

1. Sustainability Commission Agenda

Documents:

[SUSTAINABILITY_AGENDA_2017-12-04.PDF](#)

2. Sustainability Commission Packet

Documents:

[MEETING_PACKET_2017-12-04.COMPRESSED.PDF](#)

CITY OF YPSILANTI
SUSTAINABILITY COMMISSION AGENDA
REGULAR MEETING
MONDAY, DECEMBER 4, 2017
7:00 P.M. - 9:00 P.M.

Meeting Location:
Ypsilanti City Hall
1 S. Huron St.
Ypsilanti, MI 48197

I. CALL TO ORDER

II. ROLL CALL

Emily Drennen	P	A
Nancy Heine	P	A
Natalie Sampson	P	A
Thomas McKee	P	A
Brett Zeuner	P	A
Julia Bayha	P	A
Keith Michalowski	P	A
Thomas Kovacs	P	A

III. CONSENT AGENDA

- A. Approval of Agenda
- B. Approval of Minutes

IV. AUDIENCE PARTICIPATION/COMMISSION RESPONSE (3 minutes per individual)

V. PROCLAMATIONS/PRESENTATIONS (maximum of 10 minutes per presentation)

- A. Recycling Presentation

VI. ACTIVE BUSINESS

- A. Sustainability Plan sub-committee update
- B. MGC Challenge sub-committee update
- C. Outreach sub-committee update
- D. Peninsular Dam update (Councilperson Bashert)
- E. Bike Share update (Commissioner Kovacks)
- F. Special Joint Meeting with Human Relations and Sustainability update
- G. New Member / Youth Members update
- H. YSC Recommendations of Sustainable Development update

VII. NEW BUSINESS

- A. Sustainability Commission Schedule for 2018
- B. STARS Presentation and Resolution discussion
- C. Sun Shot Challenge Grant (Councilperson Bashert)
- D. Bell-Kramer update (Manager McClary)

VIII. AUDIENCE PARTICIPATION/COMMISSION RESPONSE (3 minutes per individual)

IX. PROPOSED BUSINESS (for next meeting)

X. NEXT MEETING DATE

Monday, January 8th, 2017?

XI. ADJOURNMENT

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IX. PROPOSED BUSINESS (for next meeting)

X. NEXT MEETING DATE

Monday, January 8th, 2017?

XI. ADJOURNMENT

Meeting Minutes

City of Ypsilanti
Sustainability Commission
Regular Meeting
SPARK East - 215 W Michigan
Ypsilanti, MI 48197
Monday, November 6, 2017, 7:00 P.M.

I. **CALL TO ORDER:** The meeting was called to order at 7:05 p.m.

II. **ROLL CALL:**

Commissioner Emily Drennen	Present
Commissioner Nancy Heine	Present
Commissioner Natalie Sampson	Absent
Commissioner Thomas McKee	Absent
Commissioner Leah Vanlandingham	Absent
Commissioner Brett Zeuner	Present
Commissioner Julia Bayha	Present
Commissioner Keith Michalowski	Absent
Commissioner Thomas Kovacs	Present
City Manager McClary McClary	Present
City Council Member Beth Bashert	Present
Commission Secretary Seth Torkelson-Regan	Present

III. **AGENDA APPROVAL and APPROVAL OF PREVIOUS TWO MEETING MINUTES:**
Approved. Offered by Commissioner Drennen; seconded by Commissioner Bayha.
Voice vote

IV. **AUDIENCE PARTICIPATION/COMMISSION RESPONSE:** None

V. **PROCLAMATIONS/PRESENTATIONS:** None

VI. **ACTIVE BUSINESS**

A. Sustainability Plan subcommittee update

Kovacs: Stated that the subcommittee met on the third Monday in Oct. Eight people present, including Drennen. Laid out outline of sustainability plan. Started with intro, talking about methodology and process. Talked extensively about methodology, particularly the measurables of how we evaluate sustainability. Talked about STAR rating system, something municipalities

have available to them. There is a process that goes into measuring and documenting sustainability, which costs \$1500. We will look into STAR rating system. Biggest concern is cost.

McClary: Added that the STAR is a leading program for measuring community sustainability. The framework would be valuable to this commission by consolidating everything into one framework. Was impressed by a presentation on the program in San Antonio. The process involves the community becoming certified in different sustainability areas. It could be invaluable for this commission and will help take lots of the guess work out of this work.

Kovacs. Stated that he agrees, but concern is the cost.

McClary: Stated that if commission decides they want it, he will recommend it be purchased to City Council.

Bayha: Asked if the city could afford the STAR program.

McClary: Responded that \$1500 is not too large of an expense to get the SC started in this work.

Bayha: Asked if there would be some benefit to the technical document.

Kovacs: Responded that the document would come with the program. Additionally, he has worked with a program called STARS (at EMU) that is identical in purpose, but not content. It makes much of the work of the SC much easier because it is all laid out, leaving only the assessments to be done. Check out American Association for Higher Education. A similar program for municipalities is starcommunities.org. Stated he would share the higher ed program to the commission.

Drennen: Added that in her day job at Ann Arbor they do the STAR program. It took a year to complete. She contacted them to ask how smaller municipalities could adapt to it. I talked to Michalowski about giving a presentation about the program here. If anyone would like to work on this presentation with her, that be great.

Zeuner: Responded that he would work with Drennen on it, and they could do so at the Sustainability Plan sub-committee.

Bashert: Stated that if the SC wants to request money from council for the STAR program, she suggests the subcommittee do a presentation at a SC meeting with recommendations, followed by a request to city council for it to be considered and voted on at the next council meeting.

Zeuner: Added that the subcommittee can send out the presentation before the SC meeting so they can be aware of it before seeing the presentation for the first time.

Kovacs: Stated that the next subcommittee meeting date is Monday Nov 20, 6:30pm, Ypsi downtown library.

- B. MGC Challenge subcommittee update: No updates
- C. Outreach subcommittee updates: No updates
- D. Volunteer opportunities for the Commission update: No updates
- E. City of Ypsilanti recycling planning update and discussion

Heine: Stated that the presenter is booked for next meeting. Added no follow up in terms of recycling for Ypsi. Contact person for this topic is Stan Kirton of Public Works, skirton@cityofypsilanti.com

Bayha: Stated that she heard from Commissioner Michalowski that there would be a tour of the Ann Arbor Recycling Center, but never heard from anyone else. Also, heard from Michalowski that Ypsi City will need new recycling drop off location.

Bashert: Responded that Economic Development is working on that.

Bayha: Asked if anyone knows if the empty Ford Plant parking lot would be an option.

McClary: Responded that it is owned by another company and that working with them is a struggle, and they have other interests in that property for economic projects. Doesn't believe they would consider allowing city to use part of property. They have people interested in leasing parts of facilities. Stan and Beth are looking at all possibilities, which are limited. The Ann Arbor and Chelsea facilities are setting up tours for their materials handling facilities. If anyone's interested in touring, he can get them info.

F. Peninsular Dam update and discussion

Bashert: Stated that a group has come together including the city of Ypsi, residents of up river who have joined Friends of Pen Park, and two of the nearby townships to draft a scope of work. Now it has gone from \$40,000 estimate to \$68,000, and now has gone up to \$100,000. At next council meeting there will be discussion of how to find money for the project

McClarey: Added that there was talk about splitting costs 50/50 between Ypsilanti and other members of group.

Bashert: Stated that Friends of Pen Park include many people with houses on river. The money is for the study of the effects of removing the dam, including bridge, impacts on the sediment and water upriver, and estimated costs of the dam removal.

McClary: Add that for this study the data will present general cost estimates.

Kovacs: Asked if by soil, this refers to sediment behind the dam. Asked if there is a study regarding how sediment will change downriver.

McClary: Responded that the study will include types of sediments, speed of water flow, and how sediments would be carried downriver after the dam removal.

Bashert: Added that the dam is not removed in one piece so that the flow of the river does not change. That is why there will be minimal disruption downriver. Biggest disruption will be around the dam.

Zeuner: Asked if Huron Watershed Council is conducting the test.

Bashert: Responded that they are helping and an engineering firm is primarily doing the study.

Zeuner: Stated that UM pays School of Natural Resources and the Environment students to participate with projects. If students are interested in dams, they could help with no cost to city or firm. This could help with cost of study.

Bashert: Responded that because of time of year, this will most likely have to wait to spring, and takes a bit of time to do study. Suggested students hook up with Huron River Watershed Council.

Bayha: Asked about the participation of committee with this project.

Bashert: Responded she is not sure what the role of this commission is yet. However, for the role of sub-committees, this project is important. Bashert: The vision for the dam project includes the rehab at Pen Park, including taking out invasives and developing the historic building. To see

Bayha: Asked that Bashert and others involved in the project remember that the commission could lead volunteer work around sustainability, and could be at Pen Park as a presence.

Kovacs: Stated dams are a sustainability issue, and removing dams is different story than putting dams in. The study is an important step for this issue.

Zeuner: Added that he doesn't think the city can proceed without the study.

Bashert: Added that it is an issue of liability, and the study will help us understand that.

McClary: Stated that according to the DEQ, funding can be used for removal and restoration of dam.

Bayha: Asked what the point of the dam is if it is not used.

McClary: Responded that an expert on hydroelectric power has been in touch with companies that would be interested in reestablishing hydroelectric power at that facility. It comes down to a price point with state public servant.

Kovacs: Asked if the study also is looking at rehabilitation of the dam.

McClary: This study looks at the feasibility of removal, and subsequent impact on adjacent property lines and environmental and economic costs of removal. Study looks at alternatives to the 2014 study. The study will help Council determine which option looks more attractive. We don't know which option will be best, but this study is one step in that process.

VII. NEW BUSINESS

- A. Interest in attending the Housing and Affordability Joint Meeting with the Planning and Human Relations Commissions, scheduled for Monday Nov. 13th at 7pm

Zeuner: Stated that the purpose of the meeting is to discuss the formation of Citizen Advisory Committee that Planning Commission wants to facilitate. Having all three commissions there will help contribute to that conversation.

Bashert: Encouraged the Sustainability Commission to participate in the joint meeting because the actions that result from it will influence the Master Plan.

- B. Discussion on appropriate usage of council/staff advisor resources by Commission, proper procedure for getting a subject onto the council agenda, and ways to improve the proposal process

Kovacs: Stated he was surprised with how proposals that the Commission had made to the City Council were then presented during the following City Council meeting. Asked what the best procedure may be for the Commission make recommendations and proposals for Council.

Bashert: Stated that when a commissioner wants to extend a resolution to Council or perform a similar action, they should have language drafted before coming to the commission meeting at which they present their proposal, rather than drafting language during meeting. Resolution language should appear roughly as follows: "Whereas the City of Ypsilanti... Therefore, now be it resolved that etc. action take place..."

Kovacs: Asked what is the more acceptable way for the Commission to refute some action or agenda item by Council.

McClary: Responded that the best way is to have the Commission Chair send a letter to McClary's office stating the proposal of the Commission. This will get the item on the Council's agenda, except in situations where he (McClary) does not feel it's appropriate to be on the

agenda. His office will need a proposal for city council in appropriate language at least one week before the Council meeting.

Bashert: Responded that the Commission would need two Council sponsors to get a proposal or recommendation on the Council's agenda. Commissioners can approach Council members and ask them to sponsor. Then the Council can vote on the proposal. If, in the future, you are critical of something done by Council, you can send a statement to the Council not requiring any action, but simply stating the Commission's disagreement with the Council.

Kovacs: Asked how can the Commission use the city staff to craft resolutions more properly.

McClary: Responded that it is important to work through your Commission chair. Added that he and his office can communicate with the chair to change or clarify any language of motions if needed. It is important though that a formal request is submitted (as a letter) to his office for McClary to help the Commission.

C. Recommendations for a partnership between EMU and the city of Ypsilanti for a bike share program

Kovacs: [Presented a powerpoint presentation on a potential bike share program in Ypsilanti. See meeting packet for November 6, 2017 meeting.]

Kovacs: [When presentation was over] Stated that one of the problems with bike share problem is there is no requirement for helmets.

Drennen: Responded that people tend to use helmets when using bike share bikes.

Bayha: Added that if you encode it that riders have to wear helmets, we will see a significant drop in participation. The city could bring in some type of waiver/agreement that riders have to sign regarding liability. This would work more easily with the university, but maybe not with the city.

McClary: Responded that this depends on how the contract is set up. He assumes that the developers could build into the app a hold harmless agreement that users would be required to click in order to use.

Zeuner: Added that the company assumes the liability. There is no way that all these cities with these bike share programs have made liability agreements.

McClary: Stated that as long as the use of services complies with the city's ordinances, this should be okay. The city attorney would have to review it, but it's like any other service provided for the community. The city could work with the university. He would love to see a service like this in the community.

Bayha: Stated that many commuters would like this, and many people might like to use a bike who cannot own a bike.

Bashert: Stated it would be valuable to have the university and the city at the table in order to ensure a volume of bikes that the company will want.

McClary: Asks if there is a representative who could give a presentation.

Kovacs: Added that one of the issues is where people put the bikes. Not all companies recommend how to do this.

Zeuner: Asked if the Commission could table this till next meeting and bring comparisons between the companies.

Heine: Added that this is just brainstorming about the idea, not a formal recommendation.

Kovacs: Stated EMU wants the company to demo the bikes for the Commission. Tomorrow at 11:30, Spin Bike will demo their bikes, and at 12:30 LimeBike will demo the bikes. Outside Boone Hall, off of Cross St. Reps of the bike share program will be there.

Zeuner: Requested Kovacs to ask the reps at the bike demo if there are any means for residents without smart phone access to use the bike share.

Bayha: Requested Kovacs to ask the reps how open they (their companies) are to allowing off campus residents to use the bike share program as well.

Bashert: Requested Kovacs to give the two companies' contact information to City Manager McClary.

D. Community Benefits Ordinance recommendations to council update and discussion on how to proceed

Bashert: Stated this topic is in relation to the agenda item that went in the form of a resolution to City Council. It is being reviewed by Mr. Barr, the City Council's lawyers, and will come back to City Council and this Commission for feedback.

Zeuner: Stated some citizens trying to mobilize the CBO are now trying to communicate with Dushane for feedback on how to move forward. From outside perspective, there may be no need to hire someone because the city is curious about a CBO. Dushane is helping us understand what Detroit has done with their CBO. For clarification, a CBO would set different criteria to be met by developers in the city.

Bashert: Stated that so much of what we can do at the city level is regulated by federal/state/county ordinances. The only areas the Commission and City Council can have impact are when it is a piece of property owned by the city that is under development [Zeuner: or when there are tax incentives offered to the developer]. CBOs are cutting edge. CBAs (Community Benefits Agreement with individual developments) are more common and have a history of successes and failures. Now the city is looking at what is possible and what is practical. Detroit has a CBO, but Detroit is not necessarily a valid comparison to Ypsilanti. The list that was sent to Mr. Bar will come back with lots of feedback from him. This will help the learning curve of the Commission because the Commission can know its limitations and know how to work with those limitations. Once the feedback is received from Mr. Barr, she suggests that the Commission take two or three pieces of Mr. Barr's feedback, discuss it at a meeting, then share feedback with City Council in the form of resolutions related to the CBO. This can continue as long as the Commission wishes.

Kovacs: Stated that his original proposals for development requirements in the city were not to be limited to a CBO, CBA or International Village.

Zeuner: Responded to Kovacs that a CBO is an enforcement mechanism for those demands.

Kovacs: Responded to Zeuner that a CBO is not the only mechanism.

McClary: Agreed with Kovacs that he did not see his list of proposals as related to a CBO.

Bashert: Interjected that she apologizes about that.

Kovacs: Stated he would like his list of proposals to be separate from the CBO discussion.

McClary: Responded that many of Kovacs' points on his list do relate to a CBO.

Kovacs: Responded that he agrees and that has clarified his confusion about this topic. Added that the other point he wanted to make was that a CBO and CBA only apply to city owned properties.

McClary: Stated that from an admin standpoint, his office is working on Kovacs' list of recommendations not as a CBO recommendation, but as a recommendation for all development, whether through zoning or through other means.

Kovacs: Responded yes, that is how he meant it.

McClary: Stated that is the way his office will give recommendations back, with this framework in mind. He anticipates that the list comes back to the Commission for further discussion and clarification. Added that his office is working on a CBO.

Bashert: Stated that this conversation is directly related to discussion item A, the Sustainability Plan Subcommittee.

Kovacs: Yes, that is where this topic came from. The reason the CBO idea came from there is that they believed there would be a long time before the city had a plan, so the subcommittee wanted something to start with, especially since the Commission knew there would be a lot of development coming to Ypsilanti.

Bashert: Asked if the Commission will have feedback from city staff in time to have the meeting next Monday.

McClary: Responded yes.

Kovacs: Added that he would like to argue the lawyer's points regarding the list of proposals.

McClary: Responded that he has to have the lawyer's feedback before it can be argued. Added that feedback will be coming on the 14th.

VIII. AUDIENCE PARTICIPATION/COMMISSION RESPONSE

Pete Murdock: Stated that regarding the Peninsular Dam, it was obtained in the 1980's and the intention was always to reestablish it as a hydroelectric power generator. However, the city could never make the numbers work well enough. Since the city has gone through this process of deciding what to do, he has asked another city councilmember to research new laws and technology might make hydroelectric power more feasible. The dam has a thirteen foot head, and could generate 1.3 million kilowatts annually. It's not the Hoover Dam, but it could generate some power.

McClary: Responded by thanking Council Member Murdock for his work on this project.

IX. PROPOSED BUSINESS (FOR NEXT MEETING)

A. Discussion of renters' rights when viewing homes and apartments.

Zeuner: Shared that he has learned about cities that entitle buyers and renters to see prior 12 months energy bills for any home or apartment they are considering renting. He would like to propose bringing a resolution or updates on a proposal to city council that mandates all rentals provide upon request energy bills to potential renters. He has talked with Rachel Eubanks (public service manager in Lansing) and DTE reps about this.

McClary: Asked how can landlords access that info.

Zeuner: Responded that landlords still have the properties and can get access to their properties' energy bills.

Drennen: Added that Ann Arbor has a similar law on the books. The landlord data portal issues are complex. The city of Ann Arbor has been trying to get DTE to participate in landlord portal issues, but DTE has no interest in participating in state or national conversations on this topic.

Zeuner: Responded to Drennen that the next step is to get the public service commission to force DTE to do so.

Drennen: Suggested to Zeuner that he talk to her coworker.

Zeuner: Responded that this would be good. Added that this is why he has talked with the public service commission because they control DTE.

McClary: Asked Zeuner if the public service commission has already established rules requiring utilities to share information, or if this is something that he wants to work on.

Zeuner: Responded that he wants to work on this topic.

Bayha: Asked if this exists in other places.

Zeuner: Responded to Bayha that yes, it does.

Bashart: Responded to Zeuner that she thinks Drennen was saying these laws are not effective.

Zeuner: Responded to Bashart that yes this is true, but then it takes more advocacy and work by the city to hold renters accountable. Additionally, renters need to know that such laws and rights exist for them. Making the law is the first step, and then it takes education, advocacy and outreach.

McClary: Asked if the Commission could receive a copy of Ann Arbor's ordinance on this topic. He did not know and is still not sure how municipalities could control public utilities.

B. Resignation of a Commissioner

Kovacs: Stated there is a Commissioner that is resigning.

McClary: Added that she needs to submit a letter of resignation to the City Clerk.

Kovacs: Stated he can let her know that she needs to do that.

C. Open Commission seat for youth

Bashart: Reminded that Commission that it has an open seat for youth. Added that there is no one retired on this Commission, which is a valuable asset.

X. NEXT MEETING DATE: Monday, December 4, 2017

XI. ADJOURNMENT: 9:41 p.m. Offered by Commissioner Zeuner; seconded by Commissioner Heine

Greetings!

April Baranek

Washtenaw County – Energy Coordinator
Office of Infrastructure Management

e-mail: baraneka@ewashtenaw.org

Phone: 734-680-6389



Facts

- The average person generates over **4 pounds** of trash every day.
- Recycling one ton of aluminum can saves 1,665 gallons of gasoline.
- Every ton of mixed paper recycling saves 185 gallons of gasoline.
- Recycling aluminum cans saves 95% of the energy used to make aluminum cans from new material.
- Recycling 1 glass bottle saves enough electricity to light a 100-watt light bulb for 4 hours.
- Michigan is one of 11 states with a beverage container deposit law.
- Americans throw away 2.5 million plastic bottles every hour.
- It takes about 700 years for plastic to decompose.
- Paper recycling had increased over 89% since 1990.
- If every American recycled just one-tenth of their newspapers, we could save about 25 million trees each year.
- According to the **EPA 80%-90%** of workplace solid waste is recyclable.



If the EPA is Correct – Here is the math

- Washtenaw County has approximately 1,200 Employees
- = 4,800 Pounds of trash everyday OR equivalent to...



Benefits of Recycling

- Reduces the need for virgin material
- Reduces pollution and greenhouse gas emissions
- Reduces the need for additional landfills
- Sustains the environment for future generations
- Saves money
- Creates jobs
- Saves energy
- Saves water



Where Do I Start?

- Waste audits
- Purchasing policy that is environmentally friendly
- Change culture
- Communicate “why”
- Work with your vendor



Collection and Bins



Collection and Bins

- Standardize receptacles
- Centralized location
- Eliminate desk-side bins
- Employee training
- Clear and easy to follow signage (4 second rule)



Single Stream Recycling Signage



Single stream recycling – all recyclables go together in the blue bin!

Papers – Newspaper, magazines, catalogues, glossy fillers or mailers, junk mail, any envelopes (including those with windows), wrapping paper, telephone books, paper bags, milk cartons, freezer food boxes, flattened boxes, corrugated cardboard, boxboard, office paper (all colors), file folders, frozen food boxes etc. are all accepted. Cardboard must be broken down, flattened and placed neatly on the floor behind the recycling containers.

Plastics – Berry or salad plastic containers, water or juice bottles, pudding or yogurt cups, vitamin bottles, shampoo bottles, buckets, milk jugs, cleaning spray bottles, Solo cups, detergent bottles, laundry hampers, garbage cans, lawn furniture. It's ok to leave the labels. Must be empty and clean.

Glass – Food and beverage bottles and jars, all colors. Must be empty and clean. Labels are ok. NO plate glass, eyeglasses, mirrors, ceramics, Pyrex. Must be empty and clean.

Metals – Steel food or beverage containers, metal lids, pots, pans, metal trays, beverage cans, empty aerosol cans, trays, pie plates, clean tinfoil, metal bake ware, cookie sheets, toasters, metal utensils. Must be empty and clean.



Questions or comments on the recycling program please contact April Baranek, Washtenaw County Energy Coordinator at baraneka@ewashtenaw.org

Recyclable material that can't go into the single stream recycling bin:

- Plastic bags
- Light Bulbs
- Syringes or “Sharps”
- Electronics
- Batteries
- Styrofoam
- Ink/Toner cartridge



Plastic Number 1-7



- #1 PET or PETE
 - Water bottles, juice bottles, salad dressing bottles, peanut butter containers
- #2 – HDPE
 - Shampoo bottles, milk crates, plant pots, buckets, vitamin bottles
- #3 – Vinyl or PVC
 - Traffic cones, garden hoses, jars.
- #4 – Low-density polyethylene
 - Squeeze bottles, bubble wrap, grocery bags
- #5 – Polypropylene
 - Yogurt containers, prescription medicine bottles, some food bottles
- #6 – Polystyrene
 - CD jewel cases, light switch plates, disposable silverware
- #7 – Other plastic
 - CD's, some food and non-food containers

Tips to Reduce Trash

- Avoid disposable items such as plates, cups, flatware
- Purchase products with least amount of packaging
- Use lunch box and pack lunch in reusable containers
- Sign up for paperless or e-billing
- Buy in bulk or “concentrated”
- Provide your own shopping bag
- Purchase products packaged with recycled material
- Compost food scraps
- Donate or sell used or unwanted items
- Purchase a reusable water bottle



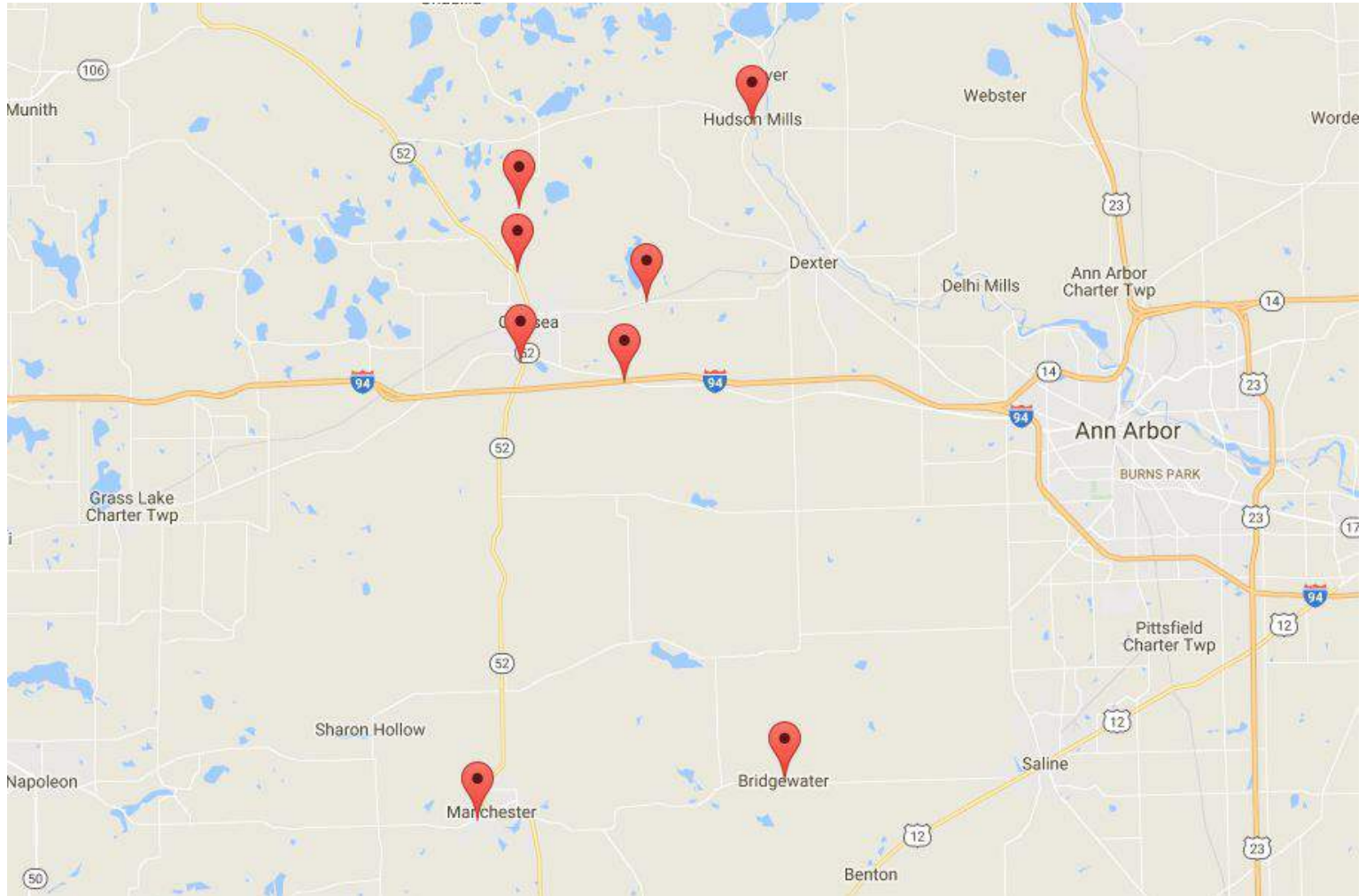
Before and...



After



Western Washtenaw Recycling Authority – Drop Off Locations



<http://www.wwrarecycles.org/bin-sites/>

Recycle Ann Arbor

Address:

2950 East Ellsworth Rd. Ann Arbor, MI 48108

Phone:

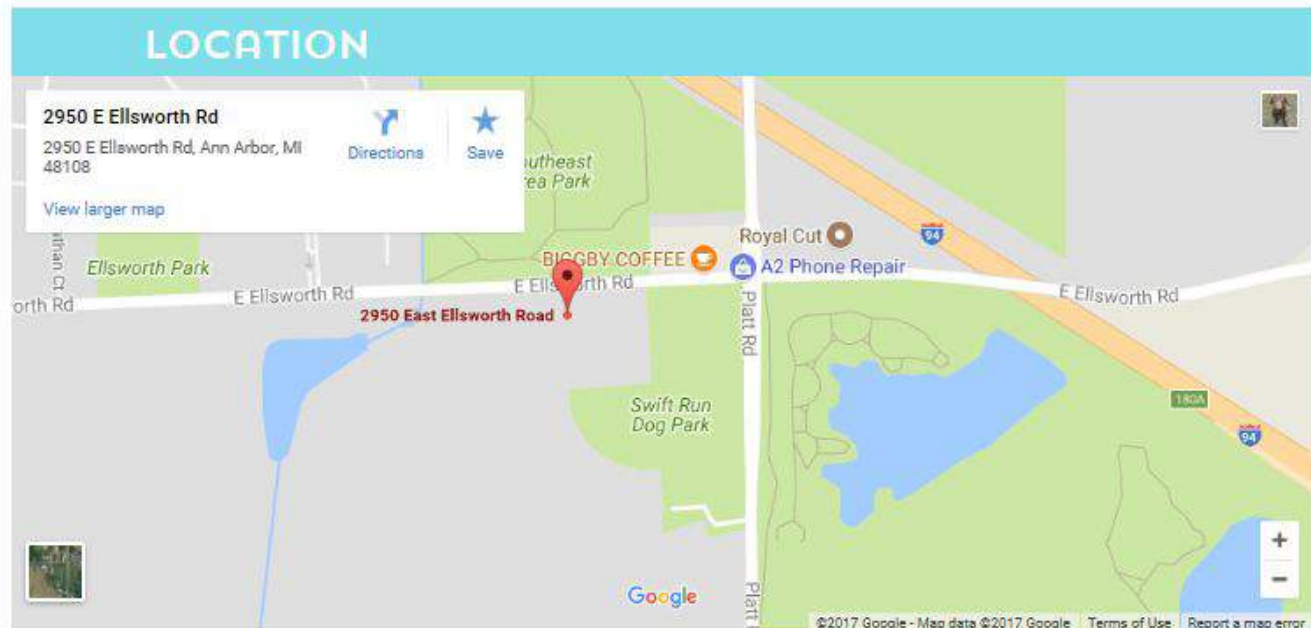
734.971.7400

Hours:

Tues & Thurs: 8:30 a.m.–6:30 p.m.

Sat: 9 a.m.–6 p.m.

Closed Sun, Mon, Wed, and Fri



<http://recycleannarbor.org/divisions/drop-off-station>



Questions?

Level	Number	Category	Secondary Category	Text
Bronze	11	Energy	Equitable	Promote an energy efficiency program for low-income residents.
Gold	1	Energy	Equitable	Implement a Property Assessed Clean Energy (PACE) financing program, or a similar program, to support community energy efficiency and renewable projects.
Gold	11	Energy	Equitable	Adopt a plan, policy, or program for energy efficiency or renewable energy in low-income housing.
Bronze	7	Energy	Renewable	Implement a program to encourage renewable energy projects (e.g., renewable energy, zoning overlay districts, and/or solar/wind ordinance).
Silver	7	Energy	Renewable	Implement at least one local government renewable energy project (e.g., solar thermal, solar photovoltaic, geothermal, wind, district heating and cooling systems, biodigesters, biomass, or energy storage system)
Silver	8	Energy	Renewable	Develop a plan to replace local government traffic signals, street lighting, and/or parking illumination with energy efficient lighting technologies (e.g., LEDs and other technologies of equal or greater efficiency)
Silver	11	Energy	Renewable	Install a renewable energy project and/or energy efficiency upgrades in government- or privately owned affordable housing
Gold	2	Energy	Renewable	Track local energy and water use for all local government buildings, using ENERGY STAR Portfolio Manager or another similar tool and upgrade/retrofit local government buildings to increase energy efficiency and/or conserve water.
Gold	7	Energy	Renewable	Implement at least one community renewable energy project (e.g., solar thermal, solar photovoltaic, geothermal, wind, district heating and cooling systems, community solar, biodigesters, biomass, or energy storage system).
Gold	8	Energy	Renewable	Replace the majority of traffic signals, publicly- and utility-owned street lighting, and/or parking illumination with energy efficient lighting technologies (e.g., LEDs and other technologies of equal or greater efficiency).
Metric	6	Energy	Renewable	Number of certified green buildings within the boundaries of the local government, including commercial and residential. LEED, ENERGY STAR, or other similar certification programs.
Bronze	8	Energy	Renewable	Create an inventory of local government-owned street lighting.
Silver	2	Energy	Use	Track local government energy use and/or water use for all local government buildings, using ENERGY STAR Portfolio Manager or another similar tool.
Silver	9	Energy	Use	Adopt a fuel efficiency target for the government fleet, including an implementation plan for reaching this target
Gold	9	Energy	Use	Adopt an anti-idling policy for government fleet and/or a communitywide policy
Metric	1	Energy	Use	Total annual municipal energy consumption. (MBTU)
Metric	2	Energy	Use	Total annual communitywide energy consumption. (MBTU)
Metric	3	Energy	Use	Annual energy savings from municipal building and/or lighting upgrades. (MBTU)

Metric	4	Energy	Use	Total annual local government renewable energy generation. (kWh)
Metric	5	Energy	Use	Total annual local government renewable energy purchased. (kWh)
Metric	7	Energy	Use	Most recent communitywide greenhouse gas emissions inventory. (MTCO ₂ e)
Bronze	2	Energy	Use	Conduct energy audits on some government facilities and/or begin to track local government energy use and/or water use systematically, using ENERGY STAR Portfolio Manager or another similar tool.
Bronze	6	Resource Management	Development	Implement a program to encourage low-impact design and/or implement a green infrastructure project.
Gold	6	Resource Management	Development	Adopt a policy or ordinance that encourages green infrastructure and/or discourages impervious surface.
Bronze	4	Resource Management	Green	Implement a program to protect natural features, such as wetlands, tree canopy, or water resources.
Silver	4	Resource Management	Green	Adopt a natural features plan or ordinance to protect natural features, such as wetlands, tree canopy, or water resources.
Gold	4	Resource Management	Green	Adopt a community forestry plan and urban tree canopy goal.
Metric	4	Resource Management	Green	Percent impervious surface communitywide.
Metric	5	Resource Management	Green	Percent tree canopy cover communitywide.
Metric	9	Resource Management	Green	Total acres of parkland.
Bronze	3	Resource Management	Policy	Establish an internal government sustainability team or a community sustainability team to coordinate sustainability initiatives.
Bronze	12	Resource Management	Policy	Develop a green purchasing policy.
Silver	1	Resource Management	Policy	Implement an internal revolving loan fund, or similar financing tool, for local government energy projects
Silver	3	Resource Management	Policy	Adopt a community sustainability plan, climate action plan, climate adaptation plan, or incorporate sustainability targets and indicators into an existing community master plan that has measurable targets.
Silver	12	Resource Management	Policy	Develop a green building policy for local government facilities
Gold	3	Resource Management	Policy	Incorporate sustainability, energy, and/or climate metrics into capital improvements planning.
Bronze	1	Resource Management	Reduce	Implement a program to encourage local government staff and elected/appointed officials to reduce environmental footprint at work.
Bronze	5	Resource Management	Reduce	Implement a program to encourage recycling and waste reduction.

Silver	5	Resource Management	Reduce	Implement communitywide residential and commercial recycling programs
Silver	6	Resource Management	Reduce	Provide incentives for property owners to decrease impervious surface
Gold	5	Resource Management	Reduce	Implement a communitywide composting program
Gold	12	Resource Management	Reduce	Achieve green building certification for a local government building.
Metric	1	Resource Management	Reduce	Materials recycled communitywide. (tons/year)
Metric	2	Resource Management	Reduce	Materials composted communitywide. (tons/year)
Metric	3	Resource Management	Reduce	Materials landfilled or incinerated by local government. (tons/year)
Metric	6	Resource Management	Reduce	Annual municipal water consumption. (gallons)
Metric	7	Resource Management	Reduce	Annual communitywide water use. (gallons)
Metric	8	Resource Management	Reduce	Annual communitywide wastewater. (gallons)
Bronze	9	Transportation	Efficiency	Conduct an inventory and efficiency audit of the government vehicle fleet.
Metric	1	Transportation	Efficiency	Total vehicles in government fleet.
Metric	2	Transportation	Efficiency	Number of hybrid electric and electric vehicles in government fleet.
Metric	3	Transportation	Efficiency	Number of alternative-fuel vehicles in government fleet.
Metric	4	Transportation	Efficiency	Annual fuel savings through green fleet upgrades (petroleum-based fuel reduction). (gallons)
Metric	6	Transportation	Efficiency	Percent sustainable commutes by mode type. (% walking, % biking, % public transportation)
Bronze	10	Transportation	Policy	Implement a program to encourage non-motorized transportation and/or install infrastructure to support non-motorized transportation.
Silver	10	Transportation	Policy	Adopt a non-motorized transportation plan
Gold	10	Transportation	Policy	Implement non-motorized plan and show measureable results (e.g., added infrastructure, an increase in non-motorized commutes).
Metric	5	Transportation	Policy	Installed non-motorized infrastructure (e.g., bike lanes, sidewalks). (miles)

Special Joint Commission Meeting Minutes
Planning Commission, Human Relations Commission and Sustainability Commission

Monday, November 13 2017 - 6:30 PM
Riverside Arts Center, 76 N Huron St
Ypsilanti, MI 48197

I. **Call to Order:** 6:33 pm

II. **Roll Call**

A. Planning Commission

1. Present: Heidi Jugenitz, Liz Dahl MacGregor, Anthony Bedogne, Toi Dennis, Matt Dunwoodie, Chris Madigan, Jared Talaga
2. Absent: Phil Hollifield, Cheryl Zuellig

B. Human Relations Commission

1. Present: Sam Jones Darling, Amber Fellows, Kyle Hunter, Ka'Ron Gaines (arrived at 6:44), Theresa Saunders (arrived at 6:44), John Shuler (arrived at 6:58)
2. Absent: Willow Carter, Tanasia Morton

C. Sustainability Commission

1. Present: Keith Michalowski, Thomas Kovacs, Thomas McKee, Brett Zeuner
2. Absent: Julia Bayha, Emily Drennen, Nancy Heine, Natalie Sampson, Leah Vanlandingham

D. Staff

1. Bonnie Wessler, City Planner
2. Joe Meyers, Community Development Manager
3. Seth Torkelson-Regan, Commission Secretary

III. **Approval of Minutes** - none

IV. Audience Participation

- A. Ray, Ypsilanti: Thanked commissions for having this meeting. Described how when she first moved to Ypsilanti, a \$500/month for a one bedroom was easy to find, and now no longer is. Stated that Portland, OR is no longer enforcing an ordinance that restricts people from parking an RV or tiny house on private property, and also that Fresno recently passed a tiny house rule that authorized tiny homes on wheels as a permanent second dwelling for the homeowner or a rental. [Read from Fresno paper.] Strongly urged Ypsilanti to move in a similar direction as Portland and Fresno. Urges commissions to do something dramatic in order that residents may secure housing.
- B. Nathaniel Romero, Ypsilanti: Thanked commissions for this joint meeting. Referenced a theme he has heard from Commissioner Zeuner--"civic helplessness," as in *this is just the way it is*. Stated that now we have an opportunity to push back against that helplessness. Stated that as a municipality Ypsi is restricted by state and federal laws, but it also has creative opportunities.

Encouraged commissioners to think about ways to *not* throw our hands up, so we can defeat this habit of learned helplessness.

- V. Public Hearing Items - none
- VI. Old Business - none
- VII. New Business
 - A. Creation of a citizen committee under the Planning Commission to review and update the Master Plan with a focus on affordability and accessibility

Discussion:

Jugenitz: Stated that the role of the PC is to review zoning and land use matters. Part of mandate is to review the master plan (MP). MP is a vision for the physical aspects of city. Last MP was done in 2013, called "Shape Ypsi." MP is designed to be participatory for people in different neighborhoods. Document of 2013 MP is available online. This is the first document of reference for the Planning Commission (PC). Two of the guiding values in MP are 1) diversity is our strength, and 2) everyone, no matter age or income, can find a home in Ypsi. These have been most important in the past years as issues of affordability and physical accessibility have become more prominent. I have proposed the formation of a Citizen Committee that would have input on the MP particularly regarding these two values. This proposal was well received by commissioners and the public at the meeting at which it was announced. There was also a proposal for a meeting between these three commissions, which is why we're here today.

Summarized input points already received since October: 1) Housing is a basic need and human right; 2) Rents in Ypsi have risen significantly since 2011; 3) The population of Ypsi is predominantly young and non-family; 4) MI state law does not strongly protect renters; 5) We've heard about the stresses of chronic displacement; 6) Concerns about International Village on low-income renters; 7) Increase of small-scale landlords imposing income minimums on renters; 8) Are we prioritising interests of current or future residents? 9) Do we have enough senior housing available? 10) People want a strategy with guts and concrete standards and that addresses all levels of affordability; 11) Want to address this issue at the county and state levels; 12) Multiple types of affordable housing; 13) Need robust data/fact finding regarding housing in city over past four years; 14) Strong community engagement efforts; 15) Requiring accessibility for new models; 16) Who should be involved in planning meetings regarding affordability and accessibility; 17) Overnight parking for tiny homes and RV; and 18) Micro apartments.

Bedogne: Stated that the last master plan process was staff driven. Asked where are we at with the staff's commitment to this, and why are we looking for a citizen driven approach.

Jugenitz: Stated that this is not an exclusion of staff. As commission, we can establish a citizen committee, which allows us to include non-planning commission members in our work. It was within our plan to do MP update, so this is an opportunity to do so with more representation and participation from the community.

Bedogne: Asked if the staff has a reaction and will be a partner.

Jugenitz: Stated that she sees this as an involved process with the staff. This will be a long process--minimum 9 months. Staff will be needed along the way in this process.

Saunders: Asked if it is correct that the committee but not staff that will create the constructs for this process.

Jugenitz: States that she is not sure if staff will *have* to do work. Most work will fall to committee members.

Kovacs: Asked how this is different from our own commissions.

Jugenitz: Explained that this is like a sub-committee *plus*. The citizen committee includes a subset of a planning commission AND citizens from other domains, including the other commissions.

Kovacs: Asked how this is different from the work done in our own commissions. Expressed concern about too many commissions.

Jugenitz: Explained that the Planning Commission is the only one that can update the MP. This will be focusing on issues of affordability and accessibility for the MP.

Zeuner: Asked if citizens will have voting power.

Jugenitz: Responded no--they would be more of an advisory group. The citizens committee's responsibility would be to do a deep dive into the issues of housing in Ypsi and then propose ideas for improving affordability and accessibility in Ypsi.

Zeuner: Asked if citizens on that committee would have equal determination on the issues.

Jugenitz: Responded that they would have equal voice.

MacGregor: Added that the same levels of hierarchy, though, would have to be followed regarding proposing and creating laws.

Bedogne: Asked when will the MP itself be updated.

Wessler: Responded that staff does not initiate update to MP--that is the work of commission. What PC wants to change is up to PC. A review is mandated every five years by State law, but does not require an update.

Bedogne: States that he feels like we should do more of a comprehensive look at the MP, including increasing business tax base and transportation.

Jugenitz: Responded that this is a good point, but she is keen to not dilute the focus on affordability and accessibility. She'd like to see how an affordability and accessibility centered effort would pair with other issues.

Bonnie: Added that in the abstract, MP can updated as frequently as the commissions want. It must be reviewed every five years. Concretely, it is difficult to update more than once per year because of the amount of public notices and community input that needs to take place.

MacGregor: States that she feels like the issues Bedogne brings up are ones the commission has tools to deal with and affordability and accessibility are ones we don't often bring up in PC meetings because we don't have tools to deal with.

Fellows: Stated that at the last PC meeting, she saw the commission was in pretty much agreement about the citizen advisory committee. In an effort to be inclusive, there was an effort to reach out to different communities to get new voices that have not been to the table. She is very excited about it. Affordability and accessibility are very present issues.

Kovacs: Asked who is deciding who will be on the committee and the basis for who will and will not be on the committee.

Jugentiz: Responded that this will fall to the chair of the PC, PC as whole, or planning staff (with consent of PC). PC will consult with SC and HRC. Part of tonight is to determine how we want to decide who will be on the committee. As I see it, we want to create opportunities for all types of people to be included, even if not part of the citizens committee, via focus groups and forums. For efficiency, we're talking about a body of no more than 10-12 people. We want people representing both affordability and accessibility. is a good start. Includes business owners, Ypsilanti Housing Commission.

Hunter: Stated that he wants representation from people in Defend Affordable Ypsi. This is a current citizen led group on these issues.

Kovacs: Want property owners and landlords represented too.

Dennis: As the PC, we're asking other commissions for input on what *your* vision for this is, rather than simply the PC's.

Zeuner: Brought up the idea of "Neighborhood block groups," something that's come up for how to include diverse representation of people, including the many micro-communities in Ypsi. We want people who communicate day-to-day with their neighbors. [Read SC's definition of sustainability.] Stated that equity addresses affordability and accessibility. Historical context is important. Sustainability is not just solar panels--but the historical aspects of our community. Can't allow housing policies to wipe away the historical significance of our communities.

Jugenitz: Stated that an asset we have to use is a working framework for MP, including an outreach process that goes into different neighborhoods. We can make it better, though.

Bedogne: Suggested Next Door as an outlet for getting info to neighborhoods.

MacGregor: Not all people can use it--since they're not in a designated neighborhood.

Fellows: Stated that one idea she heard is a public meeting in which interested people come and apply. Another idea is a focus group to get people of different interested involved. We could also do a mailouts to alert the public.

Jugenitz: Can't have more than four citizen committee members from the PC.

Kovacs: Responded to Zeuner's point about the definition of sustainability: we want to be careful about how we charter this committee because if we consider affordability only by itself we may forget about where those homes are located. An affordable house could be far from good jobs or grocery stores and may not be on an accessible public transportation line.

Jugenitz: Responded that she understands sustainability and transportation as central to the issues of affordability and accessibility. Doesn't think these issues would have to be separated.

Fellows: Responded that these are intersecting issues.

Kovacs: Responded that this seems to be sustainability that is being talked about.

Jugenitz: Stated that alongside the updates to the MP, there should be a series of proposals. Many laws at the state level restrict what cities can do regarding housing and affordability.

Gaines: Asked why can't the commissions just all do this work. It seems like creating this new committee will take away crucial time and energy from this work.

Jugenitz: Responded that creating the citizens committee does not stop any work we're doing in separate commissions. The PC has the authority to update the MP and create a citizen committee, so this is a way to do both of those towards the goals of affordability and accessibility.

Shuler: Asked what is the strategy for integrating city's MP with county's MP.

Jugenitz: [TAPE] Asked Bonnie if there are examples of integration between municipalities and counties on MPs.

Bonnie: Responded that the county usually initiates such efforts. It would be awkward for municipalities to collaborate with Washtenaw County on this issue because the county here

doesn't do any planning for the municipalities. Therefore Ypsilanti would have to coordinate with the separate municipalities.

MacGregor: Added that part of MP will be updating other municipalities in the area so they can be informed. Added that she would like to hear specific suggestions on who we should invite to the citizen committee.

Talaga: Responded students should be heard from.

Gaines: Added that the committee should include a citizen from each ward.

Michalowski: Added that a city staff adviser would help the committee.

Jones-Darling: Added the EMU's Office of Government Affairs.

Zeuner: Stated that Ann Arbor has great influence on Ypsi's housing crisis. Asked how we address that without giving Ann Arbor a foot to drive the conversation.

Jugentiz: Responded that as part of planning process, we will do deep dive into root causes of issue. We do not need direct representation from AA, but we want to think about how AA players can play important role in this issue and how they could work alongside us in these efforts.

Shuler: Stated that he'd like to know if Ann Arbor outflows strictly come to Ypsi or are there others going to other cities too.

Jugentiz: Asked commissioners to pivot to other questions they want to see addressed.

Michalowski: Responded "What's driving housing/rent costs up?"

McKay: Responded "What's increasing housing prices in the area as a whole?"

Saunders: Responded that she would like to examine the intersections of race, gender and family structure in relation to housing affordability and accessibility.

Zeuner: Responded that quality of housing should be examined, including mold, lack of heat efficiency, etc. Cheap shouldn't mean poor quality. As a landlord you can get away with a lot in Ypsi. I don't know if Ypsi has good standards for landlords.

Jugentiz: Added that the committee should be looking at the total cost of renting, not strictly rent.

Zeuner: Added particularly utilities and maybe Internet.

Hunter: Responded that Identifying food deserts--access to fresh food and grocery stores--should be a priority.

Jones-Darling: Added representation with regards to transportation. On a weekend, people are consistently late for work because they're taking the bus. Additionally,

Fellows: Added renters need to be represented. Also, non-family households, students, and single parents. [Referencing a community input forum held the day before] Stated that in response to the question, "What would equitable economic community development look like?" participants' responses included the following: equitable process that doesn't succumb to the majority; diverse makeup of participants that reflects the makeup of the community; community land trusts; percentage of development for different groups; ample information out to and in from the community; block club coalition; not a trickle-down structure; community needs assessment; communication between schools and universities; discussion of Ann Arbor spillover; development that is community controlled and owned; low interest municipal loans; rent control; tiny houses; rent-owned development; accessory dwellings; participatory budgeting; public land; not every solution become a business solution; not subsidizing large corporations; jobs for people at every education levels; cooperatives; living wage for all jobs; social housing; community center and town hall; grocery stores; thinking about long-term generational planning.

Hunter: Noticed there is no mandatory and enforced law for renters' rights regarding literature about housing before moving in.

Zeuner: Added that if a person grows up in Ypsi, he would imagine you'd want to create a place where not only you'd want to stay, but were able to stay. Children are strongly affected by this. Drawing wards may exclude people. We could look at precincts instead. Asked if we should set requirements for demographic composition of committee (regarding race/ethnicity and renter/buyer).

Jugenitz: Responded that getting a perfect match to Ypsi's demographics is difficult in such a small group, but we should strive for relevant representation.

Jones-Darling: Added that we cannot violate the Civil Rights Act by enforcing quotas via race, gender and ethnicity. I'd like to reemphasize the renter-ownership point. The policies that encourage cooperative housing/joint ownership require landlords to provide renters with voter registration about signing. East Lansing has success with this.

Madigan: Added that physical accessibility should be paramount to these discussions. (Left meeting at 7:55pm.)

Jugenitz: Stated that she wants to investigate to how living wage and other aspects influence affordability.

Hunter: Asked if anyone present had experience with the 2013 MP.

Jugentiz: Responded that she came in at the tail end of it. Bonnie was involved.

Kovacs: Stated rent-control is not permitted by state laws. It seems there are ways around doing this. I've heard of techniques for keeping rents sustainable. I'm wondering if it'd be good to have someone who knows the law well--staff maybe--to be on the committee.

Jugentiz: Responded that this is a good idea. Added that just because something can't be done now under MI law, I don't want it to defer us from making goals/a vision that go beyond MI law.

Fellows: Added that currently there's a bill going to the state house for inclusionary zoning.

Jones-Darling: Added that cities like Grand Rapids and Detroit have instituted policies through their planning commissions that provide exemptions so that developers make up for things in affordability and accessibility.

Kovacs: Added that the city government gets something when we increase rents.

MacGregor: Responded that this is not necessarily. Rents can increase more than the rate of inflation while property taxes cannot.

Zeuner: Added that it would be good to look at which landlord groups have benefitted most from current housing policy. If some are benefiting now from tax breaks that are not exemplary in their practice--whether legally or illegally--they should not be represented in the same way as those who are exemplary.

Bedogne: Responded that landlords use current policy to do business--not back deal policies or lucrative deals.

Zeuner: Responded that an example of this point would be not following up with mold or other housing issues and the code not being enforced. It goes back to the city having a means to enforcing housing code. Asked if there is a property company that is more exemplary than others. Gave the example of Flo Mar, which has increased rents frequently, but has improved their homes regularly.

Jugentiz: Added that because of our mission, we need to include people who are working towards our mission of affordability and accessibility.

MacGregor: Asked if property owners are already overrepresented on our commissions.

Jugentiz: Responded that she wants landlords of smaller units/rental homes represented because there is a large number of them.

Jones-Darling: Added that much of the time, cities don't have the resources to enforce building codes and standards. Ypsi is one of them.

Bedogne: Added that we need City Council to push for increased budgeting to housing enforcement.

Jones-Darling: Added including landlords who care about this mission will be important.

Shuler: Asked if affordability also applies to single-family owned housing.

Jugentiz: Responded yes. If rentals are more affordable, you have a better pathway towards home ownership. I'd like to see a human-centered approach, from someone who's starting off on their own.

Fellows: Added that Ypsi has many home owners who are on fixed incomes or live on disability and because of increased taxes, we are seeing gentrification. Gave examples of gentrification in the south side, West Willow, on the east side of Ypsi. Gave examples of tax sensors coming through and issuing violations in West Willow.

Bedogne: Responded that these are examples of improving the community. You cannot change taxable value without changing hands. Getting property up to livable standards, even if by issuing violations, is how we improve communities and create growth

Gaines: Asked if what Bedogne is addressing is growth or is an example of pushing certain people out of communities.

Bedogne: Responded that this is growth.

Dennis: Responded that this is not growth. Violations are fine, but cities need to have a means to help homeowners fix and improve the issues for which they receive violations, like grants.

Zeuner: Added that violations, from a sustainability perspective, are meant to punitive to keep certain behaviors in check, but not shift populations. If people can't pay taxes, what's the reason they can't pay their taxes? Violations we should look at as a notice, but what we also need to look at what resources are provided to folks by the city that allow them to respond appropriately to these notices.

Bedogne: Responded that we (the city) are not even writing violations. There's a theory in this group that people are trying to push others around, but this is simply action that is trying to level the playing field and make properties safe and livable.

Hunter: Responded that these violations are coming at the expense of people being able to live on those properties. It is criminalizing poverty and it is the first wave of gentrification. Poverty is

a byproduct of white supremacist policies that have existed for centuries. We're trying to fix something, not trying to add on to it.

Jugenitz: Stated that returning to our primary two principles, we want to avoid displacing people at all costs.

Jones-Darling: Stated that implicit bias and implicit discrimination is a thing, and has happened over time. When we do start enforcement, we need to keep this in mind. How are we handling out violations? How are we assisting homeowners to improve the quality of their houses? We have a lot of shattered homes that we can help improve, which will help increase the tax base.

Fellows: Added that she thinks this is about reframing our goal away from incentivising big developers towards incentivising those who have lived here.

Hunter: Added that he would like continued acknowledgement that we're dealing with something that's existed for a very long time. We cannot rely on the status quo because it is inherently destructive. Everything needs to be reexamined from the bottom up.

Gaines: Asked how we can go forward when we're having the wrong conversation. Some people at this commission still don't believe in gentrification or recognize it. We all have to be on the same page. We need to educate even commissioners on how serious gentrification is.

Jugenitz: Responded that she will push back a bit to Gaines' point. I appreciate the focus on history, which is important regarding our city, country, and how history has influenced housing up till today. I want to challenge everyone here to understand that we will represent a range of perspectives and that's okay and we can work together. I'm optimistic about that process. We have to move forward on what we do have in common. [Opened up floor to audie

VIII. Audience Participation

Quinn Phillips, Ypsilanti: [Responding to the discussion on the connection between affordable housing, food access, and transportation]. Stated that she recently did an interview with a UM social work grad student about the Ypsilanti tenant community in which the grad student addressed such connection. Added that the commission should not invite Beal Property to the citizen committee. Shared an experience in which she witnessed racist practices from them.

Ray, Ypsilanti: Stated that she represents the Ypsilanti Tenants Union. [Referencing the topic brought up by commissioner Zeuner.] Stated that housing quality in Ypsi is abysmal. Has been photographing homes in Ypsi for several years. There are no standards for mold. [Referencing a documentary], stated that 50% of houses in the U.S. have mold, and she guesses Ypsilanti's percentage is much higher. Many flooding occurs and nothing is done about it. We in Ypsilanti are in a radon hotspot. There are no requirements for landlords to test for radon, which is the leading cause of lung cancer among non-smokers. Also no requirements for landlords to clean heating ducts. Cost of utilities is far too high because of inefficient utilities. Many landlords won't

let renters put plastic over windows. International Village does not go along with our current MP. It is not designed for people who currently live here. After the housing crash in 2008, many owners began renting, so rental demand went up and rents went up. Strongly suggested reinstituting an old law that required $\frac{3}{4}$ of the population of an area to approve the selling of public land (like Water Street) to a private entity. Many of her friends want to own homes but cannot afford property taxes, so allowing tiny homes to be parked on private property would help homeowners raise extra income to pay property taxes.

Quinn Phillips, Ypsilanti: Echoed Ray's point on allowing tiny homes and RVs to be parked on homeowners' lots with the homeowners' permission. This would help her pay her property taxes which went up significantly last year.

Nathanael Romero: Stated that he is encouraged to see this meeting happen. It's incredible to see the brainstorming that's happening here in a public city meeting. Wants to express support for formation of a citizen's advisory commission. It has inherent value because it increases public participation and diverse representation. Can lead to a more participatory government structure. Regarding why we're look at affordability and accessibility, stated that we are often looking at how to increase the tax base. When we center equity, the outcome is better for everyone. We can revisit the MP in accordance with the status quo, but if we center affordability, accessibility, racial justice, gender justice, and diverse family dynamics, we will have better outcomes.

Izaiah Levine: Reported that Beth Ernat advised City Council tonight to not go forward on the International Village development.

Erica Mooney: Expressed support for a citizen's committee. Stated that the problem we are addressing is wicked and deep rooted in slavery and speculation, so any solutions we have will not seem rational if they are challenging the status quo. A citizen's committee makes sense because it addresses the challenge of how to have an equitable process for development. Stressed the importance of avoiding redundancy across the commissions and committees. Added that the update of the Ypsilanti Transit Center should be included in this work. Repeated that this is a difficult process because finding a new answer means challenging the status quo of community development that has gone on for many centuries.

Quinn Phillips: Thanked commissions for organizing this meeting. Stated that she just learned that the Ethics Committee only has one person on it, and this doesn't seem okay, particularly at this time during the International Village investigation. Not sure if this is the right forum for this, but wants the commission to know about this issue as well.

Jones-Darling: [In response to Gwen Phillips] Stated that as chair of the HRC, he will personally investigate why there is only one person on the Ethics Commission.

Erica Mooney: Stated that she remembers there was a significant amount of interest in the Sustainability Commission when it first started, and she thinks people who were not chosen for the commission could have been asked to be part of the Ethics Committee.

Quinn Phillips: Added that in order to be heard by the Ethics Committee, one has to file a complaint with the city attorney; however, there is no clear way to do that.

Jugenitz: Thanked all audience for their participation. Added that she will take the notes from tonight and draft into a charter for a citizen committee to be review by the PC in December.

IX. Adjournment 8:46 pm



Memo

To: City Council

From: Bonnie Wessler, City Planner

Date: November 1, 2017

Subject: Sustainability Commission Recommendations

Background

In early September, the Sustainability Commission adopted a resolution directing the City Council and Planning Commission, when applicable, ensure certain standards are met for all development plans, until such time as a Sustainability Plan is drafted. In early October, staff received direction to review the recommendations and provide further information on each.

Discussion

LEED RATING OF AT LEAST SILVER:

- **Background**
LEED (Leadership in Energy and Environmental Design) is a green building rating system developed by the U.S. Green Building Council (USGBC), a 501(c)3 nonprofit. New construction, rehabilitation, neighborhoods, homes, and campuses are all eligible to apply for certification; projects must then be recertified every five years and provide continuing energy and water usage data. Project rating levels are Certified, Silver, Gold, and Platinum; how many points a project earns dictate its ranking. USGBC charges for certification are based on square footage, and start at \$9,920 for a new construction commercial single-building project with less than 250,000 square feet and no appeals. LEED is the most recognizable green building ranking system available, but alternatives exist, such as Green Globes, the Living Building Challenge, Energy Star, and Build It Green.
- **Climate Action Plan**
The 2012 Climate Action Plan (CAP) recommended the City adopt a Green Globes certification requirement for any development project receiving \$10,000 or more in municipal incentives or tax abatements in a single year. This was estimated to reduce emissions by an equivalent of approximately 272 metric tons of carbon dioxide, presuming that 10,000 square feet annually were developed or redeveloped under this standard. This standard was chosen with an eye to the redevelopment projects of a scale and type we typically see in the City- budget-conscious, entrepreneurial, and generally consisting of less than 250,000 square feet.
- **Discussion**
Generally, where a city has incorporated certifications in their zoning code, they have been experiencing significant development pressure and done so by incentivizing, not requiring, certification. (Such incentives are discussed later in this memo.) This can be challenging, as

it is potentially a cart-before-the-horse approach; the City would be relying upon the future actions of a third party (the USGBC) to permit a development to go forward. Neither the developer nor the City could compel the USGBC to grant a certain ranking, and such standards change. Although green building certification is a useful public relations tool for the developer, involving a third party in the approval of built projects is challenging; a better path would simply be to review the requirements for certification and, where desired and possible, adopt such standards in the zoning code.

It is also notable that the City may not make modifications to the State Building Code- that is, they may not require as a matter of course that a building have certain elements above and beyond those required in the State Building Code, such as green building elements. Thus, requiring that a building must incorporate certain elements may be legally fraught. It may, however, choose to - it may only enact those requirements as part of a contract, such as when granting an incentive.

- Recommendation

At this point in time, staff recommends that Council incorporate the original recommendation of the CAP into the Community Benefits Ordinance discussion and that Council recommend to the Sustainability Commission that they work to identify specific incentive-based zoning recommendations as part of the upcoming Sustainability Plan.

SOLAR ENERGY:

- Background

There are three types of solar energy in the context of development projects: passive solar construction, which aims to capture the heat from the sun to minimize use of HVAC and is most popular for single-family home construction and greenhouses; solar water heating, which uses a thermal collector to heat water and can be used in residential, commercial, or industrial applications; and photovoltaic energy production ("solar panels").

- Climate Action Plan

"Monitor financing opportunities for solar installation and publicize via Solar Ypsi. The City should monitor grant opportunities for solar hybrid systems on high water-usage public buildings, such as the Rutherford Pool and Fire Department, and remain alert for low-cost ways to support private installations; a PACE [Property Assessed Clean Energy] program would be one such option. A target of 20 kW of new installed capacity within the city annually would build on recent momentum." (p18)

- Discussion

Zoning permits construction of "passive solar buildings" – essentially defined in the code as hoopouses or greenhouses – as primary uses in the Parks, PMD, or as an accessory use/structure in R1, MD, CN-SF, CN-Mid, CN, HC, NC, GC, and HHS. Solar water heating is permitted in all districts, provided the thermal collectors are attached to a building. Photovoltaic production is permitted as an accessory use in all districts when attached to a building; solar farms are permitted in Parks and in PMD. Photovoltaic panels are also permitted to be attached to pole lights, such as those found in parking lots, in all districts. These regulations were put in place following extensive feedback from the community during the 2013 Shape Ypsi master plan process and the 2014 zoning code update process. Building permits must be pulled prior to installation to ensure safe installation of both any electrical or plumbing components as well as supporting structural members; in the Historic District, such installations must also be reviewed to ensure compatibility with the historic fabric of the community.

The Ypsilanti Fire Department installed a 50kW photovoltaic array in 2017. The Rutherford Pool is currently operated by a 501(c)3 nonprofit, Friends of the Rutherford Pool, who will be exploring options to renovate the existing bath-house in the near future. The City has had PACE financing available through the Southeast Michigan Regional Energy Office since at least 2014, but to date no development has expressed interest. In 2013, the City adopted a resolution supporting a goal of 5MW in photovoltaic production locally by 2020, on average, this is 700kW per year, well in excess of the CAP goal.

The City is on track to meet and exceed the CAP goals regarding photovoltaic production and permits other types of solar energy capture in alignment with the goals of the CAP. The City does not publicize grant or financing opportunities, however, as it does not currently have the capacity to do so. Solar Ypsi remains the primary local resource to connect interested parties with funding opportunities.

- **Recommendation**
Staff recommends that the Council recommend to the Sustainability Commission that they work to define specific goals regarding alternative energy production locally as part of the Sustainability Plan.

WASTE STREAM REDUCTION AND/OR DIVERSION, INCLUDING RECYCLING:

- **Background**
We assume, for the purposes of this memo, that the Sustainability Commission is referencing only solid waste, not wastewater, although the CAP addresses both. Waste stream reduction can be accomplished through the production of less waste, while waste stream diversion refers generally to recycling and composting, opposed to landfilling. Reduction is generally programmatic, not something that can be predicted or regulated as part of the development or redevelopment of a site, and can be difficult to monitor over time, requiring an ongoing system of incentives and disincentives. Diversion can be enabled through provision of programs, and encouraged through an ongoing system of incentives and disincentives. Zoning does not specify how to handle solid waste, but does specify how outdoor waste receptacles, such as dumpsters, trash bins, or recycling containers, must be stored and screened.
- **Climate Action Plan**
 - **Work with neighborhood associations and Eastern Michigan University to hold a recycling competition, based either on improvements over past performance or on town vs. gown recycling rates.** The challenge for Ypsilanti residents should be to collaborate with or out-compete neighbors, but also on an individual level, to achieve the national average rate of recycling: 34.1%. The City should consider using a neighborhood competition as a pilot—perhaps working only with a few neighborhoods to begin with or seeking to later expand to include local businesses, as well. (p32)
 - **Partner with EMU, local schools, and the DDA to create an artistic trash bin design contest, incorporating local sponsorships and educational efforts.** Test the program first on EMU's campus while exploring options to expand downtown recycling, then move outwards into city itself. Additional savings could be generated by investing in an outdoor recycling service in the city's parks and downtown areas. (p33)
 - **Partner with Growing Hope and local businesses that are high generators of food waste to implement a pilot program for a municipal kitchen compost system using the drop-off site method.** Solid waste, alternative energy or similarly targeted grants should be explored to fund installation of a biodigester at any selected pilot site. (p35)
- **Discussion**

Currently, commercial trash, recycling, and waste oil or compost pickup are done via private contract between the producers and the waste handlers.

For residential properties, the City provides weekly single-stream recycling pickup year-round, and weekly yard waste (non-food compost) pickup during spring, summer, and fall, primarily to single-family residences. The City contracts with Republic for weekly rubbish pickup, and allows Simple Recycling to do curbside pickup of specialty recyclables.

A dropoff station for specialty recyclables currently open three days a week in Depot Town. No incentives or disincentives are in place. Washtenaw County administers “Waste Knot,” a program for local businesses to help them reduce or divert their waste. This program is purely voluntary and no cost.

- Recommendation

At this time, no progress has been made towards these goals of the CAP. Staff recommends that the Council recommend to the Sustainability Commission that they evaluate the barriers to completion for these goals and consider alternative goals as part of the Sustainability Plan. Note that City Council has governing authority over residential waste streams, and would have to enact new policy and updates through scavenger contracts.

LED LIGHTING IN ALL PUBLIC SPACES:

- Background

LED is a popular lighting type that draws relatively little power compared to other technologies. The City recently converted its streetlights to LED fixtures, as well as the lights in City buildings. It is unclear, however, what the Sustainability Commission intends by “public spaces,” and if the intent includes lighting previously unlit areas.

- Climate Action Plan

- **Upgrade lighting in city buildings as soon as possible. Advertise the availability of low and no cost energy audit services to help building owners prioritize the energy work they would like to do in their buildings. Partner with relevant organizations to help market available services.** (p16)

- **Upgrade as many street lights as possible with the city’s revolving loan fund, working with the DDA, EMU and Regional Energy Office to achieve the best price through bulk upgrades and to identify any grants or other funding opportunities.** This should be undertaken as soon as possible, so that savings from initial upgrades can pay for additional lights in future years. The DDA and Public Services Department should also review existing light levels during this process—in some locations, additional energy and cost savings may be achieved through removal of unneeded fixtures. (p28)

- Discussion

The zoning code does not address the power consumption of outdoor lighting, however, it does regulate outdoor light placement, brightness, glare, and pollution. Outdoor lighting within the Historic District is reviewed for appropriateness. Indoor lighting is regulated under the State Building Code. Staff is not presently aware of communities that mandate LED light fixtures, either indoor or outdoor.

- Recommendation
Staff recommends that the Council recommend to the Sustainability Commission that they work to define the scope and intent of this item and evaluate the progress made by the City since the CAP adoption as part of the Sustainability Plan.

ENERGY STAR-RATED APPLIANCES:

- Background
It is unclear when, where, and how the Sustainability Commission is proposing these be required. Currently the City does not have a mechanism to require or incentivize certain types of appliances be used. Mechanical & plumbing-related installations are governed by State Building Code or, in specific circumstances, County Public Health. Staff is not currently aware of a mechanism by which Energy Star appliances could be required.
- Climate Action Plan
The CAP does not mention Energy Star appliances in its recommendations.
- Recommendation
Staff recommends that the Council recommend to the Sustainability Commission that they work to define the scope and intent of this item and evaluate the progress made by the City since the CAP adoption as part of the Sustainability Plan.

BIKE-FRIENDLY ROADS:

- Background
Bike-friendly roads mean different things to different people, and in different contexts. On some roads, bike friendliness includes painted and protected bike lanes; on others, no particular infrastructure improvements would be required. Generally, bike friendliness can include signage, striping, bike lanes, protected bike lanes, separated bike lanes, speed of vehicle traffic, traffic light timing, traffic light sensors, street lighting, volume of vehicle traffic, presence or absence of other bicyclists, and more. Bike-friendliness also depends a great deal on the assumed skill level of the bicyclist. The City has adopted a Complete Streets ordinance that applies to newly constructed streets or reconstructed streets; this ordinance mandates that bicyclists be considered as part of the design process.
- Climate Action Plan
 - **Continue development of bicycle and pedestrian network in coordination with Townships, WCRC, and Border to Border (B2B) trail development.** Considering existing, predominantly east/west commuting patterns, roads like Forest Avenue, East Cross and West Cross/Packard may hold the most benefit in terms of converting traffic from motor vehicle miles to bicycle miles. (p 38)
 - **Engage community partners in an effort to understand residents' travel needs and develop a marketing plan to meet those needs.** Provide bicycle maps, designated routes, and other wayfinding mechanisms to make the transition to bike commuting easy and convenient. Special attention should be paid to the connections between EMU's campus and Ypsilanti's downtown and Depot Town areas, encouraging students to explore the surrounding city. The existing Non-Motorized Advisory Committee should lead this effort within the city. (p 41)
 - **Partner with Eastern Michigan University to create a bike-sharing program and to expand the carsharing network both on-campus and downtown.** The programs can originate at the university, targeting students as the primary users with the source of information available online and at new student orientation. University faculty and employees, and downtown employees, should be targeted with information on bike- and car-sharing options as a support for car-free commutes; landlords and neighborhood

associations can provide residents with information on car-sharing as a cost-saving alternative to a second household car. (p 43)

- Discussion
In 2011, the City adopted the Complete Streets Ordinance, which requires any street undergoing a certain level of construction be reviewed by the Planning Commission and staff to ensure the road will be able to serve all modes, taking into such considerations as grades, legal obligations, street trees, and other issues. Due to a limited budget, few roads are reconstructed to that level, however, recent successes include West Cross from Washtenaw to Elbridge. The success of Complete Streets has also led to street rehabilitation projects that do not trigger the extensive review incorporating features such as curb bump-outs, which improve pedestrian visibility and help to prevent excessive speeds.
- Recommendation
As the Non-Motorized Committee (a subcommittee of the Planning Commission) is currently working on revising and updating the Non-Motorized Transportation Plan, staff recommends that the Council recommend to the Sustainability Commission that they relay their input to that committee, and coordinate the recommendations of the Sustainability Plan with those of the Non-motorized Transportation Plan to ensure that they are complementary, not conflicting or duplicative.

ACCESS TO PUBLIC TRANSPORTATION FOR HOUSING DEVELOPMENTS:

- Background
Staff assumes that this means that stops and routes be placed conveniently to areas of denser housing development. The Ride (AAATA) serves the Ypsilanti area with public transportation, and is a separate entity from the City.
- Climate Action Plan
The CAP speaks of public transportation, access to it, and ways to improve access, but quite a bit more broadly. See pages 39-42 for more information.
- Discussion
As part of any housing development or redevelopment process that involves a site plan or special use application, staff works to ensure that the developers and AAATA communicate, and that the needs of each and the future residents are addressed.
- Recommendation
Staff believes that current practice satisfies this goal to the best of the City's legal ability and recommends that the current practice be continued.

BIO-SWALES OR RAIN GARDENS UPSTREAM OF STORM WATER DRAINS AND WETLANDS:

- Background
Staff assumes the intent of the recommendation is to provide for detention of stormwater and removal of sediment as well as some pollutants from stormwater, thus improving area water quality.
- Climate Action Plan
The CAP does not address stormwater.
- Discussion

The City has adopted the Design Standards of the Washtenaw County Water Resources Commissioner, which are available here:

http://www.ewashtenaw.org/government/drain_commissioner/dc_webPermits_DesignStandards/dc_Rules/frontpage. The City is responsible for review of stormwater management designs under the WCWRC rules. These standards provide for stormwater detention, and require stormwater be handled according to best management practices, which may include rain gardens, vegetated swales, detention ponds, or engineered storage solutions, based on the needs of the applicant and the unique properties of the site. Not all sites or projects will be able to accommodate a surface solution, such as a raingarden or swale; some will require engineered solutions.

- Recommendation
Staff believes that the City's current practice meets and exceeds the desires of the Sustainability Commission, and recommends a continuation of current practice.

PROPERTY TAX RELIEF AND RENT PROTECTION FOR LOW INCOME AND RETIREMENT-AGE RESIDENTS:

Please see the previous memorandum from the City Attorney regarding property tax relief and rent controls.

•

AND INCENTIVES IN ZONING (EXPEDITED REVIEW, DENSITY BONUS, TAX REDUCTION, ETC.) FOR COMMUNITY BENEFITS (E.G., OPEN SPACE CONSERVATION, AFFORDABLE HOUSING, SUSTAINABLE [sic] DEVELOPMENT BEYOND THESE MINIMUM REQUIREMENTS).

- Background
Staff assumes the intent of the recommendation is to provide for public benefit on particularly large, impactful, or complex projects.
- Discussion and recommendations on individual elements
The City cannot further expedite review of projects. Currently City review is constrained only by the timing of legally required meetings and the applicant's ability to submit complete plans and turn around revisions requested by Planning Commission or staff. This review time is considered one of the shorter review times in the state, per conversations with Michigan Department of Economic Development staff, discussed as part of the Redevelopment Ready Community certification process.
Staff does not recommend a change to current practice.

Provision of a "density bonus" is commonly used in larger cities. In Ypsilanti, zoning standards already permit, either by right or with a special use permit, the densest residential and commercial development the community expressed a desire for during the 2013 master plan development and 2014 zoning code development. To engineer a "density bonus" we would either be lowering densities below what the community has already established, or pushing the maximum higher than what the community has expressed a desire for.

Staff does not recommend a change to current practice.

Provision of a "tax reduction" is only available as part of incentive packages that the City already offers, such as PILOT, brownfield, OPRA, NEZ, etc.

Staff recommends that this be part of the Community Benefits Ordinance discussion.

- Discussion on overall concept

The City does already have a tool similar to that proposed for certain types of projects. Planned Unit Development (PUD) projects generally are used in larger or more complex projects, and allow for certain exceptions from the zoning code to secure a public benefit. These PUDs are reviewed by Planning Commission and ultimately approved by Council. More information is in Chapter 122, Article VII, Division 1 (sections 122-700 through 709), available at cityofypsilanti.com/zoning.

Note that the City is considered a Redevelopment Ready Community by the MEDC. This voluntary designation generally indicates that the City's development and redevelopment processes are clear, quick, and consistent; the designation also enables the City to apply for certain MEDC funding. To maintain that status and eligibility for funding, clarity, speed, and consistency must all be taken into account if or when zoning incentives are designed.

Conclusion

The recommendations of the Sustainability Commission are generally aligned with the intent and purpose of the Master Plan (Shape Ypsi), the Climate Action Plan, the Non-Motorized Transportation Plan, and other plans adopted by the City. However, the specific recommendations as presented conflict with the specific recommendations of these plans, lack public input, and do not reflect an understanding of the existing development processes and regulations. Staff recommends that the Sustainability Commission seek out more information about the existing development processes and controls within the City, and about best practices regarding plan creation, including public comment, and work with staff to develop future recommendations.

Andrew Hellenga to me

Oct 19

Good Morning Keith,

Elections always fall on the first Tuesday following the first Monday. State law only allows for elections in May, August, and November, except during a presidential election. The second Monday of the month is available if the Commission wishes to permanently change meeting days. If the Commission does make this change it will need to be done by resolution, and the change posted.

Regards,

...

Andrew Hellenga
Deputy City Clerk
[City of Ypsilanti](#)
[1 South Huron](#)
Phone: [\(734\) 483-1100](#)
Email: ahellenga@cityofypsilanti.com



From: Keith [mailto:kmichalowski@gmail.com]
Sent: Wednesday, October 18, 2017 10:09 PM
To: Andrew Hellenga <ahellenga@cityofypsilanti.com>
Subject: Re: Sustainability Commission Meeting Date

Hi Andrew,

Thank you for your help. I'd like to confirm we are interested in moving our meeting to Monday November 13th at City Hall. I will have an agenda for you soon.

...

As a point of curiosity, is it the case that City Hall is free every second Monday? Is it the case that all elections fall on the first Tuesday of the month?

Thanks again!
Keith

On Wed, Oct 18, 2017 at 11:26 AM Keith <kmichalowski@gmail.com> wrote:

Hi Andrew,
I had thought that would be the case. Please hold the 13th for us for today and I will get back with you with 24 hours if we decide to reschedule. Otherwise, if we remain on the 6th, when can we expect to meet?

Thanks again,
Keith

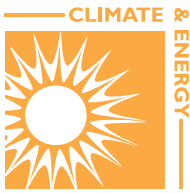
On Wed, Oct 18, 2017 at 11:23 AM Andrew Hellenga <ahellenga@cityofypsilanti.com> wrote:

Hi Keith,

Unfortunately there is an election on the 7th and the meeting will need to be relocated. Council Chambers is available on the 13th.

Best,

Andrew Hellenga
Deputy City Clerk
[City of Ypsilanti](#)
[1 South Huron](#)
Phone: [\(734\) 483-1100](#)



STAR Community Rating System

Version 2.0 | October 2016





STAR Communities is a Washington, DC based nonprofit organization that works to evaluate, improve and certify sustainable communities. We administer the STAR Community Rating System (STAR), the nation's leading framework and certification program for local sustainability. Cities and counties use STAR to measure their progress across social, economic and environmental performance areas.

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Alex Helling, Technical Specialist
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ACKNOWLEDGEMENTS

STAR Steering Committee

Adam Beck.....	EcoDistricts
Cori Burbach.....	City of Dubuque, IA
Lee Hayes Byron.....	Sarasota County, FL
Michelle Caulfield.....	City of Seattle, WA
Radcliffe Dacanay.....	City of Portland, OR
Leslie Ethen.....	City of Tucson, AZ
Eric W. Faisst.....	Madison County, NY
Wayne Feiden.....	City of Northampton, MA
Rob Fernandez.....	Breckinridge Capital Advisors
Deeohn Ferris.....	Sustainable Community Development Group
Andrea Fox.....	International City/County Managers Association
Hilary Franz.....	Futurewise
Nancy Gassman.....	City of Fort Lauderdale, FL
Richard Gelb.....	King County, WA
Josh Geyer.....	U.S. Department of Housing and Urban Development
Dan Guilbeault.....	District of Columbia
Michele Halsell.....	Pennsylvania State University
Jill Horwitz.....	Broward County, FL
Chris Kochtitzky.....	U.S. Centers for Disease Control and Prevention
Lisa Lin.....	City of Houston, TX
Kristin Lynett.....	City of Tacoma, WA
Cooper Martin.....	National League of Cities
Jenita McGowan.....	City of Cleveland, OH
Doug Melnick.....	City of San Antonio, TX
Melody Park.....	City of Indianapolis, IN
David Rouse.....	American Planning Association
Randy Solomon.....	The College of New Jersey and Sustainable Jersey
Michael Steinhoff.....	ICLEI-Local Governments for Sustainability
Paula Stroup.....	City of Raleigh, NC
John Thomas.....	U.S. Environmental Protection Agency
Jess Zimbabwe.....	Rose Center for Public Leadership

STAR Technical Advisory Group

Rosanne Albright.....	City of Phoenix, AZ
Kaye Bender.....	Public Health Accreditation Board
Jeff Caton.....	ESA
Emily Costello.....	Delaware Valley Regional Planning Commission
Roy DeWitt.....	City of Davenport, IA
Patrice Frey.....	National Main Street Center
Rebecca Kihlsinger.....	Environmental Law Institute
Tessa LeSage.....	Southwest Florida Community Foundation
Kim Lundgren.....	Kim Lundgren Associates, Inc.
Carrie Makarewicz.....	University of Colorado, Denver
Edith Makra.....	Metropolitan Mayors Caucus
Kevin Nelson.....	U.S. Environmental Protection Agency
Leslie Oberholtzer.....	Coda Metrics
Andre Pettigrew.....	Clean Economy Solutions
Victor Rubin.....	PolicyLink

STAR Technical Advisory Group (continued)

Dulcey Simpkins	City of Seattle, WA (formerly)
Cindy Steinhauer.....	City of Dubuque, IA
Ellen Tohn.....	Tohn Environmental Strategies
Michael Walker.....	City of Yarmouth, MA
Walker Wells.....	Global Green USA

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INTRODUCTION

The STAR Community Rating System (STAR) is the nation's leading framework and certification program for local sustainability. Local leaders use STAR to set goals, measure progress, and improve their communities.

The release of STAR in 2012 marked an important milestone in the sustainability movement. Hundreds of stakeholders worked together by consensus to deliver a common framework for sustainability with nationally accepted standards for measuring the depth and breadth of the social, economic, and environmental issues that our nation's cities and counties are facing.

Over the past 4 years, the rating system's metrics and methods have inspired local leaders to be more inclusive, make equitable investments, advance work on climate, integrate health into sustainability considerations, collaborate within and across departments, and build broader community support, both with residents and the business community. And the rating system has evolved -- as more communities certify, their data and experience contributes to our collective knowledge of sustainability and the growing evidence base linking actions to outcomes.

Built on the guiding principle of continuous improvement, the rating system's content changes over time to embrace innovation, apply new research, and adapt to changing conditions in the sustainability field of practice. All updates to the rating system strive to create a consistent system that is both rigorous and accessible to local government applicants and their partners.

Version 2.0

In 2015, the rating system's governance and technical committees recommended an update to STAR in order to integrate data and best practices from the first 50 STAR Certifications and address on-going issues like alignment with external standards (e.g. ISO 37120 and the United Nations Sustainable Development Goals) and development of new content to address gaps (e.g. biodiversity, good governance, aging, local government resource footprint). An analysis of points received by Certified STAR Communities revealed deficiencies in the Equity & Empowerment and Climate & Energy goal areas; it was suggested that restructuring and improvements to methodologies could resolve some of the issues communities were having with these gap areas.

Working groups of formal committee members and on call advisors were assembled and met weekly between August 2015 and January 2016 to review new research, data sets, and methodologies and recommend revisions to the framework. In May 2016, their work was compiled into a working draft of Version 2.0 of the STAR Community Rating System. The working draft was presented during the STAR 2.0 Stakeholder Convening in Washington, DC; this in-person meeting convened 50 committee members and partners to address remaining issues, concerns or omissions. Stakeholders approved the working draft at the meeting and put STAR Version 2.0 out for public comment on June 15, 2016.

Hundreds of public comments were received and analyzed by staff before presenting a final draft to committees in August 2016. The Technical Advisory Group and Steering Committee approved the final draft of the Rating System on August 23rd and August 25th, 2016 respectively.

Oversight

The rating system was developed between 2008-2012 using an open, consensus-based process. Technical Advisory Committees comprised of experts from across the country determined scientifically valid, cost-effective ways of evaluating local government progress with oversight and guidance from a Steering Committee. After the rating system was released in 2012, the eight Technical Advisory Committees were consolidated into a 21-member Technical Advisory Group. In order to maintain the rating system's credibility, all substantive changes to STAR are approved by the Technical Advisory Group, then sent to the Steering Committee for acceptance.

- **Steering Committee:** The governing body responsible for guiding the development of the STAR Community Rating System. The committee is charged with maintaining the rating system as a leadership tool, preserving its integrity, and evolving STAR using the consensus process in accordance with the mission, guiding principles, and strategic plan of STAR Communities.
- **Technical Advisory Group (TAG):** The purpose of the TAG is to enhance and, where necessary, clarify the STAR Community Rating System. The group maintains and advances the technical aspects of the existing STAR Community Rating System; continuously builds, improves and advances credit intents, requirements and guidance; upholds the technical rigor, fairness and transparency in the STAR Community Rating System development process; and holistically oversees, integrates, manages and envisions the technical aspects of the STAR Community Rating System.

STAR FRAMEWORK

The STAR framework, which integrates economic, environmental, and social aspects of sustainability, provides communities with a menu-based system to customize their approach based on local conditions and priorities. Communities can pursue the most important or relevant objectives, addressing regional variability and differing priorities along the way.

The rating system is organized by goals, objectives, and evaluation measures; this design is intended to align with local government processes and standard practice. The structure features a set of components that reflect public sector mechanisms that are proven effective in advancing change. Terms are those commonly used by local governments and their community partners to communicate strategic objectives and desired outcomes.

Within each goal area is a series of objectives aimed at achieving community-level aspirations. Objectives are measured in two ways: through attainment of community level outcomes and/or completion of local actions that are essential to reaching the outcomes. These evaluation measures provide the avenue for communities to achieve credit in the rating system.

Below are terms and definitions associated with the STAR framework.

Key Terms and Definitions	
Goal	Desired state or condition that a jurisdiction intends to achieve
Objective	A clear, desired achievement intended to move the community toward the broader goal
Purpose	Statement to clarify relevance, to provide context, and communicate the desired outcome(s)
Evaluation Measure	Qualitative or quantitative, using relative or absolute metrics
Community Level Outcome	Measurable, condition-level indicators that depict a community's progress toward a preferred state or condition as suggested by the STAR objective
Local Action	Range of decisions and investments that a community can make, or the activities that they can engage in, that are essential to achieving the desired outcome(s)

STAR's Goal Areas and Objectives

Built Environment: Achieve livability, choice, and access for all where people live, work, and play

Climate & Energy: Reduce climate impacts through adaptation and mitigation efforts and increase resource efficiency

Economy & Jobs: Create equitably shared prosperity and access to quality jobs

Education, Arts & Community: Empower vibrant, educated, connected, and diverse communities

Equity & Empowerment: Ensure equity, inclusion, and access to opportunity for all community members

Health & Safety: Strengthen communities to be healthy, resilient, and safe places for residents and businesses

Natural Systems: Protect and restore the natural resource base upon which life depends

An eighth category, **Innovation & Process**, supports the evolution of sustainability practice by recognizing best practices and processes, exemplary performance, local innovation, and good governance.

Each of the rating system's 7 goal areas is supported by 6-7 Objectives. Objectives are the clear and desired achievement intended to move the community toward the broader sustainability goal. Below are the system's 45 objectives, organized by goal area.

STAR Framework of Sustainability Goals & Objectives

Built Environment	Climate & Energy	Economy & Jobs	Education, Arts & Community	Equity & Empowerment	Health & Safety	Natural Systems	Innovation & Process
Ambient Noise & Light	Climate Adaptation	Business Retention & Development	Arts & Culture	Civic Engagement	Active Living	Green Infrastructure	Best Practices & Processes
Community Water Systems	Greenhouse Gas Mitigation	Green Market Development	Community Cohesion	Civil & Human Rights	Community Health	Biodiversity & Invasive Species	Exemplary Performance
Compact & Complete Communities	Greening the Energy Supply	Local Economy	Educational Opportunity & Attainment	Environmental Justice	Emergency Management & Response	Natural Resource Protection	Local Innovation
Housing Affordability	Energy Efficiency	Quality Jobs & Living Wages	Historic Preservation	Equitable Services & Access	Food Access & Nutrition	Outdoor Air Quality	Good Governance
Infill & Redevelopment	Water Efficiency	Targeted Industry Development	Social & Cultural Diversity	Human Services	Health Systems	Water in the Environment	
Public Parkland	Local Government GHG & Resource Footprint	Workforce Readiness	Aging in the Community	Poverty Prevention & Alleviation	Hazard Mitigation	Working Lands	
Transportation Choices	Waste Minimization				Safe Communities		

Evaluation Measures

As noted, STAR objectives are achieved through attainment of two types of evaluation measures: community level outcomes and local actions. Outcomes are measurable condition-level indicators that depict a community's progress toward a preferred state or condition within the STAR objective it supports. Outcomes are represented as trend lines, targets, or thresholds in the rating system.

Generally, STAR awards credit to county applicants if they are achieving outcome measures at the county-scale. However, recognizing the challenges faced by county applicants as a result of having multiple municipalities within their boundaries, there are two exceptions to this rule. The first exception is based on the understanding that data collection would be unreasonably burdensome. The second exception is when the Technical Guide provides explicit instructions that reporting at the county scale is not required.

Local actions describe the range of decisions and investments that a local government or community can make, or the activities that they can engage in, that are essential to achieving desired outcomes. Local actions in the rating system focus on the key interventions that move the needle towards STAR's identified outcomes.

Since many public, private, and nonprofit organizations within the community contribute towards advancing sustainability goals, the rating system recognizes these efforts, not only those of the local government. The rating system awards credit for local actions performed by community actors other than the applicant local government, provided that the applicant demonstrates that the activities have had a significant, positive impact on progress towards achieving the desired outcome(s) for the community as a whole.

Action Types	
Education and Outreach	Preparatory
Plan Development	
Policy and Code Adjustment	
Partnerships and Collaboration	
Practice Improvements	
Inventory, Assessment, or Survey	
Enforcement and Incentives	Implementation
Programs and Services	
Facilities and Infrastructure Improvements	

There are nine defined action types in the rating system. Preparatory actions are foundational steps that a community should take first to assess the community's needs and trends, identify and execute policy and regulatory changes, and strengthen partnerships and collaborations in order to effectively deploy resources and investments.

Implementation actions are the programs and services, enforcement and incentive mechanisms, and infrastructure investments a community makes in order to efficiently and equitably move the needle towards the desired outcomes. Technical advisors, staff, and other stakeholders regularly review evaluation measures to determine whether they are relevant, feasible, systemic, timely, reliable and valid. Other criteria for inclusion in the rating system include alignment with the STAR Guiding Principles.

UNDERSTANDING POINTS AND SCORES

The methodology behind STAR's points and scores acknowledges the integrated nature of the system's sustainability goal areas and objectives and the complex relationship between local actions and community level outcomes. While this section aims to provide an overview of points and scores, refer to the Technical Guide's Points Appendix for a more complete description of the design assumptions, point allocations and weightings.

It is recommended that applicants utilize the STAR Crosswalk to estimate their preliminary score and certification level before beginning to enter data; the checklist provides an interactive score based on the selection of individual evaluation measures.

Weighting of Goal Areas

STAR's seven goal areas serve as the foundation of the system's interconnected, triple bottom line approach to sustainability. There are currently no universally accepted standards for rating one sustainability goal as of greater importance or value than any other; therefore, STAR's goal areas are equally weighted at 100 points each.

Goal Area	Points Available
Built Environment	100
Climate & Energy	100
Economy & Jobs	100
Education, Arts & Community	100
Equity & Empowerment	100
Health & Safety	100
Natural Systems	100
Innovation & Process	50
Total	750

Achieving Points within STAR Objectives

Within each goal area are 6 or 7 objectives; each has a total point value between 10 and 20 points. Objectives are assigned a total point value based on their impact on achieving community sustainability as well as impact towards meeting the STAR goal area that it is situated beneath.

Applicants accumulate points in the rating system through achievement of objectives. Within each objective, there are three paths to achieving the total points available: communities can complete community level outcomes, local actions or a combination of the two types of evaluation measures.

Communities that meet the outcome's threshold, target, or trend line requirement or, in some cases, demonstrate incremental progress will achieve a proportion of the total points available. Partial credit is available where indicated. Point values for outcomes are determined by the supporting STAR objective, the outcome's strength as a standard (e.g. national standard threshold, standard target for trend, STAR set threshold, locally set threshold, locally set trend, or general trend) and its data sources and data quality (e.g. outside data set, standardized collection, or locally collected).

In each objective, the Technical Guide distinguishes whether 100% or 70% of points are available through outcomes. In objectives where the outcomes represent national or leadership standards, communities can achieve 100% of the points available without submitting documentation on local actions. In other objectives where the outcomes reflect a local or general threshold or trend; a community can achieve up to 70% of an objective's total points available and must supplement the remaining points with actions.

Finally, communities have the opportunity to accumulate points for the local actions that they complete. The rating system assigns higher point values to implementation-based actions than those that are preparatory in nature due to dedication of resources and impact on sustainability conditions. Actions will be evaluated over time and may be replaced or adjusted to align with the program's growing evidence base about which actions have the strongest influence.

Innovation & Process Category

Local government applicants may find that certain areas of the rating system are more difficult to achieve or may not apply given differences in geography, climate, jurisdictional control or other factors. The Innovation & Process credit category is a place to look for “extra credit” to supplement those areas of the system that were unattainable, difficult, or not a local priority.

SUBMITTAL REQUIREMENTS: EVALUATION MEASURES

Community Level Outcome Measures

In order to receive credit for outcome measures, the community must submit the required documentation described in the guidance section of the relevant objective. In some cases, the documentation is a formula-based, STAR-provided Excel spreadsheet that is available to STAR Members.

Local Action Measures

All local actions in STAR fit into 1 of 9 action types. The submittal requirements for each action type are consistent throughout the system and are described below.

Education and Outreach: For verification, provide a brief description of how your education and outreach campaign meets the intent of this action. Submittal must include a series of efforts designed to inform the public about the issue. If applicable, provide a link to or upload supporting materials.

Plan Development: For verification, provide the plan title; a link to or copy of the plan; the year adopted or last updated; and a description of how the plan meets the intent of this action measure.

Policy and Code Adjustment: For verification, provide the title; year adopted; a link to or copy of the policy or code; and a brief description of how the intent of this action is met.

Partnerships and Collaboration: For verification, provide the name of the group; year established; a link to or documentation of their work; and a brief description of how the intent of this action is met. Partnerships and Collaboration must be active at the time of submittal and be issue-focused, not special project-based.

Practice Improvements: For verification, provide the name of the practice improvement; a link to or copy of the annual report, if applicable; and a brief description of how the intent of this action is met.

Inventory, Assessment, or Survey: For verification, provide the title; year published; a link to or copy of the study; and a brief description of how the intent of this action is met.

Enforcement and Incentives: For verification, provide the name of the enforcement or incentive; the year created; a link to or copy of the incentive(s) and/or enforcement(s); and a brief description of how the intent of this action is met.

Programs and Services: For verification, provide the program name; year created; and a brief description of how the intent of this action is met.

Facility and Infrastructure Improvements: For verification, provide a list of investments made within the past 5 years and a brief description of how the intent of this action is met.

CERTIFICATION AND RECOGNITION

STAR certification provides a clear, data-driven approach to assessing communities' sustainability efforts. Certification allows communities to credibly and transparently track progress toward overall sustainability objectives. Communities receive a rating based on the total cumulative score of points achieved across the menu-based rating system. Communities choose the measures that they would like to report on and are not required to submit on all measures. The flexibility of a menu-based system allows local governments to select the objectives they feel are most important and relevant to their communities.

The STAR Community Rating System supports three leadership certifications: 3-STAR Community, 4-STAR Community and 5-STAR Community. Since STAR is menu-based and communities decide which measures to report on, the final scores do not provide a true head-to-head comparison. STAR is a rating, not a ranking, system. A certified STAR Community Rating lasts for four years after the award date, at which point a community is expected to measure and report progress through recertification. A community that has not had their application verified, but is working toward certification, is a Reporting STAR Community.

General descriptions and point ranges required for certification are shown below.

Certification Levels	Point Range
Certified 3-STAR Community <i>Recognized for sustainability leadership</i>	250 – 449
Certified 4-STAR Community <i>Recognized for national excellence</i>	450 – 649
Certified 5-STAR Community <i>Recognized as top tier achiever in national sustainability</i>	650+

Certification Process

The certification process enables communities to baseline their sustainability performance against the national standards and benchmarks in the STAR Community Rating System. U.S. cities and counties of all sizes and resource levels have achieved STAR certification. There is no minimum or maximum population size for pursuing certification, however the city or county government must be the primary applicant. Communities as small as Charles City, IA (pop. 7,600) and as large as Houston, TX (pop. 2.2 million) have successfully achieved STAR certification.

On average, the certification process takes a community a year from start to finish. Communities begin by aligning their existing programs, policies, and plans with the STAR Community Rating System using project management tools and resources provided by STAR Communities. Then they gather data on the evaluation measures of their choice from the rating system and enter the data into STAR's online data entry and reporting platform. Because the rating system measures community-wide sustainability, data and information on programs will need to be provided by a variety of different governmental departments and agencies, as well as from community stakeholders and civic partners.

The most common project management set-up has been to have 1 or 2 key staff people supported by interns, a community sustainability group, a green team, and/or a university partner. In general, the project team spends 1-2 months on getting organized and 4-6 months on data collection if they are working on a part-time basis.

Once the community has completed as many of the evaluation measures as possible, they submit their online application for verification. STAR Communities' Technical Team then performs a robust verification process that includes an opportunity for the community to make amendments or edits to the application. The Technical Team assigns the final STAR Community Rating®, which lasts for 4 years, at which point the community is expected to report on progress and recertify.

To meet the needs of diverse communities, STAR Communities offers multiple paths to certification through a subscription service model. Communities can work at their own pace or join the annual Leadership STAR Community Program for full service and support. There are no prerequisites for certification.

Verification

STAR Communities prides itself on a detailed and thorough approach to verification. The intent of the verification process is to preserve the rigorous nature and integrity of the STAR Community Rating System and provide solid credibility to all communities that achieve a certified STAR Community Rating.

STAR's verification process includes a two-phase review of every evaluation measure submitted by a community and provides applicants with an opportunity for amendments and improvements. As a result, governments, businesses, non-profits, residents, and other stakeholders can be confident in their and other communities' certified STAR Community Ratings.

In the first phase of the verification process, the STAR Communities Technical Team performs an initial review of each submitted measure to ensure that the submittal is complete, proper documentation has been provided, and the submission meets the requirements and intent laid out in the Technical Guide to the STAR Community Rating System. Each measure is either approved, accepted, overridden or denied:

- Approved means that the applicant met the criteria as described in the Technical Guide.
- Accepted means that the applicant meets the intent of the criteria, but it might be slightly different than what is described in the Technical Guide. Both approved and accepted measures receive full credit. Accepted measures include a comment describing how it meets the intent.
- Overridden applies to outcome measures with partial credit options. It is used when the points must be manually calculated during verification.
- Denied applies when the measure does not meet the criteria or intent or when the response is incomplete.

After the Technical Team completes their initial review, other STAR staff provides a quality check on each of the graded measures with a special focus on those denied. This offers a second "set of eyes" for the response. All comments are incorporated into the initial verification spreadsheet and an initial score is assigned based upon the points awarded for the graded measures. STAR Communities staff must complete the initial verification process within 60 calendar days.

Upon receiving their initial verification results, a community may choose to accept the initial review and associated score, or edit their application and resubmit. If a community accepts, the initial verification score becomes their final score and a certified STAR Community Rating is assigned.

Often communities see a drop in their anticipated score after the initial verification process. There are several common mistakes that result in measures being denied, but many can be easily fixed. The most common mistakes include:

- the preliminary step or other required fields were left blank;
- incorrect documentation was uploaded;
- the intent of the action measure was not clearly explained in the submittal; and/or
- the guidance laid out in the Technical Guide was not followed.

Most communities choose to edit and resubmit for phase two of the verification process. Applicants have 30 calendar days to address denials and/or pursue additional measures to improve their results. After they resubmit, the Technical Team reviews and grades any edits and/or additions within 30 calendar days. A final score is then calculated and a certified STAR Community Rating is assigned.

Communities have the option to challenge grading decisions on measures denied in the final verification process. If a denial is challenged, the rating system's Technical Advisory Group will review these measures and make a decision for acceptance or denial.

Post-Certification

STAR certification is a huge accomplishment, but it is not the end of a community's STAR journey. For most communities, the comprehensive, baseline assessment across STAR's framework of goals and objectives instigates deeper analysis, engagement with stakeholders, prioritization exercises, and action-oriented implementation. STAR Communities helps local governments use their certified STAR Community Rating to promote and enhance local sustainability efforts through marketing, implementation, and eventually, re-certification.

STAR Communities provides custom infographics, results reports, and workshops to help certified STAR communities:

- analyze their community's strengths and weaknesses;
- understand the national context for certification;
- view comparative results from similar communities;
- understand the relationship between actions and outcomes;
- identify the actions that are most likely to drive change;
- determine how best to integrate metrics from STAR into plans, reports, or budgets;
- dive more deeply into particular content areas; and/or
- facilitate decision-making, prioritization, and consensus-building activities.

CONTINUOUS IMPROVEMENT PROCESS

Built on the guiding principle of continuous improvement, STAR will evolve to remain the leading framework for local sustainability in the United States. The content of the rating system may change over time to embrace innovation, apply new research, or adapt to changing conditions in the field of community sustainability. All updates to STAR will strive to create a consistent system that is both rigorous and accessible to local government applicants.

In order to maintain its credibility, STAR's Steering Committee and Technical Advisory Group will approve all substantive changes through a consensus-based approach.

The System Change & Evolution Policy was adopted by STAR's Steering Committee on July 8, 2014. The policy describes 3 different levels of updates that can be made to the STAR Community Rating System. They include:

Level I: System Clarification and Maintenance

- Generally minor changes that are administrative in nature, relate to the guidance or submittal requirements of a specific evaluation measure, or modify the content or context to ensure the measures are useful and relevant to those engaged in implementation
- May occur annually
- Changes released as an update to the existing version (i.e. Version 1.1, Version 1.2, etc.)

Level 2: System Change

- More substantive shifts to the Rating System that include adding or removing evaluation measures and/or STAR objectives. Changes to the system's credit methods and point structure may be included
- Likely to occur on a 3-4 year cycle and includes an opportunity for public comment
- Changes released as a new version (i.e. Version 2.0)

Level 3: System Evolution

- Major sweeping changes to the Rating System that could include creating different approaches for different community types, regional focus credits, or other changes to the structure, framework and design
- Considered every 5-years; includes an opportunity for public comment
- Changes released as a new version (Version X.0) or as a new product

History of STAR Community Rating System Versions:

- Version 1.0 release: October 2012
- Version 1.1 release: January 2014
- Version 1.2 release: March 2015
- Version 2.0 release: October 2016

Relationship of this Document to the Technical Guide

This document, the STAR Community Rating System, is freely available for download and public use, subject to copyright limitations.

The Technical Guide to the STAR Community Rating System is available for purchase from www.STARcommunities.org. The Technical Guide provides clear instructions, data sources, and submittal requirements for local governments and their partners as they prepare for, collect, and then report data and information in order to receive a STAR Community Rating. The Technical Guide also includes examples of communities leading the way in each Objective and additional resources for users.



GOAL AREA: Built Environment

Achieve livability, choice, and access for all where people live, work, and play

Introduction

The 7 Objectives in the Built Environment Goal Area evaluate community development patterns, livability, and design characteristics, with emphasis on access and choice for all residents regardless of income. BE-3: Compact & Complete Communities promotes pedestrian-scaled, mixed-use development in high-density areas that support public transit. BE-4: Housing Affordability measures location efficiency through the combined costs of housing and transportation and encourages affordable housing in areas where transportation costs are already low due to public transit accessibility. BE-7: Transportation Choices provides the direct measure of transportation alternatives, affordability, safety, and Vehicle Miles Traveled.

The Built Environment Goal Area addresses other types of infrastructure, such as the provision of clean drinking water, wastewater, and stormwater in BE-2: Community Water Systems. BE-5: Infill & Redevelopment analyzes redevelopment and the condition of public infrastructure to encourage efficient use and reuse of land. BE-6: Public Parkland promotes accessibility to abundant, well-designed parks and greenways. Finally, BE-1: Ambient Noise & Light encourages reducing excessive noise and light trespass that adversely impact residents and local wildlife and protecting views of the night sky.

Objective Number	Objective Title and Purpose	Available Points
BE-1	Ambient Noise & Light: <i>Minimize and manage ambient noise and light levels to protect public health and the integrity of ecological systems</i>	10
BE-2	Community Water Systems: <i>Provide a clean and secure water supply for all local users through the management of potable water, wastewater, stormwater, and other piped infrastructure</i>	15
BE-3	Compact & Complete Communities: <i>Concentrate development in compact, human-scaled, walkable centers and neighborhoods that connect to public transit, offer diverse uses and services, and provide housing options for families of all income levels</i>	20
BE-4	Housing Affordability: <i>Construct, preserve, and maintain an adequate and diverse supply of location-efficient and affordable housing options for all residents</i>	15
BE-5	Infill & Redevelopment: <i>Focus growth and redevelopment in infill areas to reduce sprawl and ensure existing infrastructure that supports the community is in satisfactory working condition</i>	10
BE-6	Public Parkland: <i>Create a system of well-used and enjoyable public parkland that feature equitable, convenient access for residents throughout the community</i>	15
BE-7	Transportation Choices: <i>Promote diverse transportation modes, including walking, biking, and public transit, that are safe, low-cost, and reduce vehicle miles traveled</i>	15
Total Points Available:		100



BUILT ENVIRONMENT

BE-I: Ambient Noise & Light

10 available points

PURPOSE

Minimize and manage ambient noise and light levels to protect public health and the integrity of ecological systems

EVALUATION MEASURES

Community Level Outcomes

100% of points available through Outcomes

Preliminary Step:

Part 1: Identify local ambient noise target areas based upon a local assessment

--AND--

Part 2: Identify local ambient light target areas based upon a local assessment

The Preliminary Step is required only if the community is applying for credit in the Community Level Outcomes. If the community is applying for credit through Local Actions only, the Preliminary Step need not be completed.

Outcome 1: Noise

3.4 Points

Part 1: Demonstrate that daytime ambient noise levels do not exceed 60 dBA in target residential areas

--AND--

Part 2: Show progress toward locally identified ambient noise targets in commercial and natural areas

[Partial credit available]

Outcome 2: Light in the Community

3.3 Points

Show progress toward locally identified ambient light targets for light glare and/or light trespass

[Partial credit available]

Outcome 3: Light in the Night Sky

3.3 Points

Option A: Achieve a sky glow at or below 4 in the Bortle Dark-Sky Scale where the Milky Way is still visible in residential areas, or a Sky Quality Meter reading of 21.2 or greater [Partial credit available]

--OR--

Option B: Achieve certification as an International Dark Sky Community [Partial credit applies]



Local Actions

70% of points available through Actions

Action 1:

Policy and Code Adjustment

Adopt a community noise policy, ordinance, or regulations based upon a local assessment

Action 2:

Policy and Code Adjustment

Adopt a community light policy, ordinance, or regulations based upon a local assessment

Action 3:

Education and Outreach

Educate the public about standards, effects of excessive exposure, and mitigation techniques for ambient noise or ambient light

Action 4:

Partnerships and Collaboration

Create partnerships to address sources of noise and/or light pollution not subject to the local authority

Action 5:

Practice Improvements

Develop a database of noise complaints and noise measurements (e.g. roads, industrial, outdoor music venues)

Action 6:

Practice Improvements

Develop a database of light issues and neighborhoods targeted for improvements

Action 7:

Enforcement and Incentives

Establish clear lines of authority for the enforcement of nuisance noise violations relative to different noise sources



BUILT ENVIRONMENT

BE-I: Ambient Noise & Light

Action 8:

Enforcement and Incentives

Enforce noise standards during the permitting, design, and construction of new large-scale developments that can significantly increase ambient noise levels

Action 9:

Enforcement and Incentives

Enforce light standards during the permitting, design, and construction of new large-scale developments that can significantly increase ambient light levels

Action 10:

Programs and Services

Establish programs that eliminate existing sources of light pollution coming from streetlights, parking facilities, and signage



BUILT ENVIRONMENT

BE-2: Community Water Systems

15 available points

PURPOSE

Provide a clean and secure water supply for all local users through the management of potable water, wastewater, stormwater, and other piped infrastructure

EVALUATION MEASURES

Community Level Outcomes

100% of points available through Outcomes

Outcome 1: Drinking Water Quality

3.75 Points

Demonstrate that the community is not in violation of EPA's drinking water rules for chemical and microbial contaminants in water pipes and turbidity

Bonus: Jurisdiction or water provider participates in water quality research on contaminants of emerging concern

Outcome 2: Water Footprint

3.75 Points

Option A: Demonstrate that the ratio of water withdrawals for human use to the total renewable water resources is less than 0.2

--OR--

Option B: Demonstrate that the ratio of water withdrawals for human use to the total renewable, stored, and allocated water resources is less than 0.2 [Partial credit applies]

Outcome 3: Safe Wastewater Management

3.75 Points

Demonstrate that all NPDES permit holders, including publicly owned treatment works (POTWs), are in compliance with Clean Water Act effluent and reporting guidelines

Outcome 4: Safe Stormwater Management

3.75 Points

Comply with all NPDES permit requirements for MS4s, construction activities, and regulated industrial activities



BUILT ENVIRONMENT

BE-2: Community Water Systems

Local Actions

70% of points available through Actions

Action 1:

Plan Development

Adopt a jurisdiction-wide management plan for drinking water supply, wastewater, and stormwater

Action 2:

Policy and Code Adjustment

Adopt policies to ensure that the jurisdiction has the authority to enact water conservation measures during periods of drought

Action 3:

Policy and Code Adjustment

Establish protocols in the case of insufficient clean water supply to meet the needs of low-income and other vulnerable populations

Action 4:

Partnerships and Collaboration

Collaborate with a regional water management group that includes other jurisdictions that share the same water sources

Action 5:

Practice Improvements

Establish water quality monitoring and public reporting systems

Action 6:

Enforcement and Incentives

Shift towards a full-cost pricing system to ensure that users are paying for the true cost of water

Action 7:

Programs and Services

Create programs to guarantee the provision of water to low-income residents



BUILT ENVIRONMENT

BE-2: Community Water Systems

Action 8:

Facility and Infrastructure Improvements

Manage and upgrade infrastructure to reduce leaks in the drinking water system, eliminate contaminants, and achieve other local conservation goals

Action 9:

Facility and Infrastructure Improvements

Implement at least 3 innovative water infrastructure and facility programs

Action 10:

Facility and Infrastructure Improvements

Upgrade and improve stormwater and wastewater treatment facilities to meet current and foreseeable needs

Action 11:

Facility and Infrastructure Improvements

Engage in restoring and maintaining projects for critical water bodies that provide drinking water for the jurisdiction



BUILT ENVIRONMENT

BE-3: Compact & Complete Communities

20 available points

PURPOSE

Concentrate development in compact, human-scaled, walkable centers and neighborhoods that connect to public transit, offer diverse uses and services, and provide housing options for families of all income levels

EVALUATION MEASURES

Community Level Outcomes

100% of points available through Outcomes

Preliminary Step:

Identify the Compact and Complete Centers (CCCs) that will be analyzed under this objective. The number of required CCCs is determined by population.

The Preliminary Step is only required if the community is applying for credit in the Community Level Outcomes. If the community is applying for credit through Local Actions only, the Preliminary Step need not be completed.

Outcome 1: Density, Destinations, and Transit

10 Points

Option A: Demonstrate that each CCC achieves thresholds related to residential density, non-residential density, diverse uses, and public transit availability [Partial credit available]

--OR--

Option B: Demonstrate that each CCC achieves a minimum score of 70 using the EPA's Smart Location Calculator

Outcome 2: Walkability

5 Points

Demonstrate that each CCC achieves the following thresholds:

- 90% of roadway length contains sidewalks on both sides or connection pathways
- 100% of crosswalks are ADA accessible
- 60% of block faces contain street trees at no more than 40 feet intervals
- 70% of roadway length are designed for a travel speed of no more than 25 mph
- Minimum intersection density of 300 intersections per square mile

[Partial credit available]



BUILT ENVIRONMENT

BE-3: Compact & Complete Communities

Outcome 3: Design

5 Points

Demonstrate that each CCC achieves the following thresholds:

- 80% of buildings along primarily single-family residential blocks have front setbacks that are not more than 25 feet from the property line
- 80% of buildings along primarily commercial blocks have front setbacks that are not more than 10 feet from the property line
- 40% of primarily commercial blocks have ground floor street frontages free from blank walls and loading docks, and do not have structured or surface parking as the principal land use along the street

[Partial credit available]

Local Actions

70% of points available through Actions

Action 1:

Plan Development

Demonstrate that the comprehensive plan supports compact, mixed-use development

Action 2:

Plan Development

Adopt a specific mobility or circulation plan for compact, mixed development

Action 3:

Inventory, Assessment, or Survey

Identify areas appropriate for compact, mixed-use development on the community's official future land use map

Action 4:

Policy and Code Adjustment

Adopt regulatory strategies that permit or incentivize increased residential and employment densities and diverse uses in transit-served areas and areas identified for compact, mixed-use development

Action 5:

Policy and Code Adjustment

Require build-to lines for commercial and residential structures in transit-served areas and areas identified for compact, mixed-use development



BUILT ENVIRONMENT

BE-3: Compact & Complete Communities

Action 6:

Policy and Code Adjustment

Adopt advanced parking strategies in transit-served areas and areas identified for compact, mixed-use development

Action 7:

Partnerships and Collaboration

Establish a design review board or similar appointed body that provides comments on the sustainability implications of proposed development projects



BUILT ENVIRONMENT

BE-4: Housing Affordability

15 available points

PURPOSE

Construct, preserve, and maintain an adequate and diverse supply of location-efficient and affordable housing options for all residents

EVALUATION MEASURES

Community Level Outcomes

100% of points available through Outcomes

Outcome 1: Housing and Transportation Costs

7 Points

Part 1: Demonstrate that there are at least 80% of Census block groups where a household earning the Area Median Income (AMI) would spend less than 45% on housing and transportation combined [Partial credit available]

--AND--

Part 2: Demonstrate that there are at least 60% of Census block groups where a household earning 80% AMI would spend less than 45% on housing and transportation combined [Partial credit available]

Outcome 2: Affordable Housing Production

4 Points

Option A: Achieve targets for creation of new subsidized affordable housing identified in a locally adopted comprehensive housing strategy

--OR--

Option B: Demonstrate new affordable housing starts are being produced at a rate of 5% annually

Outcome 3: Affordable Rental Housing Preservation

4 Points

Option A: Demonstrate no loss of subsidized affordable housing units due to expiring subsidies in the past 3 years

--OR--

Option B: Demonstrate that any loss of subsidized affordable housing units is being replaced with new affordable housing production [Partial credit applies]



Local Actions

70% of points available through Actions

Action 1:

Plan Development

Develop a comprehensive housing strategy

Action 2:

Inventory, Assessment, or Survey

Analyze public transit access and transportation costs for neighborhoods with housing affordable to low- and moderate-income households

Action 3:

Inventory, Assessment, or Survey

When new public transit or other major infrastructure investments are planned, analyze the likelihood and extent to which housing costs are anticipated to increase in adjacent low- and moderate-income neighborhoods so that appropriate strategies can be developed to preserve and create long-term affordable housing

Action 4:

Policy and Code Adjustment

Require, incentivize, or subsidize creation of subsidized affordable housing, including deeply subsidized or deeply affordable rental housing, in transit-served areas and areas identified for compact, mixed-use development

Action 5:

Partnerships and Collaboration

Collaborate with other jurisdictions to address affordable housing and location efficiency needs in the region

Action 6:

Partnerships and Collaboration

Partner with nonprofit organization(s) to provide education, counseling, and financial assistance to homebuyers or renters



Action 7:

Programs and Services

Implement programs to preserve and maintain existing subsidized and unsubsidized affordable rental housing in transit-served areas, compact and mixed-use areas, and areas with rapidly-rising housing costs

Action 8:

Enforcement and Incentives

Work with private employers to provide live-near-your-work or employer-assisted housing financial incentives



BUILT ENVIRONMENT

BE-5: Infill & Redevelopment

10 available points

PURPOSE

Focus growth and redevelopment in infill areas to reduce sprawl and ensure existing infrastructure that supports the community is in satisfactory working condition

EVALUATION MEASURES

Community Level Outcomes

70% of points available through Outcomes

Outcome 1: Infill Development

3.5 Points

Option A: Demonstrate at least 51% of new residential and non-residential development occurred in locally designated infill and redevelopment areas or on infill sites that were previously developed, brownfield, and/or greyfield sites [Partial credit available]

--OR--

Option B: Demonstrate an increased percentage of all new residential and non-residential development occurred in locally designated infill and redevelopment areas or on infill sites that were previously developed, brownfield, and/or greyfield sites [Partial credit applies]

Outcome 2: Existing Infrastructure

3.5 Points

Option A: Demonstrate at least 90% of existing public infrastructure is in good or better condition

--OR--

Option B: Demonstrate an increased percentage of existing public infrastructure is in good or better condition over time [Partial credit applies]

Local Actions

70% of points available through Actions

Action 1:

Inventory, Assessment, or Survey

Develop an inventory of infill, previously developed, brownfield, or greyfield sites of greatest priority and potential for development or redevelopment



BUILT ENVIRONMENT

BE-5: Infill & Redevelopment

Action 2:

Inventory, Assessment, or Survey

Develop an inventory of existing public infrastructure assets, current infrastructure conditions, and priorities for maintenance or rehabilitation

Action 3:

Policy and Code Adjustment

Adopt a policy commitment to limited or no expansion of physical jurisdiction boundaries or extension of urban services

Action 4:

Policy and Code Adjustment

Use regulatory and design strategies to encourage compatible infill and redevelopment with a mix of housing types in neighborhoods close to employment centers, commercial areas, and where public transit or transportation alternatives exist

Action 5:

Education and Outreach

Educate residents and community groups about the importance of infill and redevelopment, brownfield assessment findings, and design strategies for compatible neighborhood development

Action 6:

Partnerships and Collaboration

Collaborate with state and federal authorities to advance brownfields cleanup efforts

Action 7:

Programs and Services

Establish a program to provide information and assistance to owners, potential buyers, and developers regarding brownfield assessments, redevelopment strategies, and available resources

Action 8:

Programs and Services

Support temporary, creative neighborhood uses for vacant properties and greyfields

Action 9:

Enforcement and Incentives

Provide financial incentives to encourage infill and redevelopment



Action 10:

Enforcement and Incentives

Perform proactive zoning enforcement and vacant lot cleanup or maintenance to improve the attractiveness of a redevelopment or blighted area and to deter crime

Action 11:

Facility and Infrastructure Improvements

Target local infrastructure improvements to underserved and blighted areas to revitalize redevelopment and catalyze private investment



BUILT ENVIRONMENT

BE-6: Public Parkland

15 available points

PURPOSE

Create a system of well-used and enjoyable public parkland that features equitable and convenient walkable access for residents throughout the community

EVALUATION MEASURES

Community Level Outcomes

100% of points available through Outcomes

Preliminary Step:

Identify the population density and public parkland for evaluation in this objective

The Preliminary Step is required only if the community is applying for credit in the Community Level Outcomes. If the community is applying for credit through Local Actions only, the Preliminary Step need not be completed.

Outcome 1: Acreage

4.5 Points

Provide ample parkland based on population density as follows:

- High: 6.8 acres per 1,000 residents
- Intermediate-High: 7.3 acres per 1,000 residents
- Intermediate-Low: 13.5 acres per 1,000 residents
- Low: 20.3 acres per 1,000 residents

Outcome 2: Proximity

4.5 Points

Demonstrate that housing units are located within a 1/2-mile walk distance of public parkland based on population density as follows:

- High or Intermediate-High: 85% or greater
- Intermediate-Low or Low: 70% or greater

Outcome 3: Connectivity

4.5 Points

Demonstrate that 90% of households are located within 3 miles of off-road trail access [Partial credit available]



Outcome 4: Use and Satisfaction

1.5 Points

- Option A: Demonstrate that 66% or more of surveyed residents visit a park at least once a year
--OR--
Option B: Demonstrate that 66% or more of surveyed residents respond favorably regarding the quality of the community's public park system

Local Actions

70% of points available through Actions

Action 1:

Plan Development

Adopt a parks and/or open space plan that promotes a communitywide network of public spaces that provide recreational and transportation benefits while protecting natural, historic, and cultural resources

Action 2:

Inventory, Assessment, or Survey

Conduct a study regarding the economic impact of public parklands on the local economy to understand their contributions to community satisfaction and tourism

Action 3:

Policy and Code Adjustment

Adopt regulatory strategies or development incentives to create, maintain, and connect public parkland

Action 4:

Policy and Code Adjustment

Adopt site design guidelines for new public parklands and improvements to existing facilities to strengthen environmental benefits and provide visitor amenities

Action 5:

Partnerships and Collaboration

Participate in a local or regional alliance working to improve and expand the communitywide or regional park system



BUILT ENVIRONMENT

BE-6: Public Parkland

Action 6:

Partnerships and Collaboration

Create an advisory board to regularly receive feedback from residents and organizations regarding planning, decision-making, and other issues affecting the quality and availability of public parklands

Action 7:

Programs and Services

Host or partner with a volunteer program to support public parkland maintenance

Action 8:

Programs and Services

Provide assistance for low-income users to access and use public parklands and programming through subsidy, scholarships, and discounts

Action 9:

Programs and Services

Host programs and events in public parkland that bring the community together and encourage physical activity

Action 10:

Facility and Infrastructure Improvements

Consistently invest sufficient capital and operational funding to create and maintain parklands



BUILT ENVIRONMENT

BE-7: Transportation Choices

15 available points

PURPOSE

Promote diverse transportation modes, including walking, biking, and public transit, that are safe, low-cost, and reduce vehicle miles traveled

EVALUATION MEASURES

Community Level Outcomes

100% of points available through Outcomes

Outcome 1: Mode Split

5 Points

Achieve the following thresholds for journey-to-work trips:

- Drive alone maximum: 60%
- Bike + Walk + Transit minimum: 25%
- Bike + Walk minimum: 5%

[Partial credit available]

Outcome 2: Transportation Affordability

5 Points

Show that the average total driving cost is 15% or less of the regional typical household income

Outcome 3: Transportation Safety

2.5 Points

Part 1: Demonstrate that pedestrian and bicyclist fatalities are making incremental progress towards zero fatalities by 2040 [Partial credit available]

--AND--

Part 2: Demonstrate that vehicular fatalities are making incremental progress towards zero fatalities by 2040 [Partial credit available]

Outcome 4: Vehicle Miles Traveled

2.5 Points

Demonstrate an annual decrease in vehicle miles traveled measured from a baseline year



BUILT ENVIRONMENT

BE-7: Transportation Choices

Local Actions

70% of points available through Actions

Action 1:

Plan Development

Adopt a bicycle and/or pedestrian master plan that prioritizes future projects to improve safety and access to non-motorized transportation and connections to public transit

Action 2:

Policy and Code Adjustment

Adopt a complete streets policy that addresses all users, applies to all projects with limited exceptions, and includes specific next steps for implementation

Action 3:

Policy and Code Adjustment

Subdivision and other development regulations require walkability standards that encourage walking and enhance safety

Action 4:

Practice Improvement

Conduct early development reviews of subdivisions and other developments that includes an analysis of destinations within ½ mile of project borders and multi-modal access routes

Action 5:

Practice Improvements

Offer local government employees incentives to commute by modes other than single-occupancy vehicles

Action 6:

Enforcement and Incentives

Implement at least 2 types of focused enforcement programs to ensure pedestrian, bicycle, and motorist safety

Action 7:

Facility and Infrastructure Improvements

Increase the percentage of households with access to public transit



Action 8:

Facility and Infrastructure Improvements

Increase the mileage of sidewalks, particularly on arterial or collector roads, that connect people with destinations

Action 9:

Facility and Infrastructure Improvements

Increase the mileage of striped or buffered bicycle lanes, cycle-tracks, parallel off-street paths and/or other dedicated facilities

Action 10:

Facility and Infrastructure Improvements

Establish or support a communitywide public bike share program

Action 11:

Facility and Infrastructure Improvements

Construct or retrofit transportation infrastructure to meet standards in the Americans with Disabilities Act (ADA)



GOAL AREA: Climate & Energy

Reduce climate impacts through adaptation and mitigation efforts and increase resource efficiency

Introduction

The 7 objectives in STAR's Climate & Energy Goal Area aim to reduce climate impacts and increase resource efficiency in order to create safer, healthier, and more resilient communities. CE-1: Climate Adaptation and CE-2: Greenhouse Gas Mitigation are critical to achieving reductions in harmful climate impacts and promoting resource savings through decreased energy, water, and materials use.

Most of the objectives in Climate & Energy focus on achieving incremental increases in resource efficiency. CE-4: Energy Efficiency and CE-5: Water Efficiency encourage communities to reduce energy use over time in buildings and water consumption per capita. CE-6: Local Government GHG & Resource Efficiency offers local governments an opportunity to describe how their internal efforts demonstrate their leadership in this Goal Area. CE-3: Greening the Energy Supply complements the other objectives in the Goal Area by addressing the alternative energy sources for the transportation and the community's electrical power supply.

Finally, through its ambitious waste reduction targets, CE-7: Waste Minimization rewards communities for efforts to reduce, reuse, and recycle materials.

Objective Number	Objective Title and Purpose	Available Points
CE-1	Climate Adaptation: <i>Strengthen the resilience of communities to climate change impacts on built, natural, economic, health, and social systems</i>	15
CE-2	Greenhouse Gas Mitigation: <i>Achieve greenhouse gas emissions reductions throughout the community</i>	15
CE-3	Greening the Energy Supply: <i>Transition the local energy supply for both transportation and non-mobile sources toward the use of renewable, less carbon-intensive, and less toxic alternatives</i>	15
CE-4	Energy Efficiency: <i>Minimize energy use and demand in the residential, commercial, and industrial sectors as a means to increase energy efficiency in the community</i>	15
CE-5	Water Efficiency: <i>Minimize water use and demand as a means to conserve water in the community</i>	10
CE-6	Local Government GHG & Resource Efficiency: <i>Lead by example by reducing local government greenhouse gas emissions and minimizing energy and water use in local government facilities and specified local infrastructure</i>	15
CE-7	Waste Minimization: <i>Reduce and reuse material waste produced in the community</i>	15
Total Points Available:		100



PURPOSE

Strengthen the resilience of communities to climate change impacts on built, natural, economic, health, and social systems

EVALUATION MEASURES

Community Level Outcomes

70% of points available through Outcomes

Outcome 1: Climate Resilience

10.5 Points

Demonstrate a measurable reduction in vulnerability and/or increase in resiliency to 3 communitywide risks and 1 at-risk population group [Partial credit available]

Local Actions

70% of points available through Actions

Action 1:

Inventory, Assessment or Survey

Conduct a local climate risk and vulnerability assessment

Action 2:

Plan Development

Adopt a local plan that incorporates potential climate change impact scenarios and identifies specific actions to reduce risk and exposure from identified hazards

Action 3:

Policy and Code Adjustment

Adopt building codes or land use ordinances that address specific climate impacts in the community

Action 4:

Practice Improvements

Demonstrate that internal decisions by local government departments use the most current climate science and that staff monitor climate change impacts



Action 5:

Partnerships and Collaboration

Develop an interdisciplinary committee for the purpose of understanding and addressing climate vulnerabilities

Action 6:

Education and Outreach

Create an education and outreach campaign to engage residents, businesses, and local government staff in climate change vulnerability reduction efforts

Action 7:

Programs and Services

Create or enhance programs and services that specifically address the community's greatest climate threats

Action 8:

Practice Improvements

Develop metrics for measuring the success of adaptation actions to prepare for a changing climate

Action 9:

Enforcement and Incentives

Enforce regulations or offer incentives to encourage residents and businesses to shift behaviors to prepare for future climate change impacts

Action 10:

Facility and Infrastructure Improvements

Improve facilities and infrastructure throughout the community to be better prepared for climate change threats



PURPOSE

Achieve greenhouse gas emissions reductions throughout the community

EVALUATION MEASURES

Community Level Outcomes

100% of points available through Outcomes

Outcome 1: Communitywide Greenhouse Gas Emissions

15 Points

Demonstrate incremental progress towards achieving a 28% reduction by 2025 and/or an 80% reduction by 2050 in communitywide greenhouse gas (GHG) emissions [Partial credit available]

Local Actions

70% of points available through Actions

Action 1:

Inventory, Assessment or Survey

Conduct a communitywide GHG Inventory at least every 5 years

Action 2:

Plan Development

Adopt a climate action plan designed to reduce GHG emissions throughout the jurisdiction

Action 3:

Policy and Code Adjustment

Establish a local communitywide GHG emissions target to be used as guidance for broader local government planning processes and decision-making

Action 4:

Education and Outreach

Create an education and outreach campaign to engage residents and businesses in GHG reduction efforts



Action 5:

Partnerships and Collaboration

Establish a climate change advisory group to engage diverse community stakeholders in identifying and implementing GHG reduction strategies

Action 6:

Practice Improvement

Analyze disproportionate and unintended consequences of mitigation activities and demonstrate activities that engage groups that are most likely to be negatively impacted

Action 7:

Enforcement and Incentives

Create incentives to improve opportunities for distributed generation of renewable energy sources

Action 8:

Programs and Services

Implement actions identified in a climate action plan that are intended to transition the community towards the use of alternative modes of transportation and low-emissions vehicles

Action 9:

Programs and Services

Implement specific programs and services or create facility upgrades that reduce waste in the community



CLIMATE & ENERGY

CE-3: Greening the Energy Supply

15 available points

PURPOSE

Transition the local energy supply for both transportation and non-mobile sources toward renewable, less carbon-intensive, and less toxic alternatives

EVALUATION MEASURES

Community Level Outcomes

70% of points available through Outcomes

Outcome 1: Green Vehicle Infrastructure

5.25 Points

Option A: Demonstrate that the number of private and public electric vehicle stations meets or exceeds 1.07 per 10,000 residents

--OR--

Option B: Demonstrate that the number of private and public alternative fuel stations meets or exceeds 1.52 per 10,000 residents [Partial credit applies]

Bonus: Achieve a Drive Alone rate of 60% or less

Outcome 2: Electrical Energy Supply

5.25 Points

Option A: Demonstrate that the community's overall electric utility generating capacity includes a portion from renewable energy sources [Partial credit available]

--OR--

Option B: Demonstrate that the community's electric utility is in compliance with RPS requirements and document the portion from renewable energy sources [Partial credit available]

Local Actions

70% of points available through Actions

Action 1:

Plan Development

Adopt a communitywide plan that includes a comprehensive programmatic and policy approach to shift the community towards alternative fuels and renewable energy sources

Action 2:

Policy and Code Adjustment

Utilize community choice aggregation, community shared solar, or community wind to procure renewable energy supplies



Action 3:

Policy and Code Adjustment

Remove regulatory restrictions on the development of residential and small business renewable energy installations

Action 4:

Partnerships and Collaboration

Establish partnerships between fleet managers, alternative fuel suppliers, and consumers to elevate alternative fuel options within the community

Action 5:

Practice Improvements

Earn recognition as a solar-ready community

Action 6:

Enforcement and Incentives

Create incentive programs to support the development of renewable infrastructure

Action 7:

Enforcement and Incentives

Use financial mechanisms to increase the mix of renewable energy sources supplied to residents

Action 8:

Programs and Services

Provide a net-metering program that encourages the development of residential and small business renewable energy sources

Action 9:

Facility and Infrastructure Improvements

Install public-use alternative fueling stations

Action 10:

Facility and Infrastructure Improvements

Build the necessary distribution or storage infrastructure to support further investment in renewable energy sources



PURPOSE

Minimize energy use and demand in the residential, commercial, and industrial sectors as a means to increase energy efficiency in the community

EVALUATION MEASURES

Community Level Outcomes

70% of points available through Outcomes

Outcome 1: Energy Use

7.5 Points

Part 1: Demonstrate incremental progress towards achieving an 80% reduction by 2050 in energy used by community buildings or industrial processes

--OR--

Part 2: Demonstrate incremental progress towards achieving an 80% reduction by 2050 in energy use within specific residential, commercial, and industrial sectors

[Partial credit available]

Outcome 2: Heat Island Mitigation Distribution

3 Points

Option A: Demonstrate that 85% of the population lives within a reasonable distance from a heat island mitigation feature that provides 1 of the following functions:

- localized cooling through tree canopy cover, green roofs or green walls;
- white roofs or cool roofs; and/or
- light colored pavement or groundcover

--OR--

Option B: Demonstrate that the surface temperature of the community is no more than 5 degrees Fahrenheit higher than surrounding suburban or rural areas when measured on a summer and winter night

Local Actions

70% of points available through Actions

Action 1:

Plan Development

Adopt a strategic action plan to improve the energy efficiency of residential and commercial buildings and industrial processes in the community



Action 2:

Policy and Code Adjustment

Adopt or upgrade building codes to ensure that new and renovated buildings are more energy efficient

Action 3:

Policy and Code Adjustment

Adopt an energy use information disclosure ordinance requiring energy users to disclose consumption levels

Action 4:

Education and Outreach

Create an education and outreach campaign or challenge to engage residents in energy efficiency efforts

Action 5:

Partnerships and Collaboration

Establish a committee to provide recommendations on policies related to energy efficiency in buildings OR integrate this role into the work of existing committees

Action 6:

Partnerships and Collaboration

Partner with organizations to encourage the collection and reporting of energy use data from the commercial and industrial sectors

Action 7:

Programs and Services

Develop a heat island mitigation program

Action 8:

Enforcement and Incentives

Create incentives to encourage the new construction of energy efficient buildings

Action 9:

Enforcement and Incentives

Create incentives for businesses, lessors, homeowners, and renters to improve the energy efficiency of their existing buildings and homes



Action 10:

Programs and Services

Create a local program to specifically help low-income households reduce energy-related burdens

Action 11:

Programs and Services

Work with the local utilities to implement energy commissioning programs throughout the community



PURPOSE

Minimize water use and demand as a means to conserve water in the community

EVALUATION MEASURES

Community Level Outcomes

70% of points available through Outcomes

Outcome 1: Domestic Water Use Per Capita

7 Points

Option A: Demonstrate achievement of 10% reduction in community domestic water use per capita since 2010

--OR--

Option B: Reduce local domestic water use per capita at a rate of 2% per year from a 2010 baseline [Partial credit applies]

Local Actions

70% of points available through Actions

Action 1:

Plan Development

Adopt a communitywide water management plan to improve water efficiency and reductions by residential and commercial sectors

Action 2:

Policy and Code Adjustment

Adopt plumbing, building, and/or zoning codes that promote water efficient practices and products

Action 3:

Education and Outreach

Create a comprehensive education and outreach campaign to engage residents and businesses in water efficiency efforts



Action 4:

Partnerships and Collaboration

Establish a committee to provide recommendations on policies and programs related to water efficiency in buildings OR integrate this role into the work of existing committees

Action 5:

Practice Improvements

Work with the local utilities to increase smart meters for water use throughout the community

Action 6:

Practice Improvements

Train inspectors to enforce water efficiency standards in adopted plumbing, building, and zoning codes

Action 7:

Enforcement and Incentives

Create incentives to encourage the new construction of water efficient buildings and landscaping

Action 8:

Programs and Services

Develop and provide water conservation programs to residents and businesses in order to reduce domestic water usage



CLIMATE & ENERGY

CE-6: Local Government GHG & Resource Footprint

15 available points

PURPOSE

Lead by example by reducing local government greenhouse gas emissions and minimizing energy and water use in local government facilities and specified local infrastructure

EVALUATION MEASURES

Community Level Outcomes

100% of points available through Outcomes

Outcome 1: Local Government Greenhouse Gas Emissions

7 Points

Demonstrate incremental progress towards achieving a 28% reduction by 2025 and/or an 80% reduction by 2050 in local government greenhouse gas (GHG) emissions [Partial credit available]

Outcome 2: Local Government Energy Efficiency

3.5 Points

Part 1: Demonstrate local government building stock energy use intensity is below the regional aggregated energy use intensity per building type [Partial credit available]

--AND--

Part 2: Demonstrate a 10% decrease in local government-owned public infrastructure energy use [Partial credit available]

Outcome 3: Local Government Water Conservation

3.5 Points

Demonstrate a 10% decrease in local government-owned public infrastructure water use [Partial credit available]

Local Actions

70% of points available through Actions

Action 1:

Inventory, Assessment or Survey

Conduct a local government Greenhouse Gas Inventory at least every 5 years

Action 2:

Inventory, Assessment or Survey

Benchmark local government building and infrastructure energy use annually



Action 3:

Inventory, Assessment or Survey

Establish a water use baseline for local government facilities and infrastructure and conduct a regular review of water use data against the baseline

Action 4:

Plan Development

Develop a local government sustainability action plan that includes strategies related to greenhouse gas emission mitigation, energy efficiency, and water conservation

Action 5:

Policy and Code Adjustment

Create a policy to ensure that the local government's energy supplies increasingly come from renewable sources

Action 6:

Policy and Code Adjustment

Adopt alternative fuel guidelines and/or targets for locally owned facilities and vehicles

Action 7:

Practice Improvements

Require that public infrastructure and facility managers consider energy and water consumption implications for new or upgraded infrastructure investments

Action 8:

Practice Improvements

Publish local government energy benchmarking reports at least every 3 years or maintain a web-based interface that provides local government energy data to the public

Action 9:

Practice Improvements

Develop or financially support infrastructure operators' participation in training programs on energy and water efficiency techniques



Action 10:

Facility and Infrastructure Improvements

Make retrofits and upgrades to local government buildings and/or infrastructure systems that will increase energy and water efficiency

Action 11:

Facility and Infrastructure Improvements

Increase sub-metering from specific infrastructure systems to collect better information on energy and water use



PURPOSE

Reduce and reuse material waste produced in the community

EVALUATION MEASURES

Community Level Outcomes

70% of points available through Outcomes

Outcome 1: Total Solid Waste

6.5 Points

Demonstrate incremental progress towards achieving a 100% reduction by 2050 in total solid waste generated within the jurisdiction that is disposed of via landfill, waste-to-energy facility, or incinerator [Partial credit available]

Outcome 2: Recycling Rate

4 Points

Achieve a solid waste recycling rate of 40% or greater

Local Actions

70% of points available through Actions

Action 1:

Plan Development

Adopt a waste management plan

Action 2:

Policy and Code Adjustment

Adopt specific product bans that will significantly advance progress towards waste reduction goals

Action 3:

Education and Outreach

Create a public education campaign or a focused outreach effort to inform residents and businesses of their roles in achieving waste reduction targets



Action 4:

Partnerships and Collaboration

Develop or participate in a regional coalition that enhances the community's ability to address waste management targets

Action 5:

Enforcement and Incentives

Implement communitywide incentives or enforce regulations ensuring that residents and businesses are working toward community waste reductions targets

Action 6:

Programs and Services

Provide services to enable residents and businesses to recycle and reduce their waste footprint

Action 7:

Programs and Services

Collaboratively create and run at least 3 targeted recycling programs at key locations throughout the community

Action 8:

Programs and Services

Operate at least 3 specific waste management programs for critical waste stream types found in the community, such as: organic waste, hazardous waste, electronic waste, and construction and demolition waste

Action 9:

Facility and Infrastructure Improvements

Create a Materials Recovery Facility for the community or demonstrate that community waste is diverted to a regional Materials Recovery Facility



GOAL AREA: Economy & Jobs

Create equitably shared prosperity and access to quality jobs

Introduction

The 6 objectives of STAR's Economy & Jobs Goal Area work together to promote equitably shared prosperity and access to quality jobs. EJ-1: Business Retention & Development and EJ-3: Local Economy both focus on supporting existing businesses within the community to retain workers and drive expansion to create a self-reliant local economy. Economic development efforts should consider not only the number of businesses, but the mix of businesses that suit the community and respond to its needs.

Recognizing that a robust local economy also needs to attract and incubate new businesses, EJ-5: Targeted Industry Development and EJ-2: Green Market Development seek to focus industry clusters and promote emerging green industries that protect the environment while strengthening and diversifying the local economy.

EJ-4: Quality Jobs & Living Wages evaluates workers' quality of life through increased household income and living wages, while EJ-6: Workforce Readiness recognizes the importance of a skilled workforce to fulfill local business needs and take advantage of available job opportunities.

Objective Number	Objective Title and Purpose	Available Points
EJ-1	Business Retention & Development: Foster equitable economic prosperity and stability by retaining and expanding businesses in all neighborhoods with support from the business community	20
EJ-2	Green Market Development: Increase overall market demand for products and services that protect the environment	15
EJ-3	Local Economy: Create an increasingly self-reliant community through a robust local economy that strongly supports small independent businesses	15
EJ-4	Quality Jobs & Living Wages: Expand job opportunities that support upward economic mobility, offer supportive workplace policies, and pay living wages so that all working people and their families can afford basic necessities without governmental assistance	20
EJ-5	Targeted Industry Development: Increase local competitiveness by strengthening clusters of businesses, suppliers, and associated institutions	15
EJ-6	Workforce Readiness: Prepare the workforce for successful employment through increasing attainment of post-secondary education and improving outcomes of workforce development programs	15
Total Points Available:		100



ECONOMY & JOBS

EJ- I: Business Retention & Development

20 available points

PURPOSE

Foster equitable economic prosperity and stability by retaining and expanding businesses in all neighborhoods with support from the business community

EVALUATION MEASURES

Community Level Outcomes

100% of points available through Outcomes

Outcome 1: Businesses

7.5 Points

Demonstrate an increased number of business establishments in the jurisdiction over time

Outcome 2: Employment

7.5 Points

Part 1: Demonstrate the percentage change between the jurisdiction's employment rate and the national rate is 10% or better [Partial credit available]

--AND--

Part 2: Demonstrate the percentage change between the jurisdiction's unemployment rate and the national rate is 10% or better [Partial credit available]

Outcome 3: Equitable Employment

5 Points

Part 1: Demonstrate the percentages of employed are proportional to the population in the labor force for each racial/ethnic group [Partial credit available]

--AND--

Part 2: Demonstrate unemployment rates are proportional to the population in the civilian labor force for each racial/ethnic group [Partial credit available]

Local Actions

70% of points available through Actions

Action 1:

Partnerships and Collaboration

Formally engage with the business community on a monthly or quarterly basis to improve economic conditions and address specific needs



Action 2:

Partnerships and Collaboration

Appoint an advisory body to provide recommendations and represent the business community in local decision-making

Action 3:

Partnerships and Collaboration

Engage in regional coordination with other governmental, public, private, and non-governmental entities to attract and retain businesses in the region

Action 4:

Enforcement and Incentives

Utilize tax incentives to retain or expand businesses

Action 5:

Enforcement and Incentives

Provide direct financial assistance to businesses

Action 6:

Enforcement and Incentives

Support business development activities in special investment zones

Action 7:

Programs and Services

Provide direct services and trainings tailored to the needs of the business community

Action 8:

Programs and Services

Provide focused support, resources, and services to young entrepreneurial companies through business incubators



ECONOMY & JOBS

EJ-2: Green Market Development

15 available points

PURPOSE

Increase overall market demand for products and services that protect the environment

EVALUATION MEASURES

Community Level Outcomes

70% of points available through Outcomes

Outcome 1: Greenhouse Gas Intensity

3.5 Points

Demonstrate decreased greenhouse gas (GHG) intensity over time

Outcome 2: Green and Energy Certified Building Stock

3.5 Points

Part 1: Demonstrate that 5% or more of residential units are certified through comprehensive green building programs or energy programs

--AND--

Part 2: Demonstrate that 5% or more of commercial and industrial building stock is certified through comprehensive green building programs or energy programs

[Partial credit available]

Outcome 3: Green Power

3.5 Points

Option A: Achieve status as a Green Power Community

--OR--

Option B: Demonstrate that the local government, businesses, and residents collectively use green power in amounts that meet or exceed EPA's Green Power Community usage requirements

[Partial credit available]

Local Actions

70% of points available through Actions

Action 1:

Plan Development

Amend existing local economic plans and strategies to focus market demand for green jobs, technology, products and services



Action 2:

Policy and Code Adjustment

Adopt policies and regulations that increase overall market demand for green buildings and associated materials, renewable energy products and infrastructure, and recyclable products

Action 3:

Policy and Code Adjustment

Review and amend zoning regulations to remove barriers or provide flexibility for green businesses

Action 4:

Policy and Code Adjustment

Establish regulations or zoning that incentivize district-scale sustainability projects

Action 5:

Partnerships and Collaboration

Partner with other local governments, community groups, and private entities in the region to articulate an overarching sustainable economic development strategy and work collaboratively to increase demand for green products and services

Action 6:

Education and Outreach

Create educational materials to define the larger vision of economic sustainability as one that proactively fosters green businesses, green jobs, and green practices

Action 7:

Practice Improvements

Create environmentally preferable purchasing for local government procurement of safe, healthy, and environmentally responsible products

Action 8:

Programs and Services

Create programs that directly help businesses transition to new green practices

Action 9:

Programs and Services

Implement a green business promotion program



ECONOMY & JOBS

EJ-3: Local Economy

15 available points

PURPOSE

Create an increasingly self-reliant community through a robust local economy that strongly supports small independent businesses

EVALUATION MEASURES

Community Level Outcomes

100% of points available through Outcomes

Outcome 1: Community Self-Reliance

5 Points

Option A: Demonstrate that 50% of import sectors have increasing location quotients over the past 3 years

--OR--

Option B: Demonstrate that the percentage of import sectors with increasing location quotients has increased over the past 3 years [Partial credit applies]

Outcome 2: Local Financial Institution Deposits

5 Points

Increase the total funds deposited in locally owned and operated financial institutions over time

Outcome 3: Small Businesses

5 Points

Option A: Demonstrate there are at least 20 small businesses per 1,000 residents for cities

--OR--

Option B: Demonstrate there are at least 31 small businesses per 1,000 residents for counties [Partial credit available]

Local Actions

70% of points available through Actions

Action 1:

Inventory, Assessment, or Survey

Conduct an assessment of local economic conditions, including economic leakage and targeted sectors for future investment



Action 2:

Plan Development

Adopt an economic localization plan to increase local production for local consumption and export

Action 3:

Policy and Code Adjustment

Promote purchasing preferences for locally produced goods and services in the local government and anchor institutions

Action 4:

Education and Outreach

Create or support promotional campaigns to bank locally, buy locally, or buy from small and independent businesses and retailers

Action 5:

Enforcement and Incentives

Provide incentives to small businesses in the form of direct financial assistance or tax incentives

Action 6:

Enforcement and Incentives

Provide incentives for businesses that use materials produced within the region and sell their products within the region

Action 7:

Programs and Services

Provide support services to targeted sectors to strengthen local value chain infrastructure and develop market channels

Action 8:

Programs and Services

Connect entrepreneurs and business owners with lenders and investors to facilitate investment in the local economy

Action 9:

Programs and Services

Support import substitution strategies that positively impact key sectors of the local economy



ECONOMY & JOBS

EJ-4: Quality Jobs & Living Wages

20 available points

PURPOSE

Expand job opportunities that support upward economic mobility, offer supportive workplace policies, and pay living wages so that all working people and their families can afford basic necessities without governmental assistance

EVALUATION MEASURES

Community Level Outcomes

100% of points available through Outcomes

Outcome 1: Median Household Income

6.6 Points

Increase real median household income over time

Outcome 2: Living Wages

6.7 Points

Option A: Demonstrate that 80% of household incomes in the jurisdiction meet or exceed the living wage standard

--OR--

Option B: Demonstrate an increase in the percentage of household incomes in the jurisdiction that meet or exceed the living wage standard over time [Partial credit applies]

Outcome 3: Income Inequality

6.7 Points

Demonstrate that income inequality in the region and locally is decreasing over time

Local Actions

70% of points available through Actions

Action 1:

Policy and Code Adjustment

Enact a living wage policy that covers local government employees, contractors, and entities receiving financial incentives or assistance from the local government



Action 2:

Policy and Code Adjustment

Enact family-friendly workplace policies for all local government employees that include at least 3 of the following benefits: paid sick days, paid family leave, flexible scheduling, teleworking, job sharing, and easily available childcare

Action 3:

Policy and Code Adjustment

Require that local government contractors provide at least 2 of the following benefits to their employees: paid sick days, paid family leave, flexible scheduling, job sharing, and easily accessible childcare

Action 4:

Education and Outreach

Support living wage campaigns in the community

Action 5:

Education and Outreach

Support a Best Places to Work campaign to recognize local businesses that support employees and their families

Action 6:

Partnerships and Collaboration

Maintain collective bargaining relationships with public employee labor organizations that represent local government workers

Action 7:

Practice Improvements

Participate in and promote project labor agreements, community benefit agreements and local hiring agreements

Action 8:

Programs and Services

Provide training programs and assistance to local businesses to encourage them to provide family-friendly workplace policies and extended benefits



Action 9:

Programs and Services

Provide job training and assistance programs for employees and employers in professions or sectors where wages are below the living wage

Action 10:

Enforcement and Incentive

Enforce the living wage policy with a living wage officer or equivalent function



ECONOMY & JOBS

EJ-5: Targeted Industry Development

15 available points

PURPOSE

Increase local competitiveness by strengthening clusters of businesses, suppliers, and associated institutions

EVALUATION MEASURES

Community Level Outcomes

70% of points available through Outcomes

Preliminary Step:

Locally define 3 targeted industry sectors for evaluation

The Preliminary Step is required if the community is applying for credit in the Community Level Outcomes or Local Actions 2 – 8.

Outcome 1: Targeted Industry Businesses

5.25 Points

Increase the total number of new businesses in targeted industry sectors over time [Partial credit available]

Outcome 2: Targeted Industry Employment

5.25 Points

Increase total employment in targeted industry sectors over time [Partial credit available]

Local Actions

70% of points available through Actions

Action 1:

Inventory, Assessment, or Survey

Conduct a local economic analysis or participate in the development of a regional analysis of existing industry sectors to understand current needs and opportunities

Action 2:

Inventory Assessment, or Survey

Invest in market studies and research to support the continued growth and expansion of targeted industry sectors



Action 3:

Partnerships and Collaboration

Coordinate or support local and regional associations or formal networks of related businesses in the targeted industry sectors

Action 4:

Partnerships and Collaboration

Coordinate with universities, community colleges, the local workforce investment board, private firms and other community stakeholders to align research, workforce development, and resources to support targeted industry sectors

Action 5:

Education and Outreach

Educate residents about the economic impact of targeted industry sectors in the community

Action 6:

Enforcement and Incentives

Use tax incentives to attract, retain, or expand businesses in targeted industry sectors

Action 7:

Enforcement and Incentives

Provide direct financial assistance, such as local bonds, grants, or loans, to attract, retain, or expand businesses in targeted industry sectors

Action 8:

Programs and Services

Provide capacity building services and support for professionals in emerging and existing targeted industry sectors



ECONOMY & JOBS

EJ-6: Workforce Readiness

15 available points

PURPOSE

Prepare the workforce for successful employment through increasing attainment of post-secondary education and improving outcomes of workforce development programs

EVALUATION MEASURES

Community Level Outcomes

70% of points available through Outcomes

Outcome 1: Trained Workforce

3.5 Points

Demonstrate improvements in workforce training outcomes for participants over the past 3 years

Outcome 2: Workforce Mobility

3.5 Points

Option A: Demonstrate progress towards 60% post-secondary attainment by 2025 including high-quality credentials and associate, bachelor, and graduate/professional degrees [Partial credit available]

--OR--

Option B: Demonstrate progress towards 45% post-secondary attainment by 2025 including associate, bachelor, and graduate/professional degrees [Partial credit available]

Outcome 3: Equitable Workforce Mobility

3.5 Points

Demonstrate an increasing percentage of individuals within each racial, ethnic, and gender subgroup have obtained a high-quality post-secondary educational degree or credential over time [Partial credit applies]

Local Actions

70% of points available through Actions

Action 1:

Plan Development

Adopt a workforce development plan or comprehensive strategy to educate, train, and prepare residents for local employment opportunities



Action 2:

Policy and Code Adjustment

Align local economic development policy strategies with workforce development programs

Action 3:

Policy and Code Adjustment

Require local government contractors and entities receiving financial incentives to prioritize hiring local residents

Action 4:

Partnerships and Collaboration

Create a workforce development committee to align post-secondary education, workforce development training programs, and economic development strategies

Action 5:

Partnerships and Collaboration

Create data-sharing agreements between local governments, private sector employers, and educational entities to maximize the availability and use of data in economic and workforce development planning

Action 6:

Practice Improvements

Produce an annual report that tracks workforce readiness performance measures

Action 7:

Programs and Services

Provide support services and training tailored to the needs of the local workforce

Action 8:

Programs and Services

Support expansion of community college or other credential-granting programs to address the educational and training needs of the local workforce

Action 9:

Facility and Infrastructure Improvements

Invest in community college or other credential-granting program facilities and capital improvements to accommodate residents and members of the local workforce



GOAL AREA: Education, Arts & Community

Empower vibrant, educated, connected, and diverse communities

Introduction

The 6 Objectives of STAR's Education, Arts & Community Goal Area promote an educated, cohesive, and socially connected community. EAC-3: Educational Opportunity & Attainment evaluates achievement and equitable access to a quality education so that all students may realize their full potential. EAC-1: Arts & Culture and EAC-5: Social & Cultural Diversity respect and celebrate the contributions that the arts and diversity bring to vibrant neighborhoods and communities.

Recognizing the importance of social connections within the community, EAC-4: Historic Preservation seeks to preserve the historical buildings and cultural resources that link the community to its past, while EAC-2: Community Cohesion encourages positive social interaction amongst neighbors. EAC-6: Aging in the Community addresses many issues of intergenerational importance, but focuses on enhancing quality of life as people age.

Objective Number	Objective Title and Purpose	Available Points
EAC-1	Arts & Culture: <i>Provide a broad range of arts and cultural resources and activities that encourage community member participation, creative self-expression, and community revitalization</i>	15
EAC-2	Community Cohesion: <i>Promote socially cohesive neighborhoods where residents are connected, have a sense of place, and feel committed to their community</i>	20
EAC-3	Educational Opportunity & Attainment: <i>Achieve equitable attainment of a quality education for individuals from birth to adulthood</i>	20
EAC-4	Historic Preservation: <i>Preserve and reuse historic structures and sites to retain local, regional, and national history and heritage, and reinforce community character</i>	15
EAC-5	Social & Cultural Diversity: <i>Celebrate, respect, and represent the diverse social and cultural backgrounds of the community and its members</i>	15
EAC-6	Aging in the Community: <i>Encourage active aging by optimizing opportunities for health, participation, and security in order to enhance quality of life as people age</i>	15
Total Points Available:		100



EDUCATION, ARTS & COMMUNITY

EAC-I: Arts & Culture

15 available points

PURPOSE

Provide a broad range of arts and cultural resources and activities that encourage community member participation, creative self-expression, and community revitalization

EVALUATION MEASURES

Community Level Outcomes

100% of points available through Outcomes

Outcome 1: Creative Industries

7.5 Points

Option A: Demonstrate that creative industries represent at least a 5% share of all businesses in the county according to the Local Arts Index

--OR--

Option B: Demonstrate that creative industries represent at least a 5% share of all businesses in the jurisdiction according to locally collected data

Outcome 2: Attendance and Participation

7.5 Points

Part 1: Demonstrate that at least 30% of adult residents in the county or city attend a live performing arts event annually

--AND--

Part 2: Demonstrate that at least 20% of adult residents in the county or city visit an art museum annually

[Partial credit available]

Local Actions

70% of points available through Actions

Action 1:

Plan Development

Adopt a strategic plan to protect, enhance, and expand the community's arts and cultural resources and strengthen creative industries



Action 2:

Policy and Code Adjustment

Adopt a percent-for-art ordinance requiring a percentage of the cost of new major development projects, public works projects, or capital improvement projects go to public art

Action 3:

Enforcement and Incentives

Establish enterprise zones, arts or cultural districts, or overlay zoning that encourages businesses in the creative industries to cluster together and integrate with surrounding neighborhoods

Action 4:

Partnerships and Collaboration

Collaborate with private, nonprofit, or regional organizations to increase access to and participation in the arts

Action 5:

Practice Improvements

Track participation and attendance at major community arts and cultural events, performances, festivals, and programs

Action 6:

Programs and Services

Provide financial or logistical support to local arts programs or cultural tourism

Action 7:

Programs and Services

Hire local artists to create artwork, sculptures, or perform in public spaces

Action 8:

Programs and Services

Require classes that advance arts education within the core curriculum in all public elementary and middle schools (K-8) AND provide special annual programming that brings artists into schools or brings students to art venues



Action 9:

Programs and Services

Provide entrepreneurial and workforce development training programs that serve artists, writers, designers, and other creative industries professionals

Action 10:

Facility and Infrastructure Improvements

Ensure that major arts and cultural facilities owned and operated by the local government AND at least half of all other major arts venues are fully accessible to people with disabilities

Action 11:

Facility and Infrastructure Improvements

Protect and maintain local public artworks and cultural resources for future generations



EDUCATION, ARTS & COMMUNITY

EAC-2: Community Cohesion

20 available points

PURPOSE

Promote socially cohesive neighborhoods where residents are connected, have a sense of place, and feel committed to their community

EVALUATION MEASURES

Community Level Outcomes

70% of points available through Outcomes

Outcome 1: Accessibility of Community Venues and Facilities

7.2 Points

Demonstrate that at least 75% of residents live within 1 mile of a community venue that is open to the public and offers free services and/or events for residents

Outcome 2: Volunteerism

3.4 Points

Option A: Demonstrate that at least 30% of residents in large jurisdictions or 35% of residents in small or mid-sized jurisdictions volunteered in the past year

--OR--

Option B: Demonstrate an increase in the percentage of residents who volunteered over the past 3 years [Partial credit applies]

Outcome 3: Cohesion and Connectedness

3.4 Points

Option A: Demonstrate that at least 80% of residents report positive levels of neighborhood cohesion through community surveys

--OR--

Option B: Demonstrate an increased percentage of residents reporting positive levels of neighborhood cohesion through community surveys [Partial credit applies]

Bonus: Demonstrate that at least 80% of neighborhoods within the community meet the requirements of Option A, Option B, or a combination of both.



Local Actions

70% of points available through Actions

Action 1:

Inventory, Assessment or Survey

Conduct a survey or evaluation to demonstrate existing levels of social capital and community cohesion throughout the community

Action 2:

Inventory, Assessment or Survey

Maintain a publicly accessible inventory of social networks and groups (e.g. block captains, civic organizations, trusted elders) organized by geography or neighborhood

Action 3:

Plan Development

Adopt neighborhood plans that guide future development, recommend strategies to create or preserve community venues, and address neighborhood-specific issues

Action 4:

Policy and Code Adjustment

Adopt zoning and development regulations that support or incentivize community-focused, place-oriented initiatives

Action 5:

Partnerships and Collaboration

Collaborate with neighborhood associations, civic groups, and local service providers to identify and address neighborhood-specific needs

Action 6:

Partnerships and Collaboration

Establish and support neighborhood advisory councils to build the social capital of neighborhoods and bring issues to the attention of the local government

Action 7:

Practice Improvements

Establish a department with staff assigned to work as liaisons with specific neighborhoods



EDUCATION, ARTS & COMMUNITY

EAC-2: Community Cohesion

Action 8:

Programs and Services

Ensure access to communication, funding, and organizational tools needed to foster cooperative networks in and between neighborhoods

Action 9:

Programs and Services

Provide direct funding and management of at least 2 types of community and neighborhood venues AND provide financial or logistical support for at least 2 types of publicly accessible neighborhood events, activities, and programming

Action 10:

Programs and Services

Provide programs that support the development of positive, strong youth leaders, particularly in low-income and/or minority neighborhoods

Action 11:

Programs and Services

Create a volunteer program for residents to assist the local government and community with special events, services, and operations



EDUCATION, ARTS & COMMUNITY

EAC-3: Educational Opportunity & Attainment

20 available points

PURPOSE

Achieve equitable attainment of a quality education for individuals from birth to adulthood

EVALUATION MEASURES

Community Level Outcomes

100% of points available through Outcomes

Outcome 1: Reading Proficiency

5 Points

Option A: Demonstrate at least 85% of third grade public school students meet or exceed reading proficiency standards

--OR--

Option B: Demonstrate progress towards 85% of third grade public school students meeting or exceeding reading proficiency standards [Partial credit applies]

Outcome 2: Reading Proficiency Equity

5 Points

Increase, or maintain at 85% or above, the percentage of students meeting or exceeding third grade reading proficiency standards for all third grade students in the jurisdiction from each race/ethnicity, special education, English language learners, and low-income subgroup of students [Partial credit available]

Outcome 3: Graduation Rate

5 Points

Option A: Achieve a 90% average 4-year adjusted cohort high school graduation rate for all schools in the jurisdiction

--OR--

Option B: Demonstrate progress towards a 90% average 4-year adjusted cohort high school graduation rate for all schools in the jurisdiction in the past 3 years [Partial credit applies]

Outcome 4: Graduation Rate Equity

5 Points

Increase, or maintain at 90% or above, the average 4-year adjusted cohort high school graduation rate for all students in all public schools in the jurisdiction from each race/ethnicity, special education, English language learners, and low-income subgroup of students [Partial credit available]



Local Actions

70% of points available through Actions

Action 1:

Partnerships and Collaboration

Engage local education authorities, teachers, families, and young people to advance collaborative decision-making and a community-driven framework for improving education

Action 2:

Partnerships and Collaboration

Strengthen opportunities for parental and community involvement in schools

Action 3:

Practice Improvements

Prepare an annual progress report for the public outlining the local school system's performance

Action 4:

Programs and Services

Provide local funding or other resources to support Head Start or other comprehensive early childhood development programs in the community

Action 5:

Programs and Services

Provide no-cost full-day kindergarten for low- and moderate-income students and students with special needs

Action 6:

Programs and Services

Program or support after-school activities, tutoring, and/or extended day programs for a majority of students who need additional academic assistance outside of the school day

Action 7:

Programs and Services

Program or support summer learning programs for a majority of students who need additional academic assistance and support outside of the school year



EDUCATION, ARTS & COMMUNITY

EAC-3: Educational Opportunity & Attainment

Action 8:

Programs and Services

Offer multiple pathways to graduation as a way to improve educational outcomes for students

Action 9:

Programs and Services

Implement career pathway initiatives



EDUCATION, ARTS & COMMUNITY

EAC-4: Historic Preservation

15 available points

PURPOSE

Preserve and reuse historic structures and sites to retain local, regional, and national history and heritage, and reinforce community character

EVALUATION MEASURES

Community Level Outcomes

70% of points available through Outcomes

Outcome 1: Local Historic District(s)

4.2 Points

Designate at least 1 local historic district per 100,000 residents with specific design standards and a process for reviewing new projects

Outcome 2: Preserved Structures and Sites

4.2 Points

Increase over time the annual number of eligible structures, sites, and landscapes designated as local historic landmarks, added to local historic districts, and/or rehabilitated, restored, or converted through adaptive reuse

Outcome 3: Economic Impact

2.1 Points

Demonstrate that historic preservation efforts have had a positive, measurable impact on the local economy

Local Actions

70% of points available through Actions

Action 1:

Inventory, Assessment or Survey

Create an inventory of designated and eligible historic structures and sites in the community (Bonus: Inventory includes archeological resources)

Action 2:

Plan Development

Adopt a historic preservation plan that establishes community priorities for preservation



Action 3:

Policy and Code Adjustment

Adopt a historic preservation ordinance that establishes procedures for designation of local historic districts and landmarks and authorizes establishment of a historic preservation commission

Action 4:

Policy and Code Adjustment

Adopt land use, zoning, and design regulations that support and reinforce existing community character in older and historic neighborhoods and commercial areas, and promote development of sensitive, compatible infill

Action 5:

Partnerships and Collaboration

Collaborate with local nonprofit or for-profit entities to support local events, recognition programs, and tourism efforts that celebrate and leverage the economic value of local historic resources

Action 6:

Practice Improvements

Achieve Certified Local Government status, as recognized by the National Park Service

Action 7:

Enforcement and Incentives

Establish a demolition by neglect ordinance

Action 8:

Enforcement and Incentives

Provide incentives to encourage the rehabilitation and preservation of historic buildings, and reinvestment in older and historic neighborhoods and commercial areas

Action 9:

Programs and Services

Provide local financial assistance to low- and moderate-income homeowners, residents, seniors, and/or businesses vulnerable to rising real estate values and maintenance costs associated with historic preservation



EDUCATION, ARTS & COMMUNITY

EAC-5: Social & Cultural Diversity

15 available points

PURPOSE

Celebrate, respect, and represent the diverse social and cultural backgrounds of the community and its members

EVALUATION MEASURES

Community Level Outcomes

70% of points available through Outcomes

Outcome 1: Diverse Local Government Hiring

5.25 Points

Part 1: Demonstrate that hiring to local government leadership positions reflects the gender, racial, and ethnic diversity of the community [Partial credit available]

--AND--

Part 2: Demonstrate that hiring to local government staff positions reflects the gender, racial, and ethnic diversity of the community [Partial credit available]

Outcome 2: Social and Cultural Events

5.25 Points

Demonstrate that public events celebrating social and cultural diversity are held in the community

Local Actions

70% of points available through Actions

Action 1:

Inventory, Assessment or Survey

Conduct an assessment of the community's social and cultural diversity to inform local government actions and investments

Action 2:

Policy and Code Adjustment

Adopt guidelines that ensure diversity and inclusion in hiring practices



EDUCATION, ARTS & COMMUNITY

EAC-5: Social & Cultural Diversity

Action 3:

Education and Outreach

Provide information about community issues, programs, services, and activities that is accessible to limited English proficiency residents

Action 4:

Partnerships and Collaboration

Establish a formal committee to advise the local government on social and cultural issues

Action 5:

Practice Improvements

Provide diversity or cultural competence training for local government staff

Action 6:

Practice Improvements

Maintain an office within the jurisdiction responsible for ensuring diversity and inclusion in policies, programs, procedures, and service delivery

Action 7:

Programs and Services

Host events and programs that recognize and celebrate the community's social and cultural diversity

Action 8:

Programs and Services

Provide grants to community based organizations that facilitate diversity-related programs, activities, and events



EDUCATION, ARTS & COMMUNITY

EAC-6: Aging in the Community

15 available points

PURPOSE

Encourage active aging by optimizing opportunities for health, participation, and security in order to enhance quality of life as people age

EVALUATION MEASURES

Community Level Outcomes

100% of points available through Outcomes

Outcome 1: Successful Aging

7.5 Points

Option A: Demonstrate that the community places in the top 25 percentile of the Best Cities for Successful Aging

--OR--

Option B: Achieve a Total Index Score of 60 or greater from the Livability Index

Outcome 2: Senior Satisfaction Survey

3.75 Points

Demonstrate that 70% or more of surveyed seniors view the community as meeting their needs

Outcome 3: Overcoming Challenges to Aging

3.75 Points

Demonstrate the following challenges to seniors living independently are less than the national values for:

- Responsibility for grandchildren;
- Disability;
- Unemployment;
- Food Stamp/SNAP benefits;
- 100% below the Poverty Level;
- Monthly owner housing costs 30 percent or more of household income; and
- Gross rent as a percentage of household income 30 percent or more.

[Partial credit available]



Local Actions

70% of points available through Actions

Action 1:

Inventory, Assessment or Survey

Conduct a survey of aging community members to assess how well they feel that present and future needs are being met

Action 2:

Plan Development

Adopt an action-based plan to identify priority service needs and resources to address the current and future needs of older residents

Action 3:

Policy and Code Adjustment

Adopt senior-friendly building codes that increase accessibility features of residential, commercial, and public buildings

Action 4:

Policy and Code Adjustment

Adopt design standards, zoning or transportation policy overlays that account for a senior's perspective

Action 5:

Partnerships and Collaboration

Establish a Commission on Aging to oversee community outreach and data collection efforts

Action 6:

Practice Improvements

Allocate staff time to focus on planning and programming for a maturing population

Action 7:

Practice Improvements

Be an active member of the WHO Global Network of Age-friendly Cities and Communities



Action 8:

Programs and Services

Provide mobility options that address the needs of seniors

Action 9:

Programs and Services

Create programs that provide discounts specifically for low-income seniors on utilities, transit, and other essential services

Action 10:

Programs and Services

Provide direct funding and management of community and neighborhood venues that provide services and programs specifically designed for seniors and caretakers

Action 11:

Programs and Services

Provide training to local government staff in strategies for working with older adults, including those with limited mobility, dementia, and Alzheimer's disease.



GOAL AREA: Equity & Empowerment

Ensure equity, inclusion, and access to opportunity for all residents

Introduction

The 6 Objectives in STAR's Equity & Empowerment Goal Area promote equity, inclusion, and access to opportunity and community resources for all community members. While equity and empowerment are also addressed in other Goal Areas and objectives, such as EAC-3, Outcome 3: Equitable Graduation Rate, this Goal Area delves deeper into key aspects of social equity.

EE-1: Civic Engagement measures process equity through voting, participation on local boards and committees, and community sense of empowerment. EE-2: Civil & Human Rights promotes the respect, protection, and fulfillment of civil and human rights by all members of the community.

EE-3: Environmental Justice addresses neighborhoods and populations overburdened by environmental pollution, which leads to disproportionate environmental, economic, and health impacts. EE-4: Equitable Services & Access evaluates the spatial distribution of foundational community assets, such as public schools, public transit, and healthful food, and rewards communities for reducing disparities in access.

Finally, objectives in the Equity & Empowerment Goal Area enable all residents to lead lives of dignity and address issues related to intergenerational inequity. EE-5: Human Services assures that the most vulnerable community members have timely access to necessary services, while EE-6: Poverty Prevention & Alleviation focuses on the ability of people living in poverty to obtain economic stability, and ensures the local government is working to alleviate the immediate effects of poverty.

Objective Number	Objective Title and Purpose	Available Points
EE-1	Civic Engagement: <i>Facilitate inclusive civic engagement through the empowerment of all community members to participate in local decision-making</i>	15
EE-2	Civil & Human Rights: <i>Respect, protect, and fulfill the civil and human rights of all members of the community</i>	10
EE-3	Environmental Justice: <i>Ensure no neighborhoods or populations are overburdened by environmental pollution</i>	15
EE-4	Equitable Services & Access: <i>Establish equitable spatial access to foundational community assets within and between neighborhoods and populations</i>	20
EE-5	Human Services: <i>Ensure that essential human services are readily available for the most vulnerable community members to ensure all residents receive supportive services when needed</i>	20
EE-6	Poverty Prevention & Alleviation: <i>Alleviate the impacts of poverty, prevent people from falling into poverty, and proactively enable those who are living in poverty to obtain greater, lasting economic stability and security</i>	20
Total Points Available:		100



EQUITY & EMPOWERMENT

EE- I: Civic Engagement

15 available points

PURPOSE

Facilitate inclusive civic engagement through the empowerment of all community members to participate in local decision-making

EVALUATION MEASURES

Community Level Outcomes

70% of points available through Outcomes

Outcome 1: Voter Turnout Rate

4.2 Points

Part 1: Demonstrate at least a 65% voter turnout rate in local elections during presidential election years or at least 50% during non-presidential election years

--AND--

Part 2: Option A: Demonstrate at least a 65% voter turnout rate by the community's 3 lowest performing wards or districts in the most recent local election during presidential election years or at least 50% during non-presidential election years

--OR--

Part 2: Option B: Increase the voter turnout rates for the community's 3 lowest performing wards or districts in local elections over time [Partial credit available]

Outcome 2: Sense of Empowerment

3.2 Points

Option A: Demonstrate that 51% or more of residents believe they are able to have a positive impact on their community based on a local survey

--OR--

Option B: Increase over time the percentage of residents who believe they are able to have a positive impact on their community based on local surveys [Partial credit applies]

Outcome 3: Diverse Community Representation

3.2 Points

Option A: Demonstrate that appointments to local advisory boards and commissions reflect the gender, racial, and ethnic diversity of the community

--OR--

Option B: Demonstrate incremental progress in appointing local advisory boards and commission members that reflect the gender, racial, and ethnic diversity of the community [Partial credit applies]



EQUITY & EMPOWERMENT

EE- I: Civic Engagement

Local Actions

70% of points available through Actions

Action 1:

Inventory, Assessment, or Survey

Collect and maintain public engagement records including public meeting attendance and participation on formal boards and commissions

Action 2:

Policy and Code Adjustment

Adopt a policy to encourage diversity in local government appointments to advisory boards and commissions that includes requirements for tracking and reporting composition by gender, race, and ethnicity

Action 3:

Policy and Code Adjustment

Adopt inclusive public engagement guidelines for local government agencies and departments

Action 4:

Education and Outreach

Conduct adult education campaigns about the electoral process and voter participation targeted at geographic areas or populations with low voter participation

Action 5:

Partnerships and Collaboration

Partner with business, civic, nonprofit, and neighborhood organizations to increase and promote community engagement in local decision-making

Action 6:

Practice Improvements

Provide training on the adopted public engagement guidelines to local government agencies and departments

Action 7:

Practice Improvements

Establish regular, ongoing opportunities for elected officials and/or senior government staff to meet with residents to answer questions and listen to concerns



EQUITY & EMPOWERMENT

EE- I: Civic Engagement

Action 8:

Programs and Services

Provide young people with opportunities to participate in civic activities

Action 9:

Programs and Services

Provide civic education programs that support the development of positive, strong youth leaders, with a particular focus on engaging individuals from low-income and/or minority neighborhoods

Action 10:

Programs and Services

Provide capacity building and leadership programs to cultivate and support community leaders and groups



EQUITY & EMPOWERMENT

EE-2: Civil & Human Rights

10 available points

PURPOSE

Respect, protect, and fulfill the civil and human rights of all members of the community

EVALUATION MEASURES

Community Level Outcomes

70% of points available through Outcomes

Outcome 1: Resolution of Complaints

7 Points

Part 1: Demonstrate that all police-related civil and human rights complaints in the past 3 years have been investigated and violations redressed in a timely manner

--AND--

Part 2: Demonstrate that all non-police-related civil and human rights complaints in the past 3 years have been investigated and violations redressed in a timely manner

[Partial credit available]

Local Actions

70% of points available through Actions

Action 1:

Inventory, Assessment, or Survey

Collect, analyze, and publish data on racial or ethnic disparities in judicial and law enforcement activities to proactively promote the respect of all community members' civil and human rights

Action 2:

Policy and Code Adjustment

Adopt policies or amend the jurisdiction's charter to specifically protect the civil and human rights of all

Action 3:

Practice Improvements

Establish an office within the jurisdiction with the authority and capacity to investigate civil and human rights complaints



EQUITY & EMPOWERMENT

EE-2: Civil & Human Rights

Action 4:

Education and Outreach

Conduct local public education campaigns regarding civil and human rights, such as the process for filing complaints

Action 5:

Partnerships and Collaboration

Establish an independent civil and/or human rights commission to ensure equity and inclusion for all

Action 6:

Practice Improvements

Provide training for police officers focused on implicit bias, cultural responsiveness, and non-discrimination

Action 7:

Practice Improvements

Modify law enforcement operations to increase transparency and accountability in interactions between community members and law enforcement

Action 8:

Programs and Services

Operationalize the local government's civil and human rights policies in programs, services, and operations

Action 9:

Programs and Services

Provide language translation or interpretation services to ensure that residents have access to information about their civil and human rights and local government services



EQUITY & EMPOWERMENT

EE-3: Environmental Justice

15 available points

PURPOSE

Ensure no neighborhoods or populations are overburdened by environmental pollution

EVALUATION MEASURES

Community Level Outcomes

70% of points available through Outcomes

Preliminary Step:

Identify the community's priority environmental justice conditions and priority neighborhoods for evaluation in this objective

The Preliminary Step is required only if the community is applying for credit in the Community Level Outcomes. If the community is applying for credit through Local Actions only, the Preliminary Step need not be completed.

Outcome 1: Reduce Risk and Exposure

10.5 Points

Demonstrate progress in reducing the risks and exposure to priority environmental justice conditions for priority neighborhoods

Local Actions

70% of points available through Actions

Action 1:

Inventory, Assessment, or Survey

Conduct a comprehensive environmental justice assessment

Action 2:

Plan Development

Adopt an environmental justice or social equity plan that includes strategies to reduce negative impacts and burdens to low-income populations and persons of color

Action 3:

Partnerships and Collaboration

Create an Environmental Justice Collaborative Group (EJCG)



EQUITY & EMPOWERMENT

EE-3: Environmental Justice

Action 4:

Education and Outreach

Provide information and education to the public regarding environmental justice conditions and available programs and services to alleviate disproportionate impact

Action 5:

Practice Improvements

Incorporate environmental justice criteria and priorities into zoning, land use planning, permitting policies, and development of new projects

Action 6:

Practice Improvements

Create community benefit agreements (CBAs) for environmental justice site remediation projects and/or proposed development projects with environmental justice concerns

Action 7:

Practice Improvements

Create an office or interdepartmental working committee within the local government to guide and support environmental justice activities

Action 8:

Enforcement and Incentives

Monitor and enforce environmental regulations for existing facilities that impact prioritized environmental justice sites and overburden neighborhoods

Action 9:

Facility and Infrastructure Improvements

Implement projects to reduce exposure to contaminants and risks associated with environmental justice conditions



EQUITY & EMPOWERMENT

EE-4: Equitable Services & Access

20 available points

PURPOSE

Establish equitable spatial access to foundational community assets within and between neighborhoods and populations

EVALUATION MEASURES

Community Level Outcomes

70% of points available through Outcomes

Preliminary Step:

Identify the community's priority foundational community assets and priority neighborhoods for evaluation

The Preliminary Step is required only if the community is applying for credit in the Community Level Outcomes. If the community is applying for credit through Local Actions only, the Preliminary Step need not be completed.

Outcome 1: Equitable Access and Proximity

14 Points

Demonstrate increased access and proximity to community facilities, services, and infrastructure in neighborhoods with the highest percentage of low-income residents and people of color
[Partial credit available]

Local Actions

70% of points available through Actions

Action 1:

Inventory, Assessment, or Survey

Conduct a comprehensive equity assessment for the community

Action 2:

Plan Development

Adopt an equity plan that evaluates current conditions in the community and establishes targets to improve equitable access and proximity



EQUITY & EMPOWERMENT

EE-4: Equitable Services & Access

Action 3:

Policy and Code Adjustment

Adopt an equity or social justice policy that establishes a clear commitment to equity in local government decision-making, activities, and investments

Action 4:

Partnerships and Collaboration

Appoint an advisory board to provide oversight on equity in the distribution of programs and services and in future development and planning initiatives

Action 5:

Partnerships and Collaboration

Establish partnerships that engage key community groups and stakeholders in activities to advance equitable access and proximity to facilities, services, and infrastructure

Action 6:

Education and Outreach

Publicize efforts to improve equitable access and proximity to priority foundational community assets and opportunities to contribute to decision-making and planning

Action 7:

Practice Improvements

Maintain an office or interdepartmental working committee to ensure access, equity, and inclusion in programs and service delivery

Action 8:

Practice Improvements

Provide advanced equity, inclusion, or cultural disparity training for local government staff

Action 9:

Practice Improvements

Incorporate equity impact assessments into the development and evaluation of program and services

Action 10:

Programs and Services

Expand or modify the deployment of local programs and services to reduce disparities



EQUITY & EMPOWERMENT

EE-4: Equitable Services & Access

Action 11:

Facility and Infrastructure Improvements

Construct new facilities and infrastructure in locations that reduce existing disparities



EQUITY & EMPOWERMENT

EE-5: Human Services

20 available points

PURPOSE

Ensure that essential human services are readily available for the most vulnerable community members

EVALUATION MEASURES

Community Level Outcomes

70% of points available through Outcomes

Outcome 1: Homelessness Services

7 Points

Demonstrate the homeless population within the community receives timely housing services or resources [Partial credit available]

Outcome 2: Mental Health & Substance Abuse Services

3.5 points

Option A: Demonstrate the timely provision of mental health and substance abuse treatment programs and services

--OR--

Option B: Demonstrate improvements in the timely provision of mental health and substance abuse treatment programs and services [Partial credit applies]

Outcome 3: Child and Adult/Elderly Abuse and Neglect Services

3.5 points

Demonstrate that all child and adult/elderly abuse and neglect complaints in the past 3 years have been investigated and redressed in a timely manner

Local Actions

70% of points available through Actions

Action 1:

Inventory, Assessment, or Survey

Conduct a community needs assessment to identify priority service needs and resources, including the needs of vulnerable populations



EQUITY & EMPOWERMENT

EE-5: Human Services

Action 2:

Plan Development

Adopt a human services plan designed to guarantee that basic human needs are met in the community

Action 3:

Partnerships and Collaboration

Establish an advisory committee that provides ongoing consultation to local government departments and agencies responsible for providing human services

Action 4:

Education and Outreach

Establish and support programming and events that inform residents of available human services and connect vulnerable community members to available programs or services

Action 5:

Practice Improvements

Implement information technology solutions to improve client support services and management

Action 6:

Practice Improvements

Monitor and evaluate the quality, comprehensiveness, and effectiveness of provided human services

Action 7:

Practice Improvements

Equip human services personnel with the skills and training needed to effectively improve the well-being of vulnerable populations

Action 8:

Programs and Services

Support the provision of high quality human services in coordination with non-governmental service providers

Action 9:

Facility and Infrastructure Improvements

Upgrade existing facilities or build new facilities to better provide needed human services



EQUITY & EMPOWERMENT

EE-6: Poverty Prevention & Alleviation

20 available points

PURPOSE

Alleviate the impacts of poverty, prevent people from falling into poverty, and proactively enable those who are living in poverty to obtain greater, lasting economic stability and security

EVALUATION MEASURES

Community Level Outcomes

100% of points available through Outcomes

Outcome 1: Poverty Reduction

12 Points

Demonstrate progress towards reducing the percentage of residents living below the poverty line by 50% by 2030 [Partial credit available]

Outcome 2: Equitable Poverty Reduction

8 Points

Demonstrate a decrease over time in the percentage of women, men, children, and additional subgroups of residents living below the poverty line [Partial credit available]

Local Actions

70% of points available through Actions

Action 1:

Plan Development

Adopt a communitywide plan to reduce poverty

Action 2:

Partnerships and Collaboration

Create a team of local government staff to work collaboratively and coordinate with non-governmental organizations to provide high-quality services and reduce poverty

Action 3:

Education and Outreach

Develop public education campaigns to inform residents about how to enroll in available service programs to help meet basic needs



EQUITY & EMPOWERMENT

EE-6: Poverty Prevention & Alleviation

Action 4:

Programs and Services

Establish or support programs that reduce the costs of basic needs for low-income households

Action 5:

Programs and Services

Implement supportive workplace programs for people living at or near the poverty line

Action 6:

Programs and Services

Connect low-income community members with workforce development programs to strengthen hard and soft work skills

Action 7:

Programs and Services

Provide child development programs for children living at or near the local poverty line

Action 8:

Programs and Services

Provide financial literacy, money management, and banking programs or services for low-income residents



GOAL AREA: Health & Safety

Strengthen communities to be healthy, resilient and safe places for all residents and businesses

Introduction

The 7 Objectives in STAR's Health & Safety Goal Area recognize that the development of healthy, safe, and resilient communities requires proactive efforts to prevent disease, injury, and premature death by fortifying protective factors and reducing risk factors that undermine healthy outcomes.

Several objectives are closely focused on reducing obesity and preventing related illnesses like diabetes and heart disease. HS-1: Active Living encourages physical activity for adults and kids through community design and activities that promote walking, bicycling, and other forms of recreation. HS-4: Food Access & Nutrition measures the accessibility of fresh, healthful food and recognizes efforts to encourage healthy eating. HS-2: Community Health serves as the overall, composite measure of public health and integration of health considerations into local decision-making. HS-5: Health Systems addresses the structural and professional components of health care in the community, such as hospitals, clinics, and providers.

The remaining objectives address planning efforts to prevent and alleviate the impacts of hazardous events, emergency situations, violence, and crime. HS-6: Hazard Mitigation focuses on reducing vulnerability to existing community risk areas. HS-3: Emergency Management & Response evaluates the preparedness of emergency responders to efficiently and effectively respond to emergencies. HS-7: Safe Communities, seeks to reduce violence and crime through proven prevention strategies.

Objective Number	Objective Title and Purpose	Available Points
HS-1	Active Living: <i>Enable adults and kids to maintain healthy, active lifestyles by integrating physical activity into their daily routines</i>	15
HS-2	Community Health: <i>Achieve positive health outcomes and minimize health risk factors associated with behaviors and poor indoor air quality in schools and homes</i>	15
HS-3	Emergency Management & Response: <i>Reduce harm to humans and property by utilizing collaborative approaches to increase capability and capacity to respond to emergency incidents</i>	15
HS-4	Food Access & Nutrition: <i>Ensure that adults and children of all income levels have physical and economic access to fresh and healthful food and have opportunities to learn about nutritious eating and food safety</i>	15
HS-5	Health Systems: <i>Provide high quality local health systems that are accessible and responsive to community needs</i>	10
HS-6	Hazard Mitigation: <i>Reduce or eliminate the long-term risk to life and property from existing hazard events through an on-going process that occurs before, during, and after disasters</i>	15
HS-7	Safe Communities: <i>Prevent and reduce crime and increase perceptions of safety through interagency collaboration and with residents as empowered partners</i>	15
Total Points Available:		100



HEALTH & SAFETY

HS- I: Active Living

15 available points

PURPOSE

Enable adults and kids to maintain healthy, active lifestyles by integrating physical activity into their daily routines

EVALUATION MEASURES

Community Level Outcomes

70% of points available through Outcomes

Outcome 1: Active Adults

5.25 Points

Demonstrate 20% or less of adults aged 20+ report no leisure time physical activity within the past month [Partial credit available]

Outcome 2: Active Kids

5.25 Points

Option A: Increase the percentage of high school students that are physically active for 60 minutes per day on 5 or more days

--OR--

Option B: Increase the percentage of public schools that require some form of physical activity daily, such as physical education classes or recess [Partial credit applies]

Local Actions

70% of points available through Actions

Action 1:

Plan Development

Include a chapter, section, or plan element focused on active living or active transportation in the comprehensive plan or transportation plan

Action 2:

Policy and Code Adjustment

Require or incentivize bicycle and pedestrian amenities in new major development projects in high-density, mixed-use areas or near transit stations



Action 3:

Policy and Code Adjustment

Create guidelines to encourage the incorporation of active building design features in new public, commercial, office, or multi-family residential buildings

Action 4:

Policy and Code Adjustment

Establish school siting guidelines that give preferential considerations to locations that maximize the number of students who can walk or bicycle safely to school

Action 5:

Partnerships and Collaboration

Create or designate a committee or board to advise the local government on issues related to active living in the community

Action 6:

Practice Improvements

Achieve recognition as a Bicycle-Friendly Community or Walk-Friendly Community OR achieve an average community Walk Score or Bike Score of 70 or above

Action 7:

Practice Improvements

Appoint a physical activity specialist within the local government to serve as a liaison between relevant local government departments or agencies, including the health department

Action 8:

Programs and Services

Host or partner with community groups to support at least 3 annual programs that encourage active living for adults and kids

Action 9:

Facility and Infrastructure Improvements

Implement a local enhancement program that systematically improves at least 3 bicycle and pedestrian amenities communitywide



Action 10:

Facility and Infrastructure Improvements

Provide at least 3 types of active recreation facilities that are available for community use, by population size

Action 11:

Facility and Infrastructure Improvements

Enable joint use of school-based recreation facilities during non-school hours



HEALTH & SAFETY

HS-2: Community Health

15 available points

PURPOSE

Achieve positive health outcomes and minimize health risk factors associated with behaviors and poor indoor air quality in schools and homes

EVALUATION MEASURES

Community Level Outcomes

100% of points available through Outcomes

Outcome 1: Health Outcomes

5 Points

Demonstrate that the county is a Top US Performer in regards to Length of Life and Quality of Life indicators [Partial credit available]

Outcome 2: Health Behaviors

5 Points

Demonstrate that the county is a Top US Performer in regards to key behaviors that impact health [Partial credit available]

Outcome 3: Indoor Air Quality (IAQ) in Schools

2.5 Points

Demonstrate that all IAQ problems in schools are resolved in a timely manner

Outcome 4: Indoor Air Quality (IAQ) Complaints to Enforcement Agency

2.5 Points

Decrease the number of tenant complaints regarding IAQ over time

Local Actions

70% of points available through Actions

Action 1:

Inventory, Assessment, or Survey

Conduct a comprehensive community health assessment, which includes data collection and analysis of public health conditions, trends, and problems affecting the community



HEALTH & SAFETY

HS-2: Community Health

Action 2:

Plan Development

Develop a community health improvement plan to strengthen the delivery of health services and improve community health

Action 3:

Policy and Code Adjustment

Adopt a health in all policies statement or policy commitment for local decision-making

Action 4:

Policy and Code Adjustment

Prohibit smoking in all enclosed public places, including restaurants, bars, and workplaces and affirm the right for landlords to legally establish smoke-free rental units or restrict smoking in multi-family buildings communitywide

Action 5:

Policy and Code Adjustment

Adopt the National Healthy Housing Standard or equivalent local code for existing residential buildings that includes implementation and enforcement provisions

Action 6:

Policy and Code Adjustment

Adopt a Recreational Aquatic Health Code to address illnesses, injuries, and fatalities in community pools or spas

Action 7:

Partnerships and Collaboration

Engage the public, local businesses, and nonprofit entities in assessing, developing, and implementing strategies focused on improving health behaviors related to smoking and obesity

Action 8:

Practice Improvements

Demonstrate that the local government has received healthy workplace accreditation or has established a Comprehensive Workplace Health program



Action 9:

Enforcement and Incentives

Implement a proactive rental inspection program to protect tenants' health and safety

Action 10:

Programs and Services

Develop and implement a comprehensive program focused on vector-borne diseases, such as Zika, Chikungunya, and Lyme disease

Action 11:

Programs and Services

Provide grants or loans to remediate indoor air pollution problems in low-income homes or affordable rental units

Action 12:

Facility and Infrastructure Improvements

Conduct health impact assessments (HIAs) on proposed infrastructure investments and development projects to increase positive health outcomes and minimize adverse impacts



HEALTH & SAFETY

HS-3: Emergency Management & Response

15 available points

PURPOSE

Reduce harm to humans and property by utilizing collaborative approaches to increase capability and capacity to respond to emergency incidents

EVALUATION MEASURES

Community Level Outcomes

100% of points available through Outcomes

Outcome 1: Superior Fire Protection

6 Points

Part 1: Achieve a current ISO rating of 3 or better

--AND--

Part 2: Demonstrate that 90% of response times are in compliance with standards set by the National Fire Protection Association (NFPA) [Partial credit available]

Outcome 2: Fire and Police Accreditation

6 Points

Part 1: Demonstrate that the fire department has obtained Commission on Fire Accreditation International (CFAI) accreditation

--AND--

Part 2: Demonstrate that the police department has obtained Commission on Accreditation for Law Enforcement Agencies (CALEA) accreditation

Outcome 3: Community Emergency Management

3 Points

Option A: Demonstrate that the emergency management community is prepared to manage emergency incidents involving all threats and hazards [Partial credit available]

--OR--

Option B: Demonstrate that the local government has received accreditation by the Emergency Management Accreditation Program (EMAP)



Local Actions

70% of points available through Actions

Action 1:

Inventory, Assessment, or Survey

Develop a NIMS-compliant local inventory of assets and resources available for emergency response and mutual aid requests

Action 2:

Education and Outreach

Publish information to encourage residents to develop emergency kits and evacuation plans, and encourage businesses to develop emergency procedures and shelter-in-place plans

Action 3:

Partnerships and Collaboration

Participate in cross-department/agency interstate, statewide, regional, or inter-jurisdictional mutual aid response systems

Action 4:

Partnerships and Collaboration

Participate in a regional emergency planning commission

Action 5:

Plan Development

Adopt a local comprehensive plan for emergency response that includes provisions for evacuating low-income, disabled, and other persons likely to need assistance

Action 6:

Practice Improvements

Integrate departmental and jurisdictional interoperability into public safety communications systems

Action 7:

Practice Improvements

Perform an annual review or assessment of plans, procedures, resources, and trainings based on emergency response incidents and demands

**Action 8:****Practice Improvements**

Participate in discussion-based and operations-based exercises that involve the public and emergency management personnel from multiple departments and/or multiple jurisdictions

Action 9:**Programs and Services**

Host an active Citizen Emergency Response Team (CERT) or Medical Reserve Corps (MRC)

Action 10:**Programs and Services**

Distribute emergency kits or supplies to low-income and vulnerable residents before an event occurs



HEALTH & SAFETY

HS-4: Food Access & Nutrition

15 available points

PURPOSE

Ensure that adults and children of all income levels have physical and economic access to fresh and healthful food and have opportunities to learn about nutritious eating and food safety

EVALUATION MEASURES

Community Level Outcomes

70% of points available through Outcomes

Outcome 1: Food Security and Assistance

3.5 Points

Demonstrate an increase over the past 3 years in the percentage of people who are food secure

Outcome 2: Access to Healthful Food

3.5 Points

Option A: Demonstrate an increase over the past 3 years in the percentage of residents within a walkable 1/4-mile of a healthful retail food outlet

--OR--

Option B: Demonstrate a decrease over the past 3 years in the percentage of residents living in an urban or rural food desert

Outcome 3: School Nutrition

3.5 Points

Demonstrate an increase over the past 3 years in the food service sales of fresh fruits and vegetables in the largest public school district

Local Actions

70% of points available through Actions

Action 1:

Inventory, Assessment, or Survey

Conduct an assessment of the local food system, including existing policies and programs that address the 6 steps of the food cycle: grow or produce, sell, process, distribute, consume, and compost



HEALTH & SAFETY

HS-4: Food Access & Nutrition

Action 2:

Policy and Code Adjustment

Adopt zoning and development regulations that allow farmer's markets, community gardens, and other forms of urban agriculture that promote increased food access

Action 3:

Policy and Code Adjustment

Adopt menu-labeling requirements, zoning restrictions, or development regulations that discourage, tax, or prohibit the sale of unhealthful foods or beverages

Action 4:

Policy and Code Adjustment

Demonstrate that the local government has adopted the most recent U.S. Food Code

Action 5:

Policy and Code Adjustment

Demonstrate that the local public school district has adopted a model school wellness policy

Action 6:

Partnerships and Collaboration

Establish a local or regional food policy council that includes health professionals, community organizations, schools, farmers, and/or related businesses

Action 7:

Education and Outreach

Support the development of healthy eating campaigns for residents to learn about nutrition, food safety, and food assistance programs

Action 8:

Practice Improvements

Demonstrate that local schools or the public school district has received certification from the USDA HealthierUS Schools Challenge or an award from the Alliance for a Healthier Generation in the past 3 years

Action 9:

Practice Improvements

Purchase and sell healthful food at facilities owned, leased, and operated by the local government



HEALTH & SAFETY

HS-4: Food Access & Nutrition

Action 10:

Programs and Services

Implement an “Increase Your Food Bucks” program and accept federal food assistance through SNAP or WIC programs at farmer’s markets

Action 11:

Programs and Services

Support programs that enable healthful retail food outlets to locate in underserved areas, promote mobile vendors that only sell fresh food, or increase the mix of healthful food sold in existing establishments



HEALTH & SAFETY

HS-5: Health Systems

10 available points

PURPOSE

Provide high quality local health systems that are accessible and responsive to community needs

EVALUATION MEASURES

Community Level Outcomes

70% of points available through Outcomes

Outcome 1: Clinical Care

5 Points

Demonstrate that the county is a Top U.S. Performer in regards to quality of clinical care, including access to health care [Partial credit available]

Outcome 2: Quality of Local Hospital Systems

2.5 Points

Part 1: Demonstrate that at least 1 hospital per 50,000 residents is accredited by the Joint Commission

--AND--

Part 2: Demonstrate that at least 1 hospital has been recognized as a top performer by the Joint Commission

Outcome 3: High Performing Health Department

2.5 Points

Demonstrate that the local public health department is accredited by the Public Health Accreditation Board

Local Actions

70% of points available through Actions

Action 1:

Inventory, Assessment, or Survey

Conduct a local Public Health System Assessment to identify the components, competencies, and capacities of essential service providers



HEALTH & SAFETY

HS-5: Health Systems

Action 2:

Plan Development

Demonstrate that at least 1 health care institution in the community has made a strategic commitment to addressing equity in their services

Action 3:

Partnerships and Collaboration

Establish a governance model between the health department, local healthcare providers, and community health organizations that supports local and regional collaboration for improving community health

Action 4:

Education and Outreach

Educate the public about eligibility and enrollment barriers to obtaining health insurance

Action 5:

Programs and Services

Provide medical, dental, and/or mental health services to the community through income-based clinics or community health workers

Action 6:

Practice Improvement

Provide free medical interpretation services at medical health facilities

Action 7:

Programs and Services

Implement strategies to recruit medical professionals to the community or to areas of need in the community

Action 8

Programs and Services

Use a performance management system to monitor and improve health services and programs that promote positive health outcomes and expand access to health care



HEALTH & SAFETY

HS-6: Hazard Mitigation

15 available points

PURPOSE

Reduce or eliminate the long-term risk to life and property from existing hazard events through an on-going process that occurs before, during, and after disasters

EVALUATION MEASURES

Community Level Outcomes

70% of points available through Outcomes

Outcome 1: Location Specific Hazards

5.25 Points

Part 1:

Option A: Reduce over time the number of homes below code standards that are located in designated high risk areas

--OR--

Option B: Reduce over time the percentage of residents living in designated high-risk areas

--AND--

Part 2: Reduce over time the critical infrastructure below code standards that is located in designated high risk areas

Outcome 2: Full Community Hazards

5.25 Points

Demonstrate a measurable reduction in vulnerability and/or increase in resiliency to existing communitywide hazard threats over time

Local Actions

70% of points available through Actions

Action 1:

Inventory, Assessment, or Survey

Perform an all-hazard vulnerability assessment including key local hazards, impacts on vulnerable populations and critical infrastructure, opportunities for mitigation, and a business impact analysis

Action 2:

Plan Development

Develop a post-disaster plan that addresses long-range redevelopment issues such as land use, economic development, housing, infrastructure, public services, and environmental restoration



Action 3:

Policy and Code Adjustment

Adopt land use regulations that limit development in areas of high hazard vulnerability

Action 4:

Policy and Code Adjustment

Adopt local building codes or enforce state building codes with heightened standards for buildings in areas of high hazard vulnerability

Action 5:

Education and Outreach

Increase community awareness of natural or man-made hazards through education and outreach materials

Action 6:

Enforcement and Incentives

Create insurance or incentive structures to help equitably remove residents from hazardous situations

Action 7:

Facility and Infrastructure Improvements

Build or renovate locally owned public facilities that will be used as shelters, command centers, and demonstration areas to meet higher building code standards

Action 8:

Facility and Infrastructure Improvements

Implement highest priority infrastructure improvements listed in the hazard mitigation plan



HEALTH & SAFETY

HS-7: Safe Communities

15 available points

PURPOSE

Prevent and reduce crime and increase perceptions of safety through interagency collaboration and with residents as empowered partners

EVALUATION MEASURES

Community Level Outcomes

100% of points available through Outcomes

Outcome 1: Crime Rates

7.5 Points

Demonstrate that the average crime rate for the past 3 years is below the following thresholds:

- 5.5 homicides per 100,000 residents
- 70 incidents of rape or attempted rape per 100,000 residents
- 462.7 aggravated assaults per 100,000 residents
- 2,596.1 incidents of property crime per 100,000 residents

[Partial credit available]

Outcome 2: School Violence

7.5 Points

Demonstrate that the average rate of violent victimizations at schools is less than 10 per 1,000 students aged 12-18 in the jurisdiction

Local Actions

70% of points available through Actions

Action 1:

Inventory, Assessment, or Survey

Conduct a survey of community perceptions of safety recognizing that some crimes are not reported and to illuminate safety issues that need to be addressed

Bonus: Survey includes breakdown of geographic variances in safety perceptions

Action 2:

Plan Development

Adopt a safe communities strategic plan with a comprehensive, balanced approach that includes violence prevention, intervention, suppression and enforcement, community policing, and reentry strategies



Action 3:

Education and Outreach

Educate community members about public safety and law enforcement programs and strategies

Action 4:

Partnerships and Collaboration

Develop partnerships with local agencies, nonprofit organizations, schools, and residents to implement public safety strategies, enforcement programs, and trust-building initiatives

Action 5:

Practice Improvements

Establish cross-agency coordination and procedures to support balanced implementation of public safety and enforcement activities

Action 6:

Practice Improvements

Perform ongoing data collection, evaluation, and monitoring from multiple agencies to track trends and identify emerging community needs

Action 7:

Practice Improvements

Integrate community policing and procedural justice into police department operations to support and build trust within the community

Action 8:

Programs and Services

Implement violence prevention programs and strategies to address community-identified risks and protective factors

Action 9:

Programs and Services

Implement school-based violence prevention programs and strategies, particularly in highly impacted, urban, and at-risk neighborhoods



Action 10:

Programs and Services

Develop violence intervention programs and strategies to support at-risk families and youth and to prevent the escalation of violence

Action 11:

Programs and Services

Create or support a multi-faceted, monitored reentry program for ex-offenders that includes training, education, mentoring, employment opportunities, and other support services to reduce recidivism



GOAL AREA: Natural Systems

Protect and restore the natural resources upon which life depends

Introduction

The 6 objectives in the Natural Systems Goal Area help communities protect and restore the places that provide resources to support life. The NS Goal Area takes an ecosystem services approach and recognizes the wide range of benefits natural systems provide, such as food, water, and natural regulating processes affecting climate and floods. Ecosystem services also extend to cultural benefits like aesthetic value and recreation.

NS-5: Water in the Environment and NS-4: Outdoor Air Quality bring attention to the reality that clean water and air are vital for humans and other species to thrive. NS-2: Biodiversity & Invasive Species recognizes that achieving biodiversity requires a two-prong approach of protecting habitats and controlling the spread of destructive non-native species.

With an emphasis on connectivity and collaboration, NS-3: Natural Resource Protection focuses on issues at a broad ecosystem and ecoregional scale. This objective is complemented by NS-1: Green Infrastructure, which aims to integrate natural design with the built environment and emphasizes benefits that extend beyond stormwater harvesting to include localized cooling and air quality. NS-6: Working Lands recognizes the environmental and economic contributions of land management to the Natural Systems Goal Area.

Objective Number	Objective Title and Purpose	Available Points
NS-1	Green Infrastructure: <i>Design and maintain a network of green infrastructure features that integrate with the built environment to conserve ecosystem functions and provide associated benefits to human populations</i>	20
NS-2	Biodiversity & Invasive Species: <i>Maintain the urban ecosystem habitat at levels that promote biodiversity and manage or prevent invasive species</i>	10
NS-3	Natural Resource Protection: <i>Protect, enhance, and restore natural ecosystems and cultural landscapes to confer resilience and support clean water and air, food supply, and public safety</i>	20
NS-4	Outdoor Air Quality: <i>Ensure that outdoor air quality is healthy for all segments of the human population and protects the welfare of the community</i>	15
NS-5	Water in the Environment: <i>Protect and restore the biological, chemical, and hydrological integrity of water in the natural environment</i>	20
NS-6	Working Lands: <i>Conserve and sustainably manage lands that provide ecosystem services and raw materials</i>	15
Total Points Available:		100



NATURAL SYSTEMS

NS- I: Green Infrastructure

20 available points

PURPOSE

Design and maintain a network of green infrastructure features that integrate with the built environment to conserve ecosystem functions and provide associated benefits to human populations

EVALUATION MEASURES

Community Level Outcomes

70% of points available through Outcomes

Outcome 1: Green Stormwater Infrastructure

8.4 Points

Option A: Demonstrate that 35% of the jurisdiction's land area has designated green stormwater infrastructure providing bioretention and infiltration services

--OR--

Option B: Demonstrate that no more than 65% of the jurisdiction's land area contains impervious surfaces

Outcome 2: Green Infrastructure Distribution

5.6 Points

Demonstrate that 85% of the population lives within a 1/3-mile distance from green infrastructure features that provide localized cooling through tree canopy cover or vegetative surfaces

Local Actions

70% of points available through Actions

Action 1:

Inventory, Assessment or Survey

Assess the state of the jurisdiction's urban forest

Action 2:

Plan Development

Create a communitywide green infrastructure plan that is integrated with other relevant local plans



Action 3:

Policy and Code Adjustment

Adopt local design criteria and associated codes that require proactive green infrastructure practices for new developments

Action 4:

Policy and Code Adjustment

Include evaluation of green infrastructure potential during early site reviews of proposed developments and subdivisions

Action 5:

Partnerships and Collaboration

Partner with key community groups and other stakeholders to ensure that green infrastructure practices are used in appropriate settings

Action 6:

Enforcement and Incentives

Create incentive programs to encourage landowners to adopt green infrastructure practices that link to broader green infrastructure systems

Action 7:

Practice Improvements

Establish a green infrastructure monitoring program and regularly report on status of desired outcomes

Action 8:

Facility and Infrastructure Improvements

Dedicate a percentage of funding invested in green infrastructure

Action 9:

Facility and Infrastructure Improvements

Upgrade public spaces and public buildings based upon locally adopted or recognized best practices in green infrastructure; where possible, create demonstration projects to enhance public support



NATURAL SYSTEMS

NS-2: Biodiversity & Invasive Species

10 available points

PURPOSE

Maintain the urban ecosystem habitat at levels that promote biodiversity and manage or prevent invasive species

EVALUATION MEASURES

Community Level Outcomes

70% of points available through Outcomes

Preliminary Step:

Identify up to 3 threatened species and up to 3 invasive species within the jurisdiction

The Preliminary Step is required if the community is applying for any credit in this objective.

Outcome 1: Threatened Species

3 Points

Option A: Show that the population of at least 1 threatened species has reached optimal population size

--OR--

Option B: Show that the population of at least 1 threatened species achieved their rate of recovery goal within the past 5 years [Partial credit applies]

Outcome 2: Habitat Conservation and Connectivity

2 Points

Option A: Achieve no net loss of habitat areas for threatened species

--OR--

Option B: Increase the connectivity between habitats needed for threatened species
[Partial credit available]

Outcome 3: Invasive Species Management

2 Points

Show that existing invasive species have been eradicated or contained so as to prevent their population growth and expansion [Partial credit available]



Local Actions

70% of points available through Actions

Action 1:

Plan Development

Create a plan for management of local species that minimizes damage from invasive species and enhances biodiversity and ecosystem services

Action 2:

Policy and Code Adjustment

Adopt or enforce an ordinance requiring control of listed priority invasive species or enact a preferred plant ordinance for private and public landscaping

Action 3:

Partnerships and Collaboration

Partner with state or federal agencies to monitor, manage, and report on status of threatened and invasive species

Action 4:

Partnerships and Collaboration

Partner with local volunteer groups or neighborhood associations to restore priority natural systems areas by planting native plants or improving local wildlife habitat

Action 5:

Partnerships and Collaboration

Partner with local volunteer groups to monitor areas at greatest risk of invasion and remove invasive species

Action 6:

Education and Outreach

Inform residents and/or plant or animal sellers about the benefits of native species and the hazards of invasive species

Action 7:

Enforcement and Incentives

Use incentive programs to encourage local businesses and private owners to grow and sell native plants and animals and not sell invasive species



Action 8:

Enforcement and Incentives

Enforce regulations to control the use and sale of invasive species

Action 9:

Facility and Infrastructure Improvements

Ensure that all local government-owned buildings use native and/or sustainable, site-appropriate species in landscaping

Action 10:

Programs and Services

Take actions to prevent the spread of invasive species, especially in priority natural systems areas, such as monitoring, eradication, or other control programs



NATURAL SYSTEMS

NS-3: Natural Resource Protection

20 available points

PURPOSE

Protect, enhance and restore natural ecosystems and cultural landscapes to confer resilience and support clean water and air, food supply, and public safety

EVALUATION MEASURES

Community Level Outcomes

70% of points available through Outcomes

Preliminary Step:

Identify all natural parkland and other natural resource areas, for evaluation in this objective

The Preliminary Step is only required if the community is applying for credit in the Community Level Outcomes. If the community is applying for credit through Local Actions only, the Preliminary Step need not be completed.

Outcome 1: Natural Resource Areas

3.5 Points

Option A: Maintain natural resource acreage at 20 acres per 1,000 residents or greater

--OR--

Option B: Maintain natural resource acreage at 11.5% or more of total jurisdictional land area

Outcome 2: Wetlands, Streams, and Shoreline Buffers

3.5 Points

Achieve no net loss of wetlands, streams, and shoreline buffers

Outcome 3: Connectivity

3.5 Points

Increase the amount of natural or restored areas directly connected to regional natural systems in order to improve ecosystem services

Outcome 4: Restoration

3.5 Points

Option A: Reduce the difference between the actual acreage restored and targeted acreage established in the natural systems plan or land conservation plan

--OR--

Option B: Restore degraded natural resource areas at a ratio greater than 1% of developed land area in the jurisdiction



Local Actions

70% of points available through Actions

Action 1:

Plan Development

Develop a plan to protect and restore natural resources through land conservation, corridor connectivity, and restoration of biological integrity and function

Action 2:

Policy and Code Adjustment

Adopt land use regulations that establish appropriate wetland, stream, and shoreline buffer widths and adjacent land uses

Action 3:

Partnerships and Collaboration

Create an advisory board to inform land conservation and restoration activities

Action 4:

Partnerships and Collaboration

Partner with adjacent jurisdictions, state and federal agencies, and local or regional nonprofit organizations to advance land conservation and restoration efforts

Action 5:

Education and Outreach

Sponsor activities to increase ecological literacy and knowledge about natural resource protection

Action 6:

Enforcement and Incentives

Adopt land use strategies to incentivize permanent land conservation

Action 7:

Enforcement and Incentives

Implement local and market-based financing strategies to acquire land or development easements, or fund restoration and maintenance activities



Action 8:

Facility and Infrastructure Improvements

Restore, maintain, and monitor conserved natural lands to increase natural resource resilience, adaptability, and biological integrity



NATURAL SYSTEMS

NS-4: Outdoor Air Quality

15 available points

PURPOSE

Ensure that outdoor air quality is healthy for all segments of the human population and protects the welfare of the community

EVALUATION MEASURES

Community Level Outcomes

70% of points available through Outcomes

Outcome 1: Concentration and Emissions of Criteria Air Pollutants

10 Points

Option A: Achieve attainment or maintenance status for all measured criteria pollutants

--OR--

Option B:

Part 1: Demonstrate a decrease in the annual concentration of the non-attainment criteria pollutant(s) that have the greatest impacts on public health over the past 5 years, specifically PM 2.5, PM10, and ozone

--AND--

Part 2: Demonstrate a decrease trend in the annual number of days in which the Air Quality Index (AQI) exceeds 100 over the past 5 years

[Partial credit applies]

Outcome 2: Risk from Hazardous Air Pollutants

5 Points

Option A: Demonstrate the community's total cancer risk from hazardous air pollutants is less than 50 per million

--OR--

Option B: Demonstrate a reduction in the total cancer risk from hazardous air pollutants in the community over time [Partial credit applies]

Local Actions

70% of points available through Actions

Action 1:

Inventory, Assessment, or Survey

Conduct a study to evaluate the geographic areas and subpopulations with the highest exposure to outdoor air pollutants, particularly in consideration of environmental justice and equity impacts



Action 2:

Partnerships and Collaboration

Collaborate with local industrial operations to reduce and minimize the release of criteria and hazardous air pollutants in the community

Action 3:

Partnerships and Collaboration

Collaborate with local industrial operations to reduce and minimize the release of noxious odors in the community

Action 4:

Education and Outreach

Educate the public about the impacts of poor air quality on human health and the natural environment and the efforts they can take to reduce air pollution emissions and exposure

Action 5:

Enforcement and Incentives

Enforce anti-idling regulations or burning restrictions to prevent the emission of excess pollution, particularly on Air Quality Action Days

Action 6:

Facility and Infrastructure Improvements

Improve traffic signal timing or upgrade intersections to relieve auto congestion

Action 7:

Programs and Services

Implement targeted programs to encourage residents to transition to cleaner products

Action 8:

Programs and Services

Create or enhance forestry programs aimed at increasing the jurisdiction's tree canopy through active planting, care, and management



NATURAL SYSTEMS

NS-5: Water in the Environment

20 available points

PURPOSE

Protect and restore the biological, chemical, and hydrological integrity of water in the natural environment

EVALUATION MEASURES

Community Level Outcomes

100% of points available through Outcomes

Outcome 1: Watershed Health Index

10 Points

Option A: Demonstrate a local Watershed Health Index of greater than or equal to 70

--OR--

Option B: Demonstrate that the amount of water withdrawn from the system for human uses does not exceed the amount of freshwater entering the system through precipitation, river flow, and other sources

Outcome 2: Watershed Vulnerability Index

5 Points

Demonstrate a local Watershed Vulnerability Index of less than 70

Outcome 3: Watershed Usability

5 Points

Option A: Demonstrate that all non-industrial water bodies are swimmable and fishable during 90% of days in the past year

--OR--

Option B: Demonstrate a steady reduction in water closures of at least 2% annually towards achieving 90% of days being swimmable and fishable [Partial credit applies]

Local Actions

70% of points available through Actions

Action 1:

Inventory, Assessment or Survey

Conduct a watershed health and vulnerability assessment of local waterways



Action 2:

Plan Development

Adopt a watershed management plan that integrates natural water bodies with human water use and addresses inputs and outputs of the water systems

Action 3:

Policy and Code Adjustment

Adopt community regulations that protect water quality OR participate in a regional pollutant trading program that reduces watershed pollution levels

Action 4:

Partnerships and Collaboration

Create partnerships to address sources of ambient water pollution not covered by local authority or control

Action 5:

Education and Outreach

Create an education campaign about ambient water quality, pollution prevention, mitigation, and restoration techniques

Action 6:

Enforcement and Incentives

Provide incentives to residents and developers to protect and restore critical watershed protection areas

Action 7:

Facility and Infrastructure Improvements

Engage in restoring and maintaining critical water bodies and the buffer zones that protect those water bodies

Action 8:

Programs and Services

Routinely inventory and monitor natural water bodies for biological, chemical, and hydrological integrity



NATURAL SYSTEMS

NS-6: Working Lands

15 available points

PURPOSE

Conserve and sustainably manage lands that provide ecosystem services and raw materials

EVALUATION MEASURES

Community Level Outcomes

70% of points available through Outcomes

Outcome 1: Protection

4.1 Points

Option A: Demonstrate an increase in the acreage of working lands in the jurisdiction

--OR--

Option B: Demonstrate no net loss of working lands within 5 miles of the jurisdictional boundaries

Outcome 2: Production

3.2 Points

Option A: Demonstrate an increase over the past 3 years in the production of goods from local working lands

--OR--

Option B: Demonstrate an increase over the past 3 years in sales from goods produced on local working lands

Outcome 3: Certified Management Practices

3.2 Points

Increase the percentage of working lands that use certified management practices for a locally selected industry over time

Local Actions

70% of points available through Actions

Action 1:

Inventory, Assessment, or Survey

Conduct an assessment or inventory of the community's working lands



Action 2:

Plan Development

Include considerations for working lands in the community's land conservation or natural resource plan

Action 3:

Policy and Code Adjustment

Adopt zoning and development regulations that allow for the production and sale of urban agriculture goods

Action 4:

Policy and Code Adjustment

Adopt land use strategies or development regulations that protect or expand local working lands

Action 5:

Education and Outreach

Educate future and current owners and operators of working lands about working lands preservation efforts, certification programs, and best management practices

Action 6:

Education and Outreach

Promote the value of products produced on local working lands to the public

Action 7:

Enforcement and Incentives

Implement financing strategies to conserve working lands and support ongoing conservation efforts

Action 8:

Programs and Services

Provide conservation programs and services tailored to the needs of the working lands community

Action 9:

Programs and Services

Provide support services or programs for future operators and owners of working lands



Action 10:

Programs and Services

Encourage owners of working lands to conserve their properties in perpetuity



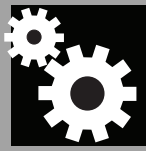
Innovation & Process

Recognize important local government practices and processes that guide the implementation of sustainability and accelerate community-scale achievement across STAR Goal Areas

Introduction

The Innovation & Process (IP) category is an avenue for discovering emerging and cutting-edge practices that communities are implementing to improve local sustainability. IP also rewards communities for putting into place best practices and processes to underpin and support continuous improvement in sustainability outcomes. There are 4 sections in this category: Best Practices & Processes; Exemplary Performance; Local Innovation; and Good Governance.

Section	Title and Purpose	Available Points
IP-1	Best Practices & Processes: <i>Recognize important local government practices and processes that underpin the implementation of sustainability measures and accelerate community-scale achievement across STAR Goal Areas</i>	10
IP-2	Exemplary Performance: <i>Reward performance in Community Level Outcome measures or Local Action measures that significantly exceeds the evaluation criteria established by the existing STAR Community Rating System</i>	10
IP-3	Local Innovation: <i>Encourage and reward creative, effective approaches to enhancing a community's environmental, social, and/or economic sustainability not reflected in existing STAR Objectives or evaluation measures</i>	20
IP-4	Good Governance: <i>Recognize the achievement of demonstrated outcomes and good practices in governance that elevate achievement and success rates across multiple goals and objectives</i>	10
Total Points Available:		50



INNOVATION & PROCESS

IP-1: Best Practices & Processes

10 available points

PURPOSE

Recognize important local government practices and processes that underpin the implementation of sustainability measures and accelerate community-scale achievement across STAR Goal Areas

Description

Local governments continually make decisions, expenditures, and investments that affect community sustainability. The strength of local decision-making is informed by community input, public planning efforts, regulations, and internal coordination across government departments and agencies. Effective practices and processes are therefore critical to ensure that local decisions lead to sustainable outcomes and do not unfairly burden particular constituencies.

IP-1: Best Practices & Processes credits applicants that demonstrate leadership in effectively and innovatively engage the public, plan for their community's future, leverage public resources, establish rules and regulations that advance sustainability and equity, and institutionalize transparency and sustainability.

There are 4 categories of best practices and processes for which credit is available:

- (1) Comprehensive Planning;
- (2) Public Engagement Techniques;
- (3) Innovative Codes & Ordinances; and
- (4) Sustainability Education.

Applicants may pursue credit in up to 2 of the 4 categories in order to receive the maximum 10 points (5 points each). No partial credit is available within each category. If there is another specific best practice or process that the applicant believes is worthy of points, consider applying for credit under IP-3: Local Innovation.

For each best practice and process category, the applicant should:

- explain how the community is meeting each of the required best practices;
- explain how implementation applies across all Goal Areas of the STAR framework; and
- link to or upload additional submittal requirements.

Submissions will be evaluated as to whether the local efforts achieve the criteria described, incorporate innovative strategies, advance equity in decision-making, and positively impact STAR Objectives.

EVALUATION CRITERIA

(1) Comprehensive Planning

Option A: Within the past 5 years, adopt a systems-based comprehensive plan that establishes a clear vision for the future, concretely addresses subjects in all STAR Goal Areas, identifies performance measures and specific actions that will enable the community to achieve its goals, provides a clear process for implementation, and includes annual reporting on progress



INNOVATION & PROCESS

IP-1: Best Practices & Processes

--OR--

Option B: Achieve official Sustaining Places Designation for the community's comprehensive plan from the American Planning Association (APA)

(2) Public Engagement Techniques

Part 1: Demonstrate both high-tech and high-touch on-going engagement techniques that empower the public in shaping the future of the community

--AND--

Part 2: Demonstrate that public engagement techniques include practices that intentionally and directly engage all residents, including traditionally unrepresented or underrepresented groups, through inclusive, context-sensitive, and transparent decision-making processes

(3) Innovative Codes & Ordinances

Part 1: Adopt innovative sets of codes or ordinances that comprehensively advance sustainable practices and raise environmental standards

--AND--

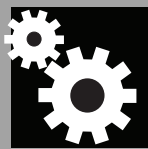
Part 2: Demonstrate how the sets of codes or ordinances are being legally enforced in the community

(4) Sustainability Education

Option A: Describe cohesive programs, services, or annual events that educate residents about wide-ranging sustainability issues in the community

--OR--

Option B: Implement a local sustainability literacy program within the local public school system



INNOVATION & PROCESS

IP-2: Exemplary Performance

10 available points

PURPOSE

Reward performance in Community Level Outcome or Local Action measures that significantly exceed the evaluation criteria or scope established by the existing STAR Community Rating System

Description

IP-2: Exemplary Performance recognizes communities that are demonstrating performance levels that exceed the leadership standards of STAR's existing outcome and action measures.

EVALUATION CRITERIA

To demonstrate exemplary performance in a STAR outcome measure, applicants must show that the community's performance in 1 or more outcomes goes significantly above and beyond STAR's standards for credit. Determination of significance will vary by outcome.

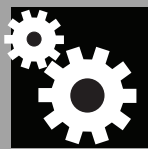
For credit, the applicant must receive full credit for the submitted measure in the original objective, including measures with multiple parts. Up to 50% of the points available in the existing outcome measure will be awarded for exemplary performance.

For verification, applicants must provide analysis supporting their claim of exemplary performance and a requested number of points. The number of points requested should consider the extent to which the applicant exceeds the threshold.

To demonstrate exemplary performance in an action measure, the applicant must show that the action meets the criteria of an existing action measure in the Technical Guide and that the intent of the submitted action is substantially more involved or comprehensive than described for that measure. Regional priorities that include substantial efforts may be included.

Local actions submitted for IP-2: Exemplary Performance may not be submitted for any of the other Innovation & Process sections. Communities that demonstrate exemplary performance in an action measure will be assigned 1 point per preparatory action and 2 points per implementation action.

Applicants may submit up to 4 outcome and/or action measures for IP-2: Exemplary Performance credit; however, note that there are only a total of 10 points available.



INNOVATION & PROCESS

IP-3: Local Innovation

20 available points

PURPOSE

Encourage and reward creative, effective approaches to enhancing a community's environmental, social, and/or economic sustainability not reflected in existing STAR Objectives or evaluation measures

Description

IP-3: Local Innovation provides a mechanism to recognize communities that approach sustainability in creative, effective ways. While the STAR Community Rating System was designed to be comprehensive, sustainability is a continuously evolving discipline. Local Innovation points can be achieved by proposing new evaluation measures (outcomes or actions) and even new STAR Objectives.

EVALUATION MEASURES

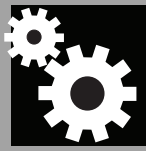
Evaluation measures that have a history of success within a community that are not present within the existing Rating System may be submitted for additional credit under IP-3: Local Innovation. Similarly, if a community has identified an objective-level sustainability issue and developed a comprehensive strategy for addressing it, STAR welcomes proposals for consideration. Proposals for new objectives must include substantive outcomes and actions that have been achieved within the community.

Applicant can submit a combination of up to 6 examples of local innovation for credit; however, a maximum of 20 total points is available. The number of points eligible are based on the type of measure and/or action type. Applicants must explain why the requested level of points is justified given the existing point structure in STAR.

Maximum point values are as follows:

- New Objective = 15 points
- New Outcome = 10 points
- New Action
 - Education and Outreach = 2 points
 - Plan Development = 2 points
 - Policy and Code Adjustment = 3 points
 - Partnerships and Collaborations = 1 point
 - Practice Improvements = 1 point
 - Inventory, Assessment, or Survey = 1 point
 - Enforcement and Incentives = 4 points
 - Programs and Services = 4 points
 - Facility and Infrastructure Improvements = 6 points

Measures submitted for IP-3 cannot receive duplicated credit for a measure already described in the STAR framework, including a different section of the Innovation & Process area. For example, a community has several violence suppression program. Each program meets the intent of HS-7: Safe Communities. This alone would not be eligible for credit under IP-3.



INNOVATION & PROCESS

IP-4: Good Governance

10 available points

PURPOSE

Recognize the achievement of demonstrated outcomes and good practices in governance that elevate achievement and success rates across multiple STAR goals and objectives

Description

IP-4: Good Governance rewards applicants that demonstrate achievement in outcomes or practices that support underlying performance across the STAR framework.

There are 3 good governance categories for which credit is available:

- (1) Quality of Municipal Bond Rating;
- (2) Transparency and Open Data; and
- (3) Designated Sustainability Director or Office of Sustainability.

Applicants may pursue credit in up to 2 of the 3 good governance categories to receive the maximum 10 points (5 points each). Partial credit is not available within the categories. If applicant has more than 2, apply for credit in the third under IP-3: Local Innovation.

EVALUATION CRITERIA

(1) Quality of Municipal Bond Rating

Achieve a Best Quality or High Quality bond rating with 1 or more of the 3 major rating agencies

(2) Transparency and Open Data

Option A: Demonstrate that data made available to the public meet the Open Data Policy Guidelines, as described by the Sunlight Foundation

--OR--

Option B: Adopt the What Works Cities Standard and describe efforts within the 4 components: Commit, Measure, Take Stock, and Act

(3) Designated Sustainability Director or Office of Sustainability

Demonstrate that the local government has designated and funded at least 1.0 FTE employee directly responsible for coordinating on sustainability issues across departments or that an Office of Sustainability has been established with a clear direction to act on the local government's behalf



SUSTAINABILITY
TOOLS FOR
ASSESSING &
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version 2.1

Administrative Update Three
July 2017

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2401 Walnut Street Suite 102 Philadelphia, PA 19103 U.S.A.

Telephone: +1 (888) 347-9997 | www.aashe.org

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Sharing

AASHE provides additional materials to facilitate sharing credit criteria with data providers. These documents, data collection spreadsheets, and other tools are available on the [STARS website](#) and in the online STARS Reporting Tool.

If these features don’t meet your on-screen reading needs, please consider printing only the sections you need, printing double-sided, and using recycled-content paper or paper that has already been printed on one side.



Dear Colleagues,

Higher education has always recognized its public responsibility to educate students, to provide research that fuels our economy and strengthens our communities, and to model the behaviors that contribute to a just and more civil society. Recently, higher education institutions have also recognized the important role they can play in moving all of us to a more sustainable future, one that will provide prosperity today while ensuring that future generations have resources to meet their needs.

These goals, as essential as they are, are also complicated. The challenges facing the globe are vast, and it can sometimes be daunting to consider how institutions might change course, particularly given that we may be somewhat unsure of where we need to head.

To help address this challenge, the Association for the Advancement of Sustainability in Higher Education offers campuses a comprehensive tool, the Sustainability Tracking, Assessment & Rating System™ (STARS). Constructed over several years and with the help of many students, staff, faculty, and administrators drawn from a wide range of institutions, STARS® enables colleges and universities to gauge their progress toward sustainability. This voluntary, self-assessment tool provides a clear and thorough system by which higher education institutions can benchmark where they are today and set goals for the future.

STARS was developed by and for higher education, and recognizes the unique missions, challenges, obligations, constraints, and opportunities of colleges and universities. It provides a tool for looking at all facets of our institutions—curriculum and research, campus operations, planning and institutional capacity—with the goal of aiding strategic planning, fostering cross-sector dialogue about sustainability on campus, and stimulating conversations and learning between institutions.

On behalf of AASHE, thank you for your interest in STARS and for your ongoing contributions to creating a sustainable future. We look forward to your participation.

Toward sustainability,

Meghan Fay Zahniser
Executive Director
AASHE

Nurit Katz
Chair, STARS Steering Committee
Chief Sustainability Officer,
University of California Los Angeles

Acknowledgements

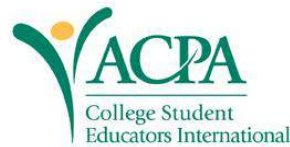
Volunteer stakeholders from throughout higher education have helped shape and refine this initiative. AASHE extends a heartfelt thanks to the STARS Steering Committee and Technical Advisors; institutions that participated in the STARS pilot project during 2008 and the international pilot during 2011-2012; reviewers who commented on draft versions of the document; participants in public comment periods; conference session attendees who asked thoughtful and challenging questions; conference call participants who offered ideas and feedback; and countless other individuals and institutions that provided resources, suggestions, encouragement, and ideas. This project would not have been possible without your remarkable contributions.

Partner Organizations

AASHE gives special thanks to our partner organizations for their ongoing support of STARS.



Association of College &
University Housing Officers –
International



Society for College and University Planning
INTEGRATED PLANNING FOR HIGHER EDUCATION

STARS Steering Committee

Current Members

Dennis Carlberg, Sustainability Director, Boston University
Ben Champion, Director, Office of Sustainability, University of Arizona
Julian Dautremont-Smith, Director of Programs, AASHE (ex-officio)
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Aaron Durnbaugh, Director of Sustainability, Loyola University Chicago
Elaine Durr, Director of Sustainability, Elon University
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Michael Gulich, Director of University Sustainability, Purdue University
Trina Innes - Chief Sustainability Officer, Office of Sustainability, University of Alberta
Nurit Katz, Chief Sustainability Officer, University of California, Los Angeles
Anna Pautler, Sustainability Data Assessment and Reporting Officer, Sheridan College
Chris Pelton, STARS Program Manager, AASHE (ex-officio)
Rashmi Sahai, Assessments Program Manager, Office of Sustainability, Stanford University
Andrea Trimble, Sustainability Director, University of Virginia

Former Steering Committee Members

Justin Brown, William Brown, Sarah Hammond Creighton, Amy Dvorak, Jeremy Friedman, Sally Grans-Korsch, Angela Halfacre, Elaine Hanson, Preston Jacobsen, Jon Jensen, Nadine Johnson, Rose Johnson, Erika Kociolek, H. Scott Matthews, Dave Newport, Chris O'Brien, Vita Pickrum, Stephenie Presseller, Paul Rowland, Cindy Shea, Adam Steinman, Ron van der Veen, Judy Walton, KyuJung Whang.

STARS Technical Advisors

Academics

Christie-Joy Hartman, Executive Director, Office of Environmental Stewardship and Sustainability, James Madison University

Michael Lizotte, University Sustainability Officer, University of North Carolina Charlotte

Maïke Luiken, Dean, Applied Research and Sustainable Development, Lambton College

Audrey Mayer, Assistant Professor, Ecology & Environmental Policy, Michigan Technological University

Beth Mercer-Taylor, Sustainability Education Coordinator, University of Minnesota

Justin Miller, Director, Sponsored Programs Office / Educational Studies, Ball State University

Max Zahniser, Ecoxera and The Sustainability NEXUS

Engagement

Marianne Buehler, Urban Sustainability Librarian, University of Nevada, Las Vegas

Christina Erickson, Sustainability Coordinator, Champlain College

Amber Garrard, Outreach & Education Manager, Yale University

Brian Hagenbuch, Dean, MST & Health, Schenectady County Community College

Jocelyn Hittle, Director, Denver Operational Initiatives, Colorado State University

Lindsey Kalkbrenner, Director, Office of Sustainability, Santa Clara University

Mariam Masud, Advisor, Operational Sustainability, University of Calgary

Jill Ramirez, Coordinator of Sustainability Education, University of Arizona

Debra Rowe, Professor of Behavioral Sciences, Oakland Community College

Operations

Tyler Arrigo, Program Coordinator, University of Massachusetts Lowell

Kevin Bright, Sustainability Coordinator, Colby College

Alex Davis, Sustainability Coordinator, Babson College

Jenny deHart, Sustainability Director, Unity College

Aparna Dial, Director, Energy and Sustainability, The Ohio State University

Carol Dollard, Energy Engineer, Colorado State University

Elaine Gallagher Adams, Professor of Architecture & Urban Design, Savannah College of Art and Design

Nathan Gauthier, Construction Management Consultant, UNICEF Rwanda

Kevin Gilford, Assistant Sustainability Director, University of Colorado Colorado Springs

Maira Hafer, Sustainability Analyst, Stanford University

Denielle Harrison, Sustainability Fellow, Dartmouth College

Corey Hawkey, Sustainability Manager, Arizona State University

Justin Heavey, Senior Research Support Specialist, State University of New York College of Environmental Science and Forestry (SUNY-ESF)

Dan Hellmuth, Principal, Hellmuth + Bicknese Architects, LLC

Julie Higgins, Principal, Landscape Architecture, Hord Coplan Macht

Preston Jacobsen, Sustainability Coordinator, University of Tennessee, Knoxville

Matthew James, Assistant Professor, Landscape Architecture, South Dakota State University

Kim Landsbergen, Associate Professor of Biology and Environmental Science, Antioch College

Zuhair Mased, Director, Energy, Sustainability & Engineering, University of California Merced

Lisa McNeilly, Director, Office of Sustainability, University of California Berkeley
Michael Meyering, Project and Sustainability Manager, University of Washington
Nina Mukherji, Director of Programs, The Real Food Challenge
Jeff Murphy, Manager of Sustainability Services at Sightlines, LLC
Amelia Neptune, Program Manager, Bicycle Friendly University & Business, League of American Bicyclists
Albert Ng, Senior Transportation Engineer, Vanasse Hangen Brustlin
Ruairi O'Mahony, Associate Director, Office of Sustainability, University of Massachusetts Lowell
John Riley, Senior Sustainability Scientist at the Julie Ann Wrigley Global Institute of Sustainability, Arizona State University
Wade Sanner, Assistant Director of Strategic Sourcing, Emory University
Erin Stanforth, Director of Sustainability, Virginia Commonwealth University
Adam Stoker, Sustainability Consultant, University of Calgary; Director, Alberta Chapter of the Canada Green Building Council
Joel Stout, Senior Associate, Building Sustainability Practice, Thornton Tomasetti
Khaled Tarabieh, Assistant Professor of Sustainable Design, The American University in Cairo
Andrea Trimble, Sustainability Director, University of Virginia
Elizabeth Turner, Campus Planner and Architect, Perkins+Will
Ron Vance, Chief, Materials Conservation and Recycling Branch, U.S. EPA
Jesse Warren, Sustainability Program Manager – Buildings & Operations, University of Virginia
Kristi Wiedemann, Office of Sustainability, Princeton University
Brian Yeoman, Director of Sustainable Leadership, Natl. Assoc. of Educational Procurement

Planning & Administration

Elise Amel, Director of Environmental Studies, University of St. Thomas
Daniel Apfel, Senior Associate, Croatan Institute
David Ayers, Associate Professor, University of North Carolina at Greensboro
Bill Benet, Executive Director, Graduation Pledge Alliance, Bentley University
David DuBois, Director of Research & Development, True Market Solutions
Lindell Haverstic, Project Architect, Office of Facilities Planning, Pittsburg State University
Mary House, Senior Principal, Environmental Compliance, Woodard & Curran
Kristy Howell, Sustainability Engagement & Education Coordinator, Johnson County Community College
Gabriel Huppé, Associate, International Institute for Sustainable Development
Cynthia Klein-Banai, Associate Chancellor for Sustainability, University of Illinois at Chicago
Cary Krosinsky, Adjunct and Coordinator, Earth Institute, Columbia University
Matthew Mancuso, Sustainability Coordinator, Iowa Western Community College
Nina Morris, Program Manager, Outreach & Engagement, University of Virginia
Yolanda Moses, Associate Vice Chancellor of Diversity, University of California Riverside
Mark Orlowski, Founder & Executive Director, Sustainable Endowments Institute

International Advisory Group

Albert Hankel, Project Manager and Sustainability Ambassador, SURFnet; Universiteit Utrecht
Pierre Lemay, Adjoint au vice-recteur exécutif et au développement, Université Laval
Alexandra Velasco, Professor, Universidad San Francisco de Quito

Former Technical Advisors

Katherine Baker, Chad Bledsoe, Justin Brown, Seth Charde, Bowen Close, Sandra B. Conners, Aurali Dade, Lisa Deal, Alex Denis, Cathy DuBois, Elaine Durr, Klay Dyer, Keri Enright-Kato, Emily Gilliland, Deborah Green, Rich Grogan, Lauren Heising, Mary House, Preston Jacobsen, Jeannette LeZaks, Mary Ellen Mallia, Kristin Markley, Rick Martin, Sara McKinstry, Josetta McLaughlin, James Pittman, Ann Radil, Reagan Richmond, Christopher Silva, Nicholas Smith-Sebasto, John Stokes, Meghna Tare, Taun Toay, Jiffy Vermynen, Edward R. Wilson.

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Introduction

I. STARS Overview

The Sustainability Tracking, Assessment & Rating System™ (STARS) is a voluntary, self-reporting framework for helping colleges and universities track and measure their sustainability progress. It is designed to:

- Provide a framework for understanding sustainability in all sectors of higher education.
- Enable meaningful comparisons over time and across institutions using a common set of measurements developed with broad participation from the campus sustainability community.
- Create incentives for continual improvement toward sustainability.
- Facilitate information sharing about higher education sustainability practices and performance.
- Build a stronger, more diverse campus sustainability community.

STARS® is intended to engage and recognize the full spectrum of colleges and universities—from community colleges to research universities, and from institutions just starting their sustainability programs to long-time campus sustainability leaders. STARS encompasses long-term sustainability goals for already high-achieving institutions as well as entry points of recognition for institutions that are taking first steps toward sustainability.

The current version of STARS incorporates feedback, suggestions, and lessons learned since the launch of STARS 1.0 in January 2010. While STARS is the most thoroughly vetted and extensively tested campus sustainability framework for North American institutions, it is by no means perfect. The current version of STARS is intended to stimulate, not end, the conversation about how to measure and benchmark sustainability in higher education. AASHE welcomes your feedback and participation in continuing to refine and shape the system.

A. How Credits Were Developed and Weighted

STARS participants pursue credits and may earn points in order to achieve a STARS Bronze, Silver, Gold or Platinum rating, or recognition as a STARS Reporter. The credits included in STARS span the breadth of higher education sustainability and include performance indicators and criteria related to Academics, Engagement, Operations, and Planning & Administration.

STARS credits were initially developed in large part by reviewing campus sustainability assessments, sustainability reports from businesses, and other sustainability rating and ranking systems. Credits have been revised based on feedback from hundreds of diverse stakeholders and experts. Previous versions of the STARS Technical Manual, as well as the record of changes between versions, may be found on the [STARS website](#).

Credits vary in the number of points they are worth. Points were allocated by a panel of STARS Steering Committee members and AASHE staff using the following considerations:

- a. To what extent does achievement of the credit ensure that people (students, employees and/or local community members) acquire the knowledge, skills, and dispositions to meet sustainability challenges?
- b. To what extent does achievement of the credit contribute to positive environmental, economic and social impacts?
 - To what extent does achievement of the credit contribute to human and ecological health and mitigate negative environmental impacts?

- To what extent does achievement of the credit contribute to secure livelihoods, a sustainable economy and other positive financial impacts?
 - To what extent does achievement of the credit contribute to social justice, equity, diversity, cooperation, democracy and other positive social impacts?
- c. To what extent are the positive impacts associated with achievement of the credit *not* captured in other STARS credits?

As these questions indicate, the focus in allocating points was on the *impact*, not the *difficulty*, of earning the credit. Some sustainability initiatives may be very difficult to implement but yield negligible impacts. Conversely, some generally easier projects have significant impacts. Assigning points based on the difficulty of earning a credit would create a perverse incentive for institutions to focus on the difficult projects or initiatives, which may not have the most meaningful impact.

Given the diversity of higher education institutions, each STARS credit should be appropriate for most institution types. In order to accommodate this diversity, some STARS credits do not include detailed specifications but are instead flexible or open. In other cases, credits include an applicability criterion, so that the credits only apply to certain types of institutions. By following this approach, institutions are not penalized when they do not earn credits that they could not possibly earn due to their circumstances.

Additionally, STARS is designed to incorporate the full spectrum of sustainability achievement, and upper levels of achievement represent highly ambitious, long-term goals. Therefore there are some credits for which few, if any, institutions will achieve full points currently.

Lastly, to help ensure that the system works as intended, AASHE strives to ensure that each credit is objective, measurable, and actionable.

B. Recognition and Scoring

STARS only gives positive recognition - each level of recognition represents significant sustainability leadership. Participating in STARS, which includes gathering extensive data and sharing it publicly, represents a commitment to sustainability that should be applauded.

There are four STARS ratings available: Bronze, Silver, Gold, and Platinum. The table below summarizes the scoring thresholds corresponding with each rating.

STARS Rating	Minimum score required
Bronze	25
Silver	45
Gold	65
Platinum	85

In addition, any institution that wishes to participate in STARS but does not want to pursue an overall STARS rating or make their scores public may participate as a **STARS Reporter**. STARS Reporters receive many of the same benefits as institutions that pursue a STARS rating, including positive recognition for participation and the

ability to share data publicly. All participants have the option to choose STARS Reporter status before completing their final submission and making it public.

An institution's STARS score is based on the percentage of applicable points it earns across four categories:

- 1) Academics (AC)
- 2) Engagement (EN)
- 3) Operations (OP)
- 4) Planning & Administration (PA)

For example, if an institution earned 30 percent of all applicable points, the institution's overall score would be 30, making it eligible for a STARS Bronze Rating.

In addition to the credits in the four categories outlined above, institutions may pursue Innovation & Leadership (IN) credits to earn up to 4 bonus points for new and path-breaking practices and performances that are not covered by other STARS credits or that exceed the highest criterion of a current STARS credit. Each point earned in Innovation & Leadership increases an institution's overall score by 1 point.

Some credits do not apply to all institutions. For example, the credits about dining services do not apply to institutions that do not have dining services operations. Institutions will earn a score based on the percentage of *applicable* points they earn. In other words, credits that do not apply to an institution will not be counted against that institution's overall score.

In addition, the number of points that are available for a credit may vary based on an institution's context. This variability is linked to third-party reference standards or methodologies for evaluating the sustainability impact of the area being evaluated in the credit. STARS 2.0 introduced this approach to contextual variability in the *Biodiversity* and *Water Use* credits.

A STARS rating is in effect for three years. All participants have continuous access to the STARS Reporting Tool and may update information at any time; however, the data that is shared publicly will only be updated when an institution formally submits a new report.

While AASHE has strived for a fair and consistent approach to allocating points and ratings, this is an inherently subjective exercise. Developing a more robust point allocation methodology, including expanding the application of contextual variability as feasible, and finding additional ways to accommodate how regional variations and difference in institution type influence each institution's sustainability impacts, will be considered for future versions of STARS.

C. Understanding Sustainability

The concept of sustainability has shaped the development of STARS and is fundamental to the rating system. One of the most popular definitions of sustainability is actually a definition of sustainable development. It is from *Our Common Future: The Report of the World Commission on Environment and Development*, commonly known as the Brundtland Commission Report:

1. Sustainable development is development that meets the needs of the present without compromising the ability of future generations to meet their own needs. It contains within it two key concepts:

the concept of 'needs', in particular the essential needs of the world's poor, to which overriding priority should be given; and

the idea of limitations imposed by the state of technology and social organization on the environment's ability to meet present and future needs.

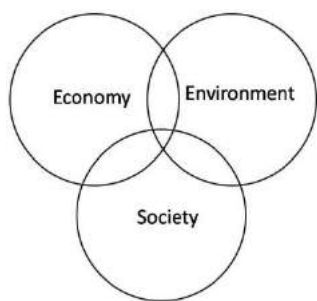
2. Thus the goals of economic and social development must be defined in terms of sustainability in all countries [...]

3. [...] Physical sustainability cannot be secured unless development policies pay attention to such considerations as changes in access to resources and in the distribution of costs and benefits. Even the narrow notion of physical sustainability implies a concern for social equity between generations, a concern that must logically be extended to equity within each generation.

The interconnectedness and interdependence of the social, environmental, and economic components of sustainability are included throughout *Our Common Future*. The Brundtland Commission writes, “Our inability to promote the common interest in sustainable development is often a product of the relative neglect of economic and social justice.” The report continues, “A world in which poverty and inequity are endemic will always be prone to ecological and other crises. Sustainable development requires meeting the basic needs of all and extending to all the opportunity to satisfy their aspirations for a better life.”

To further advance the principles of sustainability, the Brundtland Commission called for a “universal declaration” of norms to promote sustainable development. This goal was realized with the [Earth Charter](#), a “global consensus statement on ethics and values for a sustainable future.” Developed over a period of ten years with extensive global consultation, the Earth Charter has been formally endorsed by many organizations. The Earth Charter continues the Brundtland Commission’s understanding of the connections between social justice, environmental welfare, and economic security.

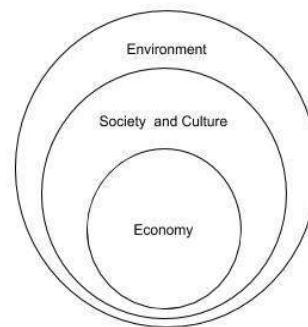
Today most uses of and references to sustainability emphasize the concept’s simultaneous economic, environmental, and social dimensions. For example, businesses talk about the triple bottom line: people, planet, and profits (or, alternately, human capital, natural capital, and financial capital). Likewise, sustainability educators commonly refer to the Three E’s of sustainability: economy, ecology, and equity.



Popular representations of sustainability also underscore the concept's three dimensions. Sustainability experts often use a three-legged stool as a symbol for sustainability. The social, economic, and environmental components each represent one of the stool's legs. If one of the legs is missing, the sustainability stool can't balance or function. A common illustration of sustainability is the diagram at left depicting three overlapping circles representing environmental needs, economic needs, and social needs. The area where the circles overlap and all three needs are met is the area of sustainability.

Another popular representation is the diagram at right in which sustainability is depicted as three concentric circles to further emphasize the interdependence of the three dimensions - the economic existing within the social/cultural, and both existing within the environment.

In 2015, the United Nations published [Transforming our world: the 2030 Agenda for Sustainable Development](#), a "plan of action for people, planet and prosperity". The publication outlines 17 Sustainable Development Goals and 169 targets, and seeks to build on previous efforts by outlining a 15-year agenda that balances "the three dimensions of sustainable development: the economic, social and environmental".



AASHE defines sustainability in a pluralistic and inclusive way, encompassing human and ecological health, social justice, secure livelihoods, and a better world for all generations. STARS attempts to translate this broad and inclusive view of sustainability to measurable objectives at the campus level. Thus, it includes credits related to an institution's environmental, social, and economic performance.

II. Participation and Reporting

A. STARS Website

The [STARS website](#) is the primary source for information about participating and reporting in STARS. The website offers the most up to date and detailed information about the program, for example, the requirements for eligibility to participate in STARS, a step-by-step guide to reporting (including how to register), and a knowledge base addressing frequently asked questions.

B. STARS Credits

The credit descriptions in the STARS Technical Manual include the following sections:

- A. Credit Rationale** - provides background on the intent and importance of the credit in the context of sustainability.
- B. Criteria** - describes the minimum requirements for an institution to earn points for the credit.
- C. Applicability** - indicates which institutions' scores and STARS ratings will be affected by their responses to the credit. As mentioned above, some credits do not apply to certain types of institutions. For example, credits involving dining services do not apply to institutions that do not have dining services.
- D. Scoring** - explains how points are allocated for the credit.
- E. Reporting Fields** - lists the fields that appear within the online Reporting Tool for each credit. Some fields are required, while others are optional and provided for institutions to provide additional documentation and information.
- F. Measurement**
 - a. Timeframe** - describes the time period from which data should be drawn. For some credits, particularly those that are based on the presence of a policy or program, institutions should report on current practices (i.e., status at the time of reporting). Other credits, particularly those based on quantitative performance, require historical performance data, typically drawn from one-year or three-year period.
 - b. Sampling and Data Standards** - provides guidelines on when institutions may use a representative sample to measure performance and when samples are prohibited, as well as guidance related to data quality, allowable exclusions, and unit conversions.
- G. Standards and Terms** - lists and defines important terminology that is referenced in credit criteria.

Also appended to many credits are **Credit Examples** and **Scoring Examples** to help explain reporting requirements, credit criteria and scoring.

C. Online STARS Reporting Tool

The [STARS Reporting Tool](#) may be accessed through the STARS website. The Reporting Tool serves as a repository for an institution's STARS data and, ultimately, is the mechanism through which the data will be submitted to AASHE.

In addition to the credit information outlined above, each credit in the STARS Reporting Tool also provides access to additional resources and guidance, including an integrated glossary, data tracking spreadsheets and other tools, and examples of best practices.

STARS Reporting Process

1. Register

Institutions that have not already done so must register for STARS by:

- Providing the name and contact information for the institution's primary STARS liaison.
- Providing the name and contact information for one executive-level administrator (president, chancellor, vice president, vice chancellor, or provost) to be copied on the registration confirmation e-mail. Copying an administrator on the registration e-mail helps ensure that each institution's leadership is aware of its participation in STARS.
- Agreeing to the STARS Terms and Conditions of Use.

2. Get organized

- Convene your data collection team.
- Familiarize yourself with the STARS Technical Manual and credits.
- Prepare a strategy for gathering and documenting data.

3. Report and manage data in the online Reporting Tool

- Determine those credits that are not applicable to your institution or that your institution is not pursuing and save them with the appropriate status.
- Report data for credits that your institution is pursuing according to the specifications outlined in this Technical Manual.
- Affirm the accuracy of the information submitted by providing the data sources used and/or specifying a responsible party for each credit.

4. Finalize and submit your report

- Review reported data for consistency with credit criteria.
- Upload a cover letter from the president, chancellor, or other high-ranking executive that affirms that the submission has been checked for accuracy.
- Submit your institution's report to AASHE.

5. Collaborate with AASHE to check data accuracy

- AASHE staff review portions of all STARS reports before ratings are awarded. We will work with you to address any inconsistencies in the reported data.
- After these inconsistencies have been addressed, your institution's rating and the associated data will be publicly posted on the STARS website.

6. Celebrate your achievement!

- Go to the *My Resources* section of the Reporting Tool and download your STARS seal and template press release to help communicate your institution's achievement.
- Share your public STARS report with stakeholders.

7. Evaluate your progress

- Access the STARS Data Displays to filter and analyze data submitted by other institutions
- Use your STARS report and the Data Displays to inform benchmarking and planning, and to develop projects, initiatives, and strategies to improve sustainability performance on your campus.

D. Accountability and Data Accuracy

While AASHE may in the future pursue opportunities for third-party verification of STARS submissions, STARS currently incorporates multiple strategies to ensure that submitted information is accurate:

- 1) For each credit, institutions may provide the data sources used to complete each credit and/or a responsible party from the institution may provide a statement that the information submitted is accurate. The name of each responsible party is listed with each credit in the public STARS report.
- 2) Each submission must be accompanied by a letter from the institution's president, chancellor, or other high-ranking executive that affirms that the institution's submission has been checked for accuracy. Sign-off from the institution's executive leadership promotes accuracy and encourages administrative involvement in STARS. In addition, the executive letter serves as an introduction or cover letter for the submission. As such, the letter may also include a description of the institution's commitment to sustainability, background about the institution, key achievements or highlights from the STARS submission, and goals for future submissions.
- 3) AASHE staff review a portion of every STARS report that is submitted and engage participants in a collaborative review and revision process to address any inconsistencies that are identified before a rating is awarded and the report is published.
- 4) All applicable information submitted is made publicly available on the STARS website. If an individual or organization believes that erroneous data have been submitted, use of the [STARS Data Inquiry Form](#) will bring the potential inconsistency to the attention of the STARS Liaison at that institution. Individuals submitting inquiries have the option to remain anonymous to the institution receiving the inquiry.
- 5) Each institution may submit a data revision request to correct inconsistencies and erroneous data in its STARS report after it has been made public on the STARS website. Individuals at the institution with Administrator access within the Reporting Tool may submit revision requests. The process for making revisions remains the same even if the change results in a new STARS rating level.

More information about data accuracy is detailed in the Data Accuracy Policy, which is approved by the STARS Steering Committee and may be found on the [STARS Report Accuracy](#) webpage.

Table of Credits

ACADEMICS (AC)			
Curriculum 40 points available	AC 1	Academic Courses	14
	AC 2	Learning Outcomes*	8
	AC 3	Undergraduate Program*	3
	AC 4	Graduate Program*	3
	AC 5	Immersive Experience*	2
	AC 6	Sustainability Literacy Assessment	4
	AC 7	Incentives for Developing Courses	2
	AC 8	Campus as a Living Laboratory*	4
Research 18 points available	AC 9	Research and Scholarship*	12
	AC 10	Support for Research*	4
	AC 11	Open Access to Research*	2
ENGAGEMENT (EN)			
Campus Engagement 21 points available	EN 1	Student Educators Program	4
	EN 2	Student Orientation*	2
	EN 3	Student Life	2
	EN 4	Outreach Materials and Publications	2
	EN 5	Outreach Campaign	4
	EN 6	Assessing Sustainability Culture	1
	EN 7	Employee Educators Program	3
	EN 8	Employee Orientation	1
	EN 9	Staff Professional Development	2
Public Engagement 20 points available	EN 10	Community Partnerships	3
	EN 11	Inter-Campus Collaboration	3
	EN 12	Continuing Education*	5
	EN 13	Community Service*	5
	EN 14	Participation in Public Policy	2
	EN 15	Trademark Licensing*	2
OPERATIONS (OP)			
Air & Climate 11 points available	OP 1	Greenhouse Gas Emissions	10
	OP 2	Outdoor Air Quality	1
Buildings 8 points available	OP 3	Building Operations and Maintenance*	5
	OP 4	Building Design and Construction*	3
Energy 10 points available	OP 5	Building Energy Consumption	6
	OP 6	Clean and Renewable Energy	4
Food & Dining 8 points available	OP 7	Food and Beverage Purchasing*	6
	OP 8	Sustainable Dining*	2
Grounds 3-4 points available	OP 9	Landscape Management*	2
	OP 10	Biodiversity*	1-2

Purchasing 6 points available	OP 11	Sustainable Procurement	3
	OP 12	Electronics Purchasing	1
	OP 13	Cleaning and Janitorial Purchasing	1
	OP 14	Office Paper Purchasing	1
Transportation 7 points available	OP 15	Campus Fleet*	1
	OP 16	Student Commute Modal Split*	2
	OP 17	Employee Commute Modal Split	2
	OP 18	Support for Sustainable Transportation	2
Waste 10 points available	OP 19	Waste Minimization and Diversion	8
	OP 20	Construction and Demolition Waste Diversion*	1
	OP 21	Hazardous Waste Management	1
Water 6-8 points available	OP 22	Water Use	4-6
	OP 23	Rainwater Management	2
PLANNING & ADMINISTRATION (PA)			
Coordination & Planning 8 points available	PA 1	Sustainability Coordination	1
	PA 2	Sustainability Planning	4
	PA 3	Participatory Governance	3
Diversity & Affordability 10 points available	PA 4	Diversity and Equity Coordination	2
	PA 5	Assessing Diversity and Equity	1
	PA 6	Support for Underrepresented Groups	3
	PA 7	Affordability and Access	4
Investment & Finance 7 points available	PA 8	Committee on Investor Responsibility*	2
	PA 9	Sustainable Investment*	4
	PA 10	Investment Disclosure*	1
Wellbeing & Work 7 points available	PA 11	Employee Compensation	3
	PA 12	Assessing Employee Satisfaction	1
	PA 13	Wellness Program	1
	PA 14	Workplace Health and Safety	2
INNOVATION & LEADERSHIP (IN)			4 bonus points available
Exemplary Practice Catalog of credits available			0.5 each
Innovation 4 credits available			1 each

* credit does not apply to all institutions

Institutional Characteristics (IC)

Institutional characteristics include data related to an institution's boundary (defining the campus for purposes of reporting), its operational characteristics (the context in which it operates) and its demographics and academics (programs, students, staff, and faculty). This information provides valuable context for understanding and interpreting STARS data. Thus, all information documented in the sections below will be displayed in the institution's public STARS report.

Some of the values reported here are also required to pursue specific STARS credits. Such reporting fields may be populated in the online Reporting Tool for editing from the data provided in the Institutional Characteristics section.

IC 1	Institutional Boundary	Required
IC 2	Operational Characteristics	Required
IC 3	Academics and Demographics	Required

IC 1: Institutional Boundary

Required for submission

Each institution is expected to include its entire main campus when collecting data. Institutions may choose to include any other land holdings, facilities, farms, and satellite campuses, as long as the selected boundary is the same for each credit. If an institution finds it necessary to exclude a particular unit from its submission, the reason for excluding it must be provided in the appropriate reporting field, below.

Reporting Fields

Required

- ☐ Institution type (Associate, Baccalaureate, Doctorate, or Master's)
 - ☐ Institutional control (Public, Private for-profit, or Private non-profit)
 - ☐ A brief description of the institution's main campus and other aspects of the institutional boundary used to complete this report
 - ☐ Which of the following features are present on campus and which are included within the institutional boundary?
 - ☐ Agricultural school
 - ☐ Medical school
 - ☐ Other professional school(s) with labs and clinics (e.g., dental, nursing, pharmacy, public health, veterinary)
 - ☐ Satellite campus
 - ☐ Hospital
 - ☐ Farm (larger than 5 acres or 2 hectares)
 - ☐ Agricultural experiment station (larger than 5 acres or 2 hectares)
- If there are features present that are not included within the boundary, provide:*
- ☐ The rationale for excluding any features that are present from the institutional boundary

Optional

- ☐ Additional documentation to support the submission (upload)
- ☐ Data source(s) and notes about the submission

Standards and Terms

Institution type

Each institution is classified into one of four basic types adapted from [Carnegie U.S. Classifications](#):

- Associate's Colleges include institutions where all degrees are at the associate's level, or where baccalaureate degrees account for less than 10 percent of all undergraduate degrees.
- Baccalaureate Colleges include institutions where baccalaureate degrees represent at least 10 percent of all undergraduate degrees and where fewer than 50 master's degrees or 20 doctoral degrees are awarded annually. (May include some institutions above the master's degree threshold.)

- Master's Colleges and Universities generally include institutions that award at least 50 master's degrees and fewer than 20 doctoral degrees annually.
- Doctorate-granting Universities include institutions that award at least 20 research doctoral degrees annually (which may include doctoral-level degrees that qualify recipients for entry into professional practice, such as the JD, MD, PharmD, DPT, etc).

Each institution should report the institution type that is most appropriate given its context and with consideration for the criteria outlined above. For example, a U.S. Carnegie-classified Special Focus institution or Tribal College should select the institution type that best reflects the number and type of degrees offered.

IC 2: Operational Characteristics

Required for submission

Operational characteristics are variables that provide information about the context in which the institution operates. Report the most recent data available within the three years prior to the anticipated date of submission.

Reporting Fields

Required

- ☐ **Endowment size** (US/Canadian dollars)
- ☐ **Total campus area** (i.e., the total amount of land within the institutional boundary) (acres/hectares)
- ☐ **Locale** (Large city, Urban fringe of large city, Mid-size city, Urban fringe of mid-size city, Large town, Small town, or Rural)
- ☐ **IECC climate zone** (1 - Very Hot; 2 - Hot; 3- Warm; 4 - Mixed; 5 - Cool; 6 - Cold; 7 - Very Cold; 8 - Subarctic)
- ☐ **Gross floor area of building space** (gross square feet/metres)
- ☐ **Floor area of laboratory space** (square feet/metres)
- ☐ **Floor area of healthcare space** (square feet/metres)
- ☐ **Floor area of other energy intensive space**, e.g., data centers, food production space, convenience stores (square feet/metres)

Optional

- ☐ Additional documentation to support the submission (upload)
- ☐ Data source(s) and notes about the submission

Standards and Terms

Endowment

Consistent with the U.S. Department of Education, endowment funds are defined as “funds whose principal is nonexpendable (true endowment) and that are intended to be invested to provide earnings for institutional use. Also includes term endowments and funds functioning as endowment.”

Energy intensive space

Energy intensive space includes “laboratory space”, “healthcare space”, and “other energy intensive space”. “Other energy intensive space” is reported separately from laboratory space and healthcare space and may include data centers, food production space, convenience stores, and other facilities that the institution has determined to have an average energy use intensity (EUI) that is at least twice that of office/administrative space. (Energy use intensity is a unit of measurement that represents the energy consumed by a building relative to its size, e.g., 1,000 MMBtu per square metre). For more information, see [ENERGY STAR Portfolio Manager Technical Reference: U.S. Energy Use Intensity by Property Type](#).

Gross floor area of building space

Gross floor area of building space refers to the total amount of building space that is included within the institutional boundary. Any standard definition of building space may be used (e.g., ASHRAE, ANSI/BOMA, IECC) as long as it is used consistently. Parking structures are included. For guidance on calculating gross square footage of a building, you may also consult [3.2.1 Gross Area](#) of the U.S. Department of Education's *Postsecondary Education Facilities Inventory and Classification Manual*.

Buildings within the overall STARS boundary that the institution leases entirely (i.e., the institution is the only tenant) should be included.

Buildings that are not owned by the institution and in which the institution is one of multiple tenants may be excluded. If the institution chooses to include such buildings, it must include all multi-tenant buildings that are included in the institution's overall STARS boundary and in which the institution is a tenant; institutions cannot choose to include some leased spaces and omit others. If an institution chooses to include leased spaces, the institution should count only the square footage of building space it occupies and not the entire building.

Healthcare space

The total amount of building space within the institutional boundary that may be categorized as "Health Care Facilities" (e.g., codes in the 800 series under the [Space Use Codes](#) in the US Department of Education's *Postsecondary Education Facilities Inventory and Classification Manual*). To simplify reporting, institutions with hospitals may report all floor area within hospitals as healthcare space.

IECC climate zone

Climate zones are consistent with the climate designations used by the International Energy Conservation Code (IECC) and the American Society of Heating, Refrigerating and Air-Conditioning Engineers (ASHRAE). The zones correspond to these generalized climate categories:

1 - Very Hot; 2 - Hot; 3 - Warm; 4 - Mixed; 5 - Cool; 6 - Cold; 7 - Very Cold; 8 - Subarctic

For further guidance, see [IECC/ASHRAE Climate Zones](#) (U.S) and [ANSI/ASHRAE/IESNA Standard 90.1-2007](#) (international).

Laboratory space

The total amount of building space within the institutional boundary that may be categorized as "research laboratories" (e.g., code 250 under the [Space Use Codes](#) in the US Department of Education's *Postsecondary Education Facilities Inventory and Classification Manual*). To simplify reporting, institutions may report all floor area within buildings that contain energy intensive research laboratories as laboratory space.

Locale

The locale or setting of institution's main campus may be classified as one of the following:

- Large City: A central city of a consolidated metropolitan statistical area (CMSA) or metropolitan statistical area (MSA), with the city having a population greater than or equal to 250,000.
- Mid-size City: A central city of a CMSA or MSA, with the city having a population less than 250,000.
- Urban Fringe of a Large City: Any territory within a CMSA or MSA of a Large City and defined as urban by a national census bureau or the equivalent.

- Urban Fringe of a Mid-size City: Any territory within a CMSA or MSA of a Mid-size City and defined as urban by a national census bureau or the equivalent.
- Large Town: An incorporated place or census-designated place with a population greater than or equal to 25,000 and located outside a CMSA or MSA.
- Small Town: An incorporated place or census-designated place with a population less than 25,000 and greater than or equal to 2,500 and located outside a CMSA or MSA.
- Rural: Any territory designated as rural by a national census bureau or the equivalent.

IC 3: Academics and Demographics

Required for submission

This section includes variables that provide information about the institution's academic programs, students, faculty and staff. Report the most recent data available within the three years prior to the anticipated date of submission. Some population figures are used to calculate "[weighted campus user](#)", a measurement of an institution's population that is adjusted to accommodate how intensively certain community members use the campus.

Reporting Fields

Required

- ☐ Number of [academic divisions](#) (e.g., colleges, schools)
- ☐ Number of [academic departments](#) (or the equivalent)

[Headcounts](#). Report the unduplicated total number of students enrolled and workers employed over a 12-month period (e.g., as reported on the U.S. [Integrated Postsecondary Education Data System 12-Month Enrollment and Human Resources forms](#)) or else representative headcounts (e.g., autumn figures).

- ☐ Number of [students enrolled for credit](#)
- ☐ Total number of employees (staff + faculty)

[Full-Time Equivalents \(FTE\)](#). Report the institution's best estimates, [annualized](#) as feasible and/or calculated according to relevant national, regional or international standards (e.g., as reported on the U.S. IPEDS 12-Month Enrollment form or calculated using the IPEDS formulas). [Non-credit students](#) may be included.

- ☐ Total full-time equivalent student enrollment (undergraduate and graduate)
- ☐ Full-time equivalent of students enrolled exclusively in [distance education](#) (If FTE is not regularly tracked, institution may estimate FTE attributable to distance education, e.g., by multiplying the percentage of students that are enrolled exclusively in distance education by total FTE enrollment.)
- ☐ Full-time equivalent of employees (staff + faculty)

[On-Campus Residents](#). Report annualized headcounts as feasible or else representative snapshots (e.g., autumn headcounts).

- ☐ Number of students [resident on-site](#)
- ☐ Number of employees resident on-site
- ☐ Number of other individuals resident on-site, e.g., family members of employees, individuals lodging on-site (by average occupancy rate), and/or staffed hospital beds (if applicable)

Optional

- ☐ Additional documentation to support the submission (upload)
- ☐ Data source(s) and notes about the submission

Standards and Terms

Academic departments

An academic department is an administrative division of a college, university, or school faculty that is devoted to a particular academic discipline (e.g., Economics, Environmental Science, Sociology) or a closely related set of disciplines (e.g., Asian Studies or Physics & Astronomy). Departments may exist under other nomenclature and with coarser or finer divisions, depending upon each institution's context. Fields of study, programs, subject areas or the equivalent may be considered to be "departments" in the absence of traditional administrative divisions.

Academic divisions

An academic division is an administrative division of a college, university, or school faculty that is devoted to a subset of students (e.g., Undergraduate School) or a particular academic degree program or discipline (e.g., School of Architecture). Divisions may exist under other nomenclature and with coarser or finer divisions, depending upon each institution's context.

Annualized

An annualized population figure is the average of all periods (e.g., quarters, semesters, months) during an academic or calendar year (e.g., adding fall, winter, spring and summer enrollment figures and dividing by 4).

Consistent with the U.S. IPEDS, an institution may calculate and report annual FTE student enrollment based on instructional activity (i.e., the credit and/or contact hours reported by the institution over a 12 month period) rather than annualized counts.

Likewise, an institution may calculate and report annual FTE employees based on level of service rather than annualized counts. For example, an institution may define one "annualized FTE" as 12 months of service at 100 percent time. When an appointment is less than 12 months service or less than 100 percent time, the annualized FTE would be reduced proportionately. See also "Full-time equivalent".

Distance education

Consistent with U.S. [IPEDS](#), distance education is education that "uses one or more technologies to deliver instruction to students who are separated from the instructor and to support regular and substantive interaction between the students and the instructor synchronously or asynchronously".

A distance education course is one in which "the instructional content is delivered exclusively via distance education. Requirements for coming to campus for orientation, testing, or academic support services do not exclude a course from being classified as distance education."

A distance education program is one for which "all the required coursework for program completion is able to be completed via distance education courses". Distance education students are students who are enrolled in distance education programs, or else exclusively in distance education courses.

Full-time equivalent

Consistent with [Eurostat](#), full-time equivalent (FTE) is defined as follows:

A full-time equivalent, sometimes abbreviated as FTE, is a unit to measure employed persons or students in a way that makes them comparable although they may work or study a different number of hours per week.

The Organization for Economic Co-operation and Development (OECD) further elaborates in regard to [FTE students](#):

A full-time equivalent (FTE) measure attempts to standardize a student's actual course load against the normal course load. Calculating the full-time/part-time status requires information on the time periods for actual and normal course loads. For the reduction of head-count data to FTEs, where data and norms on individual participation are available, course load is measured as the product of the fraction of the normal course load for a full-time student and the fraction of the school/academic year.

[FTE = (actual course load/normal course load) * (actual duration of study during reference period/normal duration of study during reference period).]

When actual course load information is not available, a full-time student is considered equal to one FTE.

An institution should report its best estimates for FTE figures, annualized as feasible and calculated according to relevant national, regional or international standards (e.g., as calculated or reported on the U.S. IPEDS 12-Month Enrollment form and using the [IPEDS formulas](#)).

Headcount

Consistent with the [Organization for Economic Co-operation and Development \(OECD\)](#), “headcount” is defined as:

The number of individuals [...] counted, regardless of the intensity of participation/length of their program.

In other words, a headcount measures the total number of students or employees, irrespective of course-load or employment status.

Integrated Postsecondary Education Data System

The [Integrated Postsecondary Education Data System](#) (IPEDS) is a system of interrelated surveys conducted annually by the U.S. Department of Education's National Center for Education Statistics (NCES). IPEDS gathers information from every college, university, and technical and vocational institution that participates in the federal student financial aid programs.

Non-credit students

Non-credit or community education students are students who are enrolled in courses for personal or professional interest and are not seeking a [degree](#) or formal award, for example:

- Students enrolled exclusively in courses that cannot be applied towards a formal award
- Students enrolled exclusively in Continuing Education Units (CEUs)
- Students exclusively auditing classes

Resident on-site

Individuals are resident on-site when they are living in a housing facility within the institutional boundary that is owned or controlled by the institution. To avoid double-counting, count student resident assistants (RAs) as students, even if they are also considered to be employees. The number of staffed hospital beds is used as a proxy for the number of hospital patients resident on-site.

Staffed hospital beds

Consistent with [Practice Greenhealth](#), staffed hospital beds:

...are those in-service and patient-ready for more than half of the days in the reporting period. Staffed beds does not include beds ordinarily occupied for less than 24 hours, such as those in the emergency department, clinic, labor (birthing) rooms, surgery and recovery rooms and outpatient holding beds.

Students enrolled for credit

Consistent with U.S. [IPEDS](#), students enrolled for credit include all students enrolled in courses or programs that can be applied towards the requirements for a postsecondary degree, diploma, certificate, or other formal award, regardless of whether or not they are seeking a degree or certificate. This includes:

- Students enrolled for credit in off-campus centers
- High school students taking regular college courses for credit
- Students taking remedial courses if the student is degree-seeking for the purpose of student financial aid determination
- Students from overseas enrolled in U.S. courses for credit (e.g., online students)
- Graduate students enrolled for thesis credits, even when zero credits are awarded as these students are still enrolled and seeking their degree.

Weighted campus user

“Weighted campus user” is a measurement of an institution’s population that is adjusted to accommodate how intensively certain community members use the campus. This figure is used to normalize resource consumption and environmental impact figures in order to accommodate the varied impacts of different population groups. For example, an institution where a high percentage of students live on campus would witness higher greenhouse gas emissions, waste generation, and water consumption figures than otherwise comparable non-residential institution since students’ residential impacts and consumption would be included in the institution’s totals.

STARS calculates the figure according to the following formula. Please note that users will not have to calculate this figure themselves; the result will be calculated automatically when the data are entered into the online Reporting Tool.

$$\text{Weighted campus users} = (A + B + C) + 0.75 [(D - A) + (E - B) - F]$$

- A= Number of students resident on-site
B= Number of employees resident on-site
C= Number of other individuals resident on-site and/or staffed hospital beds
D= Total full-time equivalent student enrollment
E= Full-time equivalent of employees (staff + faculty)
F= Full-time equivalent of students enrolled exclusively in distance education

Academics (AC)

Curriculum

This subcategory seeks to recognize institutions that have formal education programs and courses that address sustainability. One of the primary functions of colleges and universities is to educate students. By training and educating future leaders, scholars, workers and professionals, higher education institutions are uniquely positioned to prepare students to understand and address sustainability challenges. Institutions that offer courses covering sustainability issues help equip their students to lead society to a sustainable future.

Credits		Points available: 40
AC 1	Academic Courses	14
AC 2	Learning Outcomes*	8
AC 3	Undergraduate Program*	3
AC 4	Graduate Program*	3
AC 5	Immersive Experience*	2
AC 6	Sustainability Literacy Assessment	4
AC 7	Incentives for Developing Courses	2
AC 8	Campus as a Living Laboratory*	4

* credit does not apply to all institutions

Share your story

The My Submission section of the online Reporting Tool includes an optional reporting field for the institution to provide an overview of notable activities and accomplishments in this subcategory. This information is featured in the institution's public report.

- ☐ A brief summary of the institution's notable activities and accomplishments relevant to this subcategory

AC 1: Academic Courses

14 points available

A. Credit Rationale

This credit recognizes institutions that offer sustainability courses and that include sustainability in courses across the curriculum. Sustainability courses can provide valuable grounding in the concepts and principles of sustainability, help build knowledge about a component of sustainability, or introduce students to sustainability concepts. Institutions that integrate sustainability concepts throughout the curriculum prepare students to apply sustainability principles in their professional fields. Having sustainability courses and content offered by numerous departments helps ensure that the institution's approach to sustainability education is comprehensive and includes diverse topics. This will help students develop a broad understanding of the field. Likewise, offering sustainability courses and content in numerous departments can increase student exposure to sustainability topics and themes.

Conducting an inventory of academic offerings provides an important foundation for advancing sustainability curriculum. It provides a baseline for understanding current offerings and can help institutions identify strengths and opportunities for growth. In addition, a list and description of sustainability courses and other courses that include sustainability helps current and prospective students find and understand sustainability course offerings, which can assist them in organizing their academic studies.

B. Criteria

Institution has conducted an inventory during the previous three years to identify its sustainability course offerings for current and prospective students. [Sustainability course offerings](#) include:

- Courses that have been identified as “sustainability courses” and “courses that include sustainability” using the definitions provided in *G. Standards and Terms*.
- Courses that have been formally designated as sustainability course offerings in the institution's standard course listings or catalog.

For each course, the inventory provides:

- The title, department (or equivalent), and level of the course (e.g., undergraduate or graduate).
- A brief description of the course.
- An indication of whether the course is a “sustainability course” or a “course that includes sustainability” (or equivalent terminology).

A course may be a sustainability course or it may include sustainability; no course should be identified as both. Courses for which partial or incomplete information is provided may not be counted toward earning points for this credit. This credit does not include continuing education and extension courses, which are covered by the *Continuing Education* credit in Public Engagement.

For guidance on conducting a course inventory and distinguishing between sustainability courses and courses that include sustainability, see *F. Measurement*, *G. Standards and Terms*, and the Credit Example, below. An institution that has developed a more refined approach to course classification may use that approach as long as it is consistent with the definitions and guidance provided.

Part 1

Institution offers sustainability course content as measured by the percentage of courses offered that are sustainability course offerings.

The total number of courses offered and the number of sustainability course offerings must be counted in the same manner; see *F. Measurement*.

Part 2

Institution offers sustainability course content as measured by the percentage of [academic departments](#) (or the equivalent) with sustainability course offerings.

C. Applicability

This credit applies to all institutions.

D. Scoring

An institution must identify its sustainability course offerings per the minimum criteria outlined above to earn points for this credit. Each part is scored independently.

Part 1

Institutions earn the maximum of 8 points for Part 1 of this credit if 20 percent or more of all courses offered by the institution are sustainability courses and/or courses that include sustainability. Incremental points are awarded based on the percentage of course offerings that are sustainability courses and/or courses that include sustainability. For example, an institution where 4 percent of all courses offered are sustainability courses and 6 percent are courses that include sustainability would earn 4 points (half of the points available for Part 1 of this credit).

Points for Part 1 of this credit are calculated automatically in the STARS Reporting Tool as follows:

Course type	Factor	Multiply	Number of courses offered of each type	Divide	Total number of courses offered by the institution	Equals	Points earned
Sustainability courses	40	x	_____	÷	_____	=	
Courses that include sustainability	40		_____				
Total points earned ➡							Up to 8

Part 2

Institutions earn the maximum of 6 points for Part 2 of this credit when 90 percent or more of academic departments or their equivalent offer at least one sustainability course or one course that includes sustainability. Incremental points are available based on the percentage of academic departments that have sustainability course offerings. For example, if 45 percent of the departments at an institution offered one or

more sustainability courses, that institution would earn 3 points (half of the points available for Part 2 of this credit).

Points for Part 2 of this credit are calculated automatically in the STARS Reporting Tool as follows:

Factor	Multiply	Number of departments with sustainability course offerings	Divide	Total number of departments	Equals	Points earned
6 $\frac{2}{3}$	×	_____	÷	_____	=	Up to 6

E. Reporting Fields

Required

- ☐ Total number of [undergraduate courses](#) offered by the institution
- ☐ Number of undergraduate sustainability courses offered (i.e., courses for which the primary and explicit focus is on sustainability and/or understanding or solving one or more major sustainability challenge)
- ☐ Number of undergraduate courses offered that include sustainability (i.e., courses that are focused on a topic other than sustainability, but incorporate a unit or module on sustainability or a sustainability challenge, include one or more sustainability-focused activities, or integrate sustainability issues throughout the course)
- ☐ Total number of [graduate courses](#) offered by the institution
- ☐ Number of graduate sustainability courses offered
- ☐ Number of graduate courses offered that include sustainability
- ☐ Total number of [academic departments](#) (or the equivalent) that offer courses (at any level)
- ☐ Number of academic departments (or the equivalent) that offer at least one sustainability course and/or course that includes sustainability (at any level)
- ☐ A copy of the institution's inventory of its [sustainability course offerings](#) and descriptions (upload)
- ☐ Do the figures reported above cover one, two, or three academic years?
- ☐ A brief description of the methodology used to determine the total number of courses offered and to identify sustainability course offerings, including the definitions used and the process for reviewing and/or validating the course inventory
- ☐ How were courses with multiple offerings or sections counted for the figures reported above?
 - ☐ Each offering or section of a course was counted as an individual course
 - ☐ Each course was counted as a single course regardless of the number of offerings or sections
 - ☐ Not applicable; no courses with multiple offerings or sections were included
 - ☐ Other (please describe below)
- ☐ A brief description of how courses with multiple offerings or sections were counted (if different from the options outlined above)
- ☐ Are the following course types included in the inventory?

- Internships
- Practicums
- Independent study
- Special topics
- Thesis / dissertation
- Clinical
- Physical education
- Performance arts

Optional

- ☐ The website URL where information about the programs or initiatives is available
- ☐ Additional documentation to support the submission (upload)
- ☐ Data source(s) and notes about the submission
- ☐ Contact information for a responsible party (a staff member, faculty member, or administrator who can respond to questions regarding the data once it is submitted and available to the public)

F. Measurement

Timeframe

Report the most recent data available from within the three years prior to the anticipated date of submission.

Institutions may choose to inventory and report course offerings from one, two, or three academic years, as long as both the total number of courses offered and the number of sustainability course offerings are measured during the same period.

Sampling and Data Standards

Each institution is free to choose a methodology to identify sustainability courses that is most appropriate given its unique circumstances. Asking faculty and departments to self-identify sustainability courses and courses that include sustainability using the definitions outlined in *G. Standards and Terms* or looking at the stated learning outcomes and course objectives associated with each course may provide a richer view of sustainability course offerings than simply reviewing course descriptions, but it is not required.

To best reflect the number of opportunities students have to learn about sustainability, it is recommended that institutions count each time a course is offered as a separate course (e.g., a course with two sections taught in the fall term and two sections taught during spring term would count as four courses). To streamline the data gathering process, however, institutions may elect to count a course with multiple offerings as a single course as long as sustainability course offerings are counted in the same way as total course offerings. For example, a course that is held twice (or if there are two sections) in the fall term and once in the spring term may be counted as 3 courses or 1 course, as long as the institution's course counting methodology is consistent. An institution that elects not to count each time a course is offered as a separate course should verify that 50 percent or more of the sections or offerings of a course include sustainability to count the course as inclusive of sustainability.

Likewise, institutions may choose whether or not to count courses listed in multiple departments or academic divisions as separate courses. For example, a course that is cross-listed in two departments or that is listed as both an undergraduate and a graduate course may be counted as one or two courses, as long as the institution's methodology is consistent.

Each department with one or more sustainability course offering may be counted toward Part 2 of this credit, even if the courses are offered or administered jointly with other departments. Courses that are offered independently of any department are not considered in Part 2.

The following course types may be excluded, as long as they are excluded from both the count of sustainability course offerings and the count of total courses:

- Individually-directed courses (e.g., thesis, independent study, practicum);
- Courses of four or fewer students;
- Special topics courses;
- Physical education courses;
- Performance arts courses; and
- Clinical courses offered exclusively to [doctor's degree-professional practice students](#).

Courses must have been taught during the specified timeframe of one, two or three academic years to count (e.g., as opposed to being listed in a course catalog, but not taught).

Courses offered by outside entities (e.g., courses offered by other colleges that are part of a consortium with the institution or courses offered through study abroad programs that are not administered by the institution) should not be counted in the reporting institution's course inventory. However, courses developed and offered jointly by multiple institutions that are listed in the reporting institution's course catalog may be counted. In such circumstances, courses should be counted consistently. This means that if sustainability courses offered jointly by the participating institution and another entity are included in the inventory, jointly offered courses without sustainability content should be included as well.

Institutions that do not have academic departments should report fields of study, programs, subject areas or the equivalent.

G. Standards and Terms

Academic departments

An academic department is an administrative division of a college, university, or school faculty that is devoted to a particular academic discipline (e.g., Economics, Environmental Science, Sociology) or a closely related set of disciplines (e.g., Asian Studies or Physics & Astronomy). Departments may exist under other nomenclature and with coarser or finer divisions, depending upon each institution's context. Fields of study, programs, subject areas or the equivalent may be considered to be "departments" in the absence of traditional administrative divisions.

Doctor's degree-professional practice students

Consistent with [IPEDS](#), doctor's degree-professional practice students include those enrolled in the following programs:

A doctor's degree that is conferred upon completion of a program providing the knowledge and skills for the recognition, credential, or license required for professional practice. The degree is awarded after a period of study such that the total time to the degree, including both pre-professional and

professional preparation, equals at least six full-time equivalent academic years. Some of these degrees... include: Chiropractic (D.C. or D.C.M.); Dentistry (D.D.S. or D.M.D.); Law (J.D.); Medicine (M.D.); Optometry (O.D.); Osteopathic Medicine (D.O.); Pharmacy (Pharm.D.); Podiatry (D.P.M., Pod.D., D.P.); or, Veterinary Medicine (D.V.M.), and others, as designated by the awarding institution.

Graduate courses

Graduate courses are offered as part of the spectrum of education beyond the level of a baccalaureate, i.e., for students who hold bachelor's degrees or above and are taking courses at the graduate level.

Sustainability challenges

Consistent with [Transforming Our World: The 2030 Agenda for Sustainable Development](#) (United Nations, 2015), major sustainability challenges include (but are not limited to) climate change, global poverty and inequality, natural resource depletion, and environmental degradation. To identify courses, research, programs, and initiatives that contribute towards understanding or solving sustainability challenges, it is helpful to ask:

- Does it contribute towards realizing one or more of the principles outlined in the [Earth Charter](#)?
And/or
- Does it contribute towards achieving one or more of the targets embedded in the United Nations [Sustainable Development Goals](#) (SDGs)?

Sustainability course offerings

Sustainability course offerings include "sustainability courses" and "courses that include sustainability":

Sustainability Courses

Sustainability courses are courses in which the *primary and explicit* focus is on sustainability and/or on understanding or solving one or more major sustainability challenge. This includes:

- A. Foundational courses in which the primary and explicit focus is on sustainability as an integrated concept having social, economic, and environmental dimensions. Obvious examples include Introduction to Sustainability, Sustainable Development, and Sustainability Science, however courses may also count if their course descriptions indicate a primary and explicit focus on sustainability.
- B. Courses in which the primary and explicit focus is on the application of sustainability within a field. As sustainability is an interdisciplinary topic, such courses generally incorporate insights from multiple disciplines. Obvious examples include Sustainable Agriculture, Architecture for Sustainability, and Sustainable Business, however courses may also count if their course descriptions indicate a primary and explicit focus on sustainability within a field.
- C. Courses in which the primary focus is on providing skills and/or knowledge *directly* connected to understanding or solving one or more major sustainability challenges. A course might provide knowledge and understanding of the problem or tools for solving it, for example Climate Change Science, Renewable Energy Policy, Environmental Justice, or Green Chemistry. Such courses do not necessarily cover "sustainability" as a concept, but should address more than one of the three dimensions of sustainability (i.e., social wellbeing, economic prosperity, and environmental health).

While a foundational course such as chemistry or sociology might provide knowledge that is useful to practitioners of sustainability, it would not be considered a sustainability course. Likewise, although specific tools or practices such as GIS (Geographical Information Systems) or engineering can be applied towards

sustainability, such courses would not count as sustainability courses unless their primary and explicit focus is on sustainable applications. If there is a sustainability unit, module or activity within one of these courses, but it is not the main focus, the course may be counted as a “course that includes sustainability”:

Courses That Include Sustainability

A course that includes sustainability is primarily focused on a topic other than sustainability, but incorporates a unit or module on sustainability or a sustainability challenge, includes one or more sustainability-focused activities, or integrates sustainability issues throughout the course. To count, these units/modules, activities or issues should be documented in course descriptions or syllabi.

While a foundational course such as chemistry or sociology might provide knowledge that is useful to practitioners of sustainability, it would not be considered to be inclusive of sustainability unless the concept of sustainability or a sustainability challenge is specifically integrated into the course. Likewise, although specific tools or practices such as GIS (Geographical Information Systems) or engineering can be applied towards sustainability, such courses would not count unless they incorporated a unit on sustainability or a sustainability challenge, included a sustainability-focused activity, or incorporated sustainability issues throughout the course.

Undergraduate courses

Undergraduate courses are included in courses of study leading up to the level of a baccalaureate, i.e., 4 or 5-year bachelor's degree programs, associate's degree programs, or vocational or technical programs below the baccalaureate.

Scoring Example: Academic Courses

Part 1

Example College offered 1,000 courses during the past year. Of those courses, 10 were sustainability courses and 65 were courses that included sustainability.

Course type	Factor	Multiply	Number of courses offered of each type	Divide	Total number of courses offered by the institution	Equals	Points earned
Sustainability courses	40	×	<u>10</u>	÷	<u>1,000</u>	=	0.4
Courses that include sustainability	40		<u>65</u>				2.6
Total points earned ➡							3.0

Part 2

Example College has 30 academic departments. Of those, 10 offer sustainability courses and/or courses that include sustainability.

Factor	Multiply	Number of departments with sustainability course offerings	Divide	Total number of departments	Equals	Points earned
6 $\frac{2}{3}$	×	<u>10</u>	÷	<u>30</u>	=	2.22

Credit Example: Inventory of Sustainability Course Offerings

Example College asked faculty members representing all of its academic departments to identify sustainability course offerings using the definitions outlined in *G. Standards and Terms*. Following is an excerpt of the completed inventory:

Sustainability Courses

Title	Department	Level	Description
Introduction to Sustainability	Interdisciplinary Studies	UG	<i>[Description is optional; sustainability focus of the course is apparent from its title.]</i>
Sustainable Development	Geography	UG	<i>[Description is optional; sustainability focus of the course is apparent from its title.]</i>
Sustainability Science	Ecology and Evolutionary Biology	UG	<i>[Description is optional; sustainability focus of the course is apparent from its title.]</i>
Introduction to Environmental Studies	Environmental Studies	UG	This course provides an overview of environmental studies as an interdisciplinary academic field centered upon interdependent society – nature relationships. It provides an introduction to the concept of sustainability, critical thinking, the interdependency of social and ecological systems, interdisciplinary approaches, and related social engagement.
Systems Thinking and Analysis	Engineering	UG	Introduction to the systems thinking process, systems of systems, and the fundamental considerations associated with engineering and sustainable development.
Society and the Environment	Sociology	UG	This course will enable students to devise their own set of principles for understanding sustainability issues which should be of value in decision-making in their future careers.
Resilient Societies	Interdisciplinary Studies	UG	Provides an overview of the study of social and economic development in the context of ecological limits. Studies pathways and processes that lead to positive adjustment and sustainable societies.
Ecological Economics	Economics	UG	This course studies the role of environmental amenities such as clean air and clear water in economic systems. The course analyzes the problems of market outcomes when such amenities are not priced, examines the challenges associated with estimating economic costs and benefits, and emphasizes the connection between economic understanding and improved public policy.
International Development	International Studies	UG	An interdisciplinary course based on real world problems, direct field experience and current research on the causes of global poverty, environmental degradation, and preventable disease.
Environmental Ethics	Philosophy	UG	Course examines concepts such as animal rights, the land ethic and environmental justice within the larger context of environmental philosophy.
Corporate Social Responsibility	Business	G	This course explores how corporations design, manage and measure social strategies to generate business value. Students will learn frameworks, methodologies

			and tools and use these to develop CSR strategies for real-world corporations.
Global Environmental Health	Public Health	G	The public health implications, positive and negative, of society's efforts to mitigate and adapt to climate change will be elaborated, including discussions of ethical, political, economic aspects.
Environmental Journalism	Journalism	UG	In this course, students will learn the gathering and presentation of stories about environmental issues. We will also study the effect of mass media on the environmental movement and public policy debates.
Urban Planning	Planning	UG	Examination of current urban planning and policy issues and debates, such as normative theories of good urban form, metropolitan organization and governance, economic development and growth management, edge cities, spatial mismatch hypothesis, urban poverty, racial/ethnic inequality, gender and urban structure, sustainability, and the future of cities.
Organic Agriculture	Plant, Soil and Agricultural Systems	UG	This course asks students to use critical thinking skills to compare organic and industrial agricultural practices and explore food production issues including antibiotics, herbicides, hormones, GMOs, animal welfare, crop yields, nutrients, and pollution.
National Environmental Policy Act	Public Policy	UG	Learn about the philosophy and practice of ecological theory and policy and discuss contemporary challenges associated with implementation of the National Environmental Policy Act (NEPA).
Photovoltaic and Wind Turbine Installation	Electrical and Electronics	UG	The course will discuss the fundamentals of photovoltaic and wind power generation, installation and maintenance practices.
Conservation Biology	Biology	G	The focus of this course is on the science of conservation biology in the context of environmental policy, socioeconomic demands, and environmental ethics. Topics will include population biology, extinction, wildlife management, the role of science in making environmental policy, wetlands conservation, sustainable agriculture and forestry, integrated land-use management, and vegetation analysis.
Health Disparities	Public Health	UG	Students learn the nature of socioeconomic, racial and ethnic disparities in health status, and become familiar with the research literature on disparities in health care.
Infill Development	Public Policy	G	This course provides students with a comprehensive understanding of urban infill development, including the economic development thrust of urban infill and the political, environmental and community dimensions of projects.
Integrated Pest Management	Plant, Soil and Agricultural Systems	UG	Course is designed to provide an overview of IPM in agricultural situations. The course covers the fundamentals of pest management; safe use of and alternatives to pesticides; and the development, classification, and identification of insects.
Peace Studies	Peace Studies	UG	This course provides an overview of the field of peace studies and examines theories related to peace, conflict studies and non-violence. Students gain an understanding of the various tools and processes that are used internationally in working towards a more equitable, just and peaceful world.

Life Cycle Assessment	Business	G	Green supply chains are an important part of sustainable business practice. This course teaches about green product and service supply chains and compliance requirements.
Courses That Include Sustainability			
Title	Department	Level	Description
Introduction to Chemistry	Chemistry	UG	Includes a module on green chemistry and chemistry's contribution to sustainability
Art and Social Change	Art and Architecture	UG	One of the course's listed objectives is to examine art's potential contribution to sustainability
Construction Management	Construction and Environmental Management	UG	Includes a unit on green building
Math in Society	Mathematics	UG	Includes practice problems that are oriented around sustainability
Business in the European Union	Business	G	Includes a unit on sustainability, corporate social responsibility (CSR) and EU policy
Applied Ethics	Philosophy	UG	Includes discussion of inter-generational equity and the sustainability ethic
HVAC II	Construction and Environmental Management	UG	Includes a unit on high-efficiency and geothermal HVAC systems
Cause Marketing	Communications	UG	Case studies include marketing around corporate social responsibility (CSR) and sustainability
Social Problems and Social Change	Sociology	UG	Includes units on sustainability, environmental movements and activism, and responses to climate change
Literature and Nature	Literary Arts	UG	Includes readings on the relationship between humans and the land and a writing assignment related to sustainability

AC 2: Learning Outcomes

8 points available

A. Credit Rationale

This credit recognizes institutions with sustainability learning outcomes associated with program degrees and/or courses of study. Learning outcomes help students develop specific sustainability knowledge and skills and provide institutions and accrediting bodies with standards against which to assess student learning.

B. Criteria

Institution's students graduate from degree programs that include sustainability as a learning outcome or include multiple sustainability learning outcomes. Sustainability learning outcomes (or the equivalent) may be specified at:

- Institution level (e.g., covering all students)
- Division level (e.g., covering one or more schools or colleges within the institution)
- Program level (e.g., covering all graduates from a degree program)
- Course level (if successful completion of the course is required to complete a degree program)

This credit includes graduate as well as undergraduate programs. For this credit, "degree programs" include majors, minors, concentrations, certificates, and other academic designations. Extension certificates and other certificates that are not part of academic degree programs do not count for this credit; they are covered in the: *Continuing Education* credit in Public Engagement. Programs that include co-curricular aspects may count as long as there is an academic component of the program.

This credit is inclusive of learning outcomes, institutional learning goals, general education outcomes, and graduate profiles that are consistent with the definition of "[sustainability learning outcomes](#)" included in *G. Standards and Terms*. While they do not necessarily have to use the term "sustainability", learning outcomes must collectively address sustainability as an integrated concept having social, economic, and environmental dimensions for a program's graduates to count. Mission, vision and values statements are not sufficient unless the above criteria are met.

Institutions may count graduates from sustainability-focused programs (i.e., majors, minors, concentrations and the equivalent as reported for the *Undergraduate Program* and *Graduate Program* credits) and other degree programs that do not have specified sustainability learning outcomes, but require the successful completion of one or more sustainability courses (i.e., courses in which the primary and explicit focus is on sustainability as reported for the *Academic Courses* credit).

C. Applicability

This credit applies to all institutions that have degree programs.

D. Scoring

Institutions earn the maximum of 8 points available for this credit when all students graduate from programs that have adopted at least one sustainability learning outcome. Incremental points are available based on the percentage of students who graduate from such programs. For example, if half of all students graduate from

programs that have specified sustainability learning outcomes, an institution would earn 4 points (half of the points available for this credit).

Points for this credit are calculated automatically in the STARS Reporting Tool as follows:

Factor	Multiply	Number of students that graduate from programs that have adopted at least one sustainability learning outcome	Divide	Total number of graduates	Equals	Points earned
8	×	_____	÷	_____	=	Up to 8

E. Reporting Fields

Required

- ☐ Total number of graduates from degree programs (i.e., majors, minors, concentrations, certificates, and other academic designations)
- ☐ Number of students that graduate from programs that have adopted at least one sustainability learning outcome
- ☐ Do the figures reported above cover one, two, or three academic years?
- ☐ Does the institution specify sustainability learning outcomes at the institution level (e.g., covering all students)?
- ☐ Does the institution specify sustainability learning outcomes at the division level (e.g., covering particular schools or colleges within the institution)?

If institution level or division level learning outcomes are specified, provide:

- ☐ A list or brief description of the institution level or division level sustainability learning outcomes
- ☐ Does the institution specify sustainability learning outcomes at the program level (i.e., majors, minors, concentrations, degrees, diplomas, certificates, and other academic designations)?

If program level learning outcomes are specified, provide:

- ☐ A list or brief description of the program level sustainability learning outcomes (or a list of sustainability-focused programs)
- ☐ Do course level sustainability learning outcomes contribute to the figure reported above (i.e., in the absence of program, division, or institution level learning outcomes)?

If yes, provide:

- ☐ A list or brief description of the course level sustainability learning outcomes and the programs for which the courses are required

Optional

- ☐ The website URL where information about the programs or initiatives is available
- ☐ Additional documentation to support the submission (upload)

- Data source(s) and notes about the submission
- Contact information for a responsible party (a staff member, faculty member, or administrator who can respond to questions regarding the data once it is submitted and available to the public)

F. Measurement

Timeframe

Report the most recent data available within the three years prior to the anticipated date of submission. Institutions may choose to report data from one, two, or three academic years, as long as both the total number of graduates and the number of graduates from programs that have sustainability learning outcomes are measured during the same time period.

Sampling and Data Standards

Not applicable

G. Standards and Terms

Sustainability learning outcomes

Consistent with the United Nations Educational, Scientific and Cultural Organization ([UNESCO](#)), student learning outcomes are defined as:

Statements of what a learner is expected to know, understand, and be able to demonstrate after completion of a process of learning as well as the specific intellectual and practical skills gained and demonstrated by the successful completion of a unit, course, or programme. Learning outcomes, together with assessment criteria, specify the minimum requirements for the award of credit, while grading is based on attainment above or below the minimum requirements for the award of credit. Learning outcomes are distinct from the aims of learning in that they are concerned with the achievements of the learner rather than with the overall intentions of the teacher.

Sustainability learning outcomes are statements that outline the specific sustainability knowledge and skills that a student is expected to have gained and demonstrated by the successful completion of a unit, course, or program. Learning outcomes do not necessarily have to use the term “sustainability” to count as long as they collectively address sustainability as an integrated concept having social, economic, and environmental dimensions. For example, an institution may have adopted a set of sustainability learning outcomes for its general education program that cover systems thinking, interdisciplinary capacities, social responsibility, and an understanding of the carrying capacity of ecosystems. Each outcome does not have to include the term “sustainability” for the set to be considered sustainability learning outcomes. Likewise, however, none of those outcomes would be considered a sustainability learning outcome on its own.

Examples of sustainability learning outcomes include (but are not limited to):

- Students will be able to define sustainability and identify major sustainability challenges.
- Students will have an understanding of their ethical responsibility towards present and future generations.
- Students will have an understanding of the carrying capacity of ecosystems.
- Students will be able to apply concepts of sustainable development to address sustainability challenges in a global context.

- Students will identify, act on, and evaluate their professional and personal actions with the knowledge and appreciation of interconnections among economic, environmental, and social perspectives in order to create a more sustainable future.

Scoring Example: Learning Outcomes

Example University graduated 1,000 students in the past academic year. Of those students, 250 graduated from programs that have adopted a sustainability learning outcome or multiple sustainability outcomes.

Factor	Multiply	Number of students that graduate from programs that have adopted at least one sustainability learning outcome	Divide	Total number of graduates	Equals	Points earned
8	×	<u>250</u>	÷	<u>1,000</u>	=	2.0

AC 3: Undergraduate Program

3 points available

A. Credit Rationale

This credit recognizes institutions that have formal, undergraduate-level degree programs focused on sustainability. Developing such programs signals an institution's commitment to sustainability. Such programs also provide a path for students to study sustainability topics in depth, which better prepares them to address sustainability challenges. Formal academic programs also provide a home for sustainability scholars within the institution.

B. Criteria

Institution offers at least one:

- [Sustainability-focused program](#) (major, degree program, or equivalent) for [undergraduate students](#)

And/or

- Undergraduate-level sustainability-focused minor or concentration (e.g., a concentration on sustainable business within a business major).

To count, programs must concentrate on sustainability as an integrated concept, including its social, economic, and environmental dimensions.

Extension certificates and other certificates that are not part of academic degree programs do not count for this credit; they are covered in the *Continuing Education* credit in Public Engagement.

C. Applicability

This credit applies to all institutions that have undergraduate majors, academic programs, or the equivalent.

D. Scoring

Institutions earn the maximum of 3 points available for this credit for having at least one sustainability-focused degree program or the equivalent for undergraduate students. Partial points are available. An institution with no sustainability-focused degree program that has at least one sustainability-focused minor, concentration or certificate earns 1.5 points (half of the points available for this credit).

E. Reporting Fields

Required

- ☐ Does the institution offer at least one sustainability-focused major, degree program, or the equivalent for undergraduate students (i.e., an interdisciplinary academic program that concentrates on sustainability as an integrated concept, including its social, economic, and environmental dimensions)?

If yes, provide:

- Name of the sustainability-focused undergraduate degree program
- A brief description of the undergraduate degree program

- The website URL for the undergraduate degree program
- Does the institution offer one or more sustainability-focused minors, concentrations or certificates for undergraduate students?

If yes, provide:

- Name of the sustainability-focused undergraduate minor, concentration or certificate
- A brief description of the undergraduate minor, concentration or certificate
- The website URL for the undergraduate minor, concentration or certificate

Optional

- For up to two additional sustainability-focused undergraduate degree programs, provide:
 - Name of the sustainability-focused undergraduate degree program
 - A brief description of the undergraduate degree program
 - The website URL for the undergraduate degree program
- The name and website URLs of all other sustainability-focused, undergraduate degree programs
- For up to two additional sustainability-focused undergraduate minors, concentrations or certificates, provide:
 - Name of the sustainability-focused undergraduate minor, concentration or certificate
 - A brief description of the undergraduate minor, concentration or certificate
 - The website URL for the undergraduate minor, concentration or certificate
- The name and website URLs of all other sustainability-focused undergraduate minors, concentrations and certificates
- Additional documentation to support the submission (upload)
- Data source(s) and notes about the submission
- Contact information for a responsible party (a staff member, faculty member, or administrator who can respond to questions regarding the data once it is submitted and available to the public)

F. Measurement

Timeframe

Report on current program status and offerings at the time of submission. Planned degree programs or degree programs that have been canceled are not eligible for this credit.

Sampling and Data Standards

Not applicable

G. Standards and Terms

Sustainability-focused program

Sustainability-focused programs are interdisciplinary academic programs that concentrate on sustainability as an integrated concept, including its social, economic, and environmental dimensions. The courses required for the successful completion of the program educate students about how different dimensions of sustainability

relate to and support each other in theory and practice. The sustainability focus of such a program should be explicit in the program title or description.

Undergraduate students

Undergraduate students are students enrolled in courses of study leading up to the level of a baccalaureate, i.e., 4- or 5-year bachelor's degree programs, associate's degree programs, or vocational or technical programs below the baccalaureate.

AC 4: Graduate Program

3 points available

A. Credit Rationale

This credit recognizes institutions that have formal, graduate academic degree programs focused on sustainability. Developing such programs signals an institution's commitment to sustainability. Formal academic programs focused on sustainability provide a path for students to study sustainability topics in depth, thus better preparing them to address sustainability challenges. Formal academic programs also provide a home for sustainability scholars within the institution.

B. Criteria

Institution offers at least one:

- [Sustainability-focused program](#) (major, degree program, or equivalent) for [graduate students](#)

And/or

- Graduate-level sustainability-focused minor, concentration or certificate (e.g., a concentration on sustainable business within an MBA program).

To count, programs must concentrate on sustainability as an integrated concept, including its social, economic, and environmental dimensions.

Extension certificates and other certificates that are not part of academic degree programs do not count for this credit; they are covered in the *Continuing Education* credit in Public Engagement.

C. Applicability

This credit applies to all institutions that offer at least 25 distinct graduate programs. Institutions that offer fewer than 25 distinct graduate programs have a choice of either pursuing or omitting this credit.

D. Scoring

Institutions earn the maximum of 3 points available for this credit for having at least one sustainability-focused degree program or the equivalent for graduate students. Partial points are available. An institution with no sustainability-focused degree program for graduate students that has at least one graduate-level sustainability-focused minor, concentration or certificate earns 1.5 points (half of the points available for this credit).

E. Reporting Fields

Required

- ☐ Does the institution offer at least one sustainability-focused major, degree program, or the equivalent for graduate students (i.e., an interdisciplinary academic program that concentrates on sustainability as an integrated concept, including its social, economic, and environmental dimensions)?

If yes, provide:

- Name of the sustainability-focused graduate-level degree program
- A brief description of the graduate-level degree program

- The website URL for the graduate-level degree program
- Does the institution offer one or more graduate-level sustainability-focused minors, concentrations or certificates?

If yes, provide:

- Name of the graduate-level sustainability-focused minor, concentration or certificate
- A brief description of the graduate-level minor, concentration or certificate
- The website URL for the graduate-level minor, concentration or certificate

Optional

- For up to two additional sustainability-focused graduate-level degree programs, provide:
 - Name of the sustainability-focused graduate-level degree program
 - A brief description of the graduate-level degree program
 - The website URL for the graduate-level degree program
- The name and website URLs of all other sustainability-focused graduate-level degree programs
- For up to two additional graduate-level sustainability-focused minors, concentrations or certificates, provide:
 - Name of the graduate-level sustainability-focused minor, concentration or certificate
 - A brief description of the graduate-level minor, concentration or certificate
 - The website URL for the graduate-level minor, concentration or certificate
- The name and website URLs of all other graduate-level sustainability-focused minors, concentrations and certificates
- Additional documentation to support the submission (upload)
- Data source(s) and notes about the submission
- Contact information for a responsible party (a staff member, faculty member, or administrator who can respond to questions regarding the data once it is submitted and available to the public)

F. Measurement

Timeframe

Report on current program status and offerings at the time of submission. Planned degree programs or degree programs that have been canceled do not count for this credit.

Sampling and Data Standards

Not applicable

G. Standards and Terms

Graduate students

Graduate students are students enrolled in the spectrum of education beyond the level of a baccalaureate, i.e., students who hold bachelor's degrees or above and are taking courses at the post-baccalaureate level.

Sustainability-focused program

Sustainability-focused programs are interdisciplinary academic programs that concentrate on sustainability as an integrated concept, including its social, economic, and environmental dimensions. The courses required for the successful completion of the program educate students about how different dimensions of sustainability relate to and support each other in theory and practice. The sustainability focus of such a program should be explicit in the program title or description.

AC 5: Immersive Experience

2 points available

A. Credit Rationale

This credit recognizes institutions that offer sustainability-focused immersive experience programs. Sustained immersive experiences such as community-based internships and “study abroad” programs give students the opportunity to witness and learn in-depth about sustainability challenges and solutions. These programs provide a memorable way for students to deepen and expand their knowledge of sustainability.

B. Criteria

Institution offers at least one immersive, sustainability-focused educational study program. The program is one week or more in length and may take place off-campus, overseas, or on-campus.

For this credit, the program must meet one or both of the following criteria:

- It concentrates on sustainability, including its social, economic, and environmental dimensions;
- And/or
- It examines an issue or topic using sustainability as a lens.

For-credit programs, non-credit programs and programs offered in partnership with outside entities may count for this credit. Programs offered exclusively by outside entities do not count for this credit. See Credit Example, below, for further guidance.

C. Applicability

This credit applies to all institutions that offer [immersive educational programs](#).

D. Scoring

Institutions earn 2 points for meeting the criteria outlined above. Partial points are not available for this credit.

E. Reporting Fields

Required

- ☐ Does the institution offer at least one immersive, sustainability-focused educational study program that is one week or more in length?
If yes, provide:
 - A brief description of the sustainability-focused immersive program(s) offered by the institution, including how each program addresses the social, economic, and environmental dimensions of sustainability

Optional

- ☐ The website URL where information about the programs or initiatives is available
- ☐ Additional documentation to support the submission (upload)
- ☐ Data source(s) and notes about the submission

- Contact information for a responsible party (a staff member, faculty member, or administrator who can respond to questions regarding the data once it is submitted and available to the public)

F. Measurement

Timeframe

Programs offered during the three years prior to the anticipated date of submission are eligible for this credit.

Sampling and Data Standards

Not applicable

G. Standards and Terms

Immersive educational programs

Consistent with [Ball State University](#), immersive educational programs are learning experiences that are:

...designed to bridge content knowledge, skill of application, societal need, and life-long learning. The citizen of the 21st century needs qualities and competencies not easily developed in a traditional teacher-centered classroom: the ability to work in multidisciplinary teams; an appreciation for an array of cultures; an understanding of diverse and changing societies.

Immersive learning experiences require students to manifest their learning in a tangible outcome that lives on and has utility beyond the duration of the experience itself. Through such transformative experiences students should better understand societal issues in global, local, economic, or environmental contexts.

Immersive learning experiences may exhibit most or all of the following characteristics:

- Engage participants in an active learning process that is student-driven, but guided by a faculty mentor.
- Produce a tangible outcome or product, such as a business plan, policy recommendation, publication, or work of art.
- Involve a team of students, often working on a project that is interdisciplinary in nature.
- Include a community partner(s) and create an impact on the larger community as well as on the student participants.
- Focus on student learning outcomes.
- Help students define a career path or make connections to a profession or industry.

Credit Example: Immersive Experience

Example 1: Eco-village semester

Example Community College offers a semester abroad at one of eight affiliated overseas and domestic eco-villages. These eco-villages are sustainability-themed communities where students engage in sustainability skills and issues relevant to that culture and region. The semester experience includes academic content taught by resident faculty at each eco-village as well as practitioners of sustainable practices. In addition, the semester stresses immersion in the culture of sustainability by interacting and working with the people that live there as well as in surrounding areas to develop solutions to environmental, social and economic problems.

Example 2: Local service semester

Example University offers formal semester-long, full-time internships with three local non-profit organizations that serve to advance sustainability. Each organization has a designated faculty liaison that also serves as a mentor for students involved with a particular sustainability organization. As part of the internships, students must complete a substantial academic writing project. These reflections focus on sustainability learning and are presented to all students that completed academic internships that semester.

AC 6: Sustainability Literacy Assessment

4 points available

A. Credit Rationale

This credit recognizes institutions that are assessing the sustainability literacy of their students. Such an assessment helps institutions evaluate the success of their sustainability education initiatives and develop insight into how these initiatives could be improved.

B. Criteria

Institution conducts an assessment of the [sustainability literacy](#) of its students. The sustainability literacy assessment focuses on knowledge of sustainability topics and challenges.

Assessments that exclusively address sustainability culture (i.e., values, behaviors, beliefs, and awareness of campus sustainability initiatives) or student engagement in sustainability-related programs and activities are excluded. Cultural assessments are recognized in the *Assessing Sustainability Culture* credit in Campus Engagement.

Participation by U.S. and Canadian institutions in the National Survey of Student Engagement (NSSE) Sustainability Education Consortium does not count for this credit, but may be reported as an Exemplary Practice in Innovation & Leadership.

An institution may use a single instrument that addresses sustainability literacy, culture, and/or engagement to meet the criteria for this credit if at least ten questions or a third of the assessment focuses on student knowledge of sustainability topics and challenges.

C. Applicability

This credit applies to all institutions.

D. Scoring

Institutions earn the maximum of 4 points available for this credit by administering a [pre- and post-assessment](#) to the entire student body or, at minimum, to the institution's predominant student body (e.g., all undergraduate students), directly or by representative sample. Partial points are available based on the population assessed and whether or not a pre- and post-assessment is conducted as follows:

Attributes of the sustainability literacy assessment (points awarded)	Points earned
An assessment of sustainability literacy is: - Administered to the entire student body or, at minimum, to the institution's predominant student body (e.g., all undergraduate students), directly or by representative sample. (2 points) Or - Administered to a subset of students (e.g., students enrolled in a sustainability program) or a sample of students that may not be representative of the institution's predominant student body (e.g., graduate and not undergraduate students). (1 point)	_____
Administered as a pre- and post-assessment to the same cohort of students or to representative samples in both the pre-test and post-test.	× 2
Total points earned →	Up to 4

E. Reporting Fields

Required

- ☐ Does the institution conduct an assessment of the sustainability literacy of its students (i.e., an assessment focused on student knowledge of sustainability topics and challenges)?

If yes, provide:

- Which of the following best describes the literacy assessment? The assessment is administered to:
 - The entire student body or, at minimum, to the institution's predominant student body (e.g., all undergraduate students), directly or by representative sample.
 - A subset of students (e.g., students enrolled in a sustainability program) or a sample of students that may not be representative of the institution's predominant student body (e.g., graduate and not undergraduate students).
 - Which of the following best describes the structure of the assessment? The assessment is administered as a:
 - Pre- and post-assessment to the same cohort of students or to representative samples in both a pre-test and post-test.
 - Standalone evaluation without a follow-up assessment of the same cohort or representative samples (e.g., a summative or outcome assessment without a pre-test).
- ☐ A copy or sample of the questions included in the sustainability literacy assessment(s) or the website URL where the assessment tool may be found (text or upload)

- ❑ A brief description of how the literacy assessment was developed and/or when it was adopted
- ❑ A brief description of how a representative sample was reached (if applicable) and how the assessment(s) were administered
- ❑ A brief summary of results from the literacy assessment(s), including a description of any measurable changes over time

Optional

- ❑ The website URL where information about the programs or initiatives is available
- ❑ Additional documentation to support the submission (upload)
- ❑ Data source(s) and notes about the submission
- ❑ Contact information for a responsible party (a staff member, faculty member, or administrator who can respond to questions regarding the data once it is submitted and available to the public)

F. Measurement

Timeframe

Report the most recent data available. Sustainability literacy assessments administered within the three years prior to the anticipated date of submission are eligible for this credit. A structured pre- and post-assessment for which the pre-assessment has been conducted and the post-assessment has been scheduled may count.

Sampling and Data Standards

Institutions may choose to measure sustainability literacy by administering a survey to a [representative sample](#) of the student population being assessed or by surveying the entire student population being assessed (e.g., by making the assessment mandatory).

In conducting an assessment with a representative sample (e.g., of an entire class or cohort of students), care should be taken so that participation in the assessment is not skewed toward individuals with an interest in sustainability, e.g., by employing appropriate sampling techniques or making the assessment mandatory. Recruiting students during a sustainability event or limiting the assessment to students enrolled in a sustainability course or program, for example, would not result in a representative sample.

Institutions may report on a single assessment or on multiple assessments that target different groups (e.g., students taking specific courses).

G. Standards and Terms

Pre- and Post-Assessment

Consistent with the UCLA Office of Instructional Development, pre- and post-assessment is defined as follows:

Pre- and post-assessments measure student learning by comparing results from tests conducted at the start and end of the course [or program]. This type of assessment identifies progress and/or mastery of desired learning goals among students with diverse educational backgrounds, and assesses the “value-added” by the course [or program].

A valid pre- and post-assessment must be administered to the same cohort of students or representative samples of the student population being assessed in both the pre-test and post-test.

Representative sample

A representative sample is a subset of a statistical population that accurately reflects the members of the entire population. A representative sample should be an unbiased indication of what the entire population is like. For example, in a student population of 1000 students in which 25 percent of the students are enrolled in a business school, 50 percent are enrolled in humanities programs, and 25 percent are enrolled in science programs, a representative sample might include 200 students: 50 business students, 100 humanities students, and 50 science students. Likewise, a representative sample of purchases should accurately reflect the institution's total purchases, accounting for seasonal and other variations in product availability and purchasing.

Sustainability literacy

Consistent with the [Sustainability Literacy Test](#), sustainability literacy is defined as “knowledge about our shared sustainability challenges as well as ways to create solutions to these challenges”.

Sustainability literacy assessments are designed to assess student understanding of the interconnectedness of social, economic and environmental issues and challenges, and not just knowledge about the environment or environmental problems.

Literacy assessments are predominantly composed of items with “correct” and “incorrect” responses in contrast to assessments of sustainability culture (i.e., values, behaviors, beliefs and awareness) that are predominantly composed of items with no single “correct” response.

AC 7: Incentives for Developing Courses

2 points available

A. Credit Rationale

This credit recognizes institutions that offer incentives to help faculty expand sustainability course offerings. Providing release time, funding for professional development, trainings, and other incentives can help faculty broaden and deepen sustainability curriculum. Faculty members often need these incentives to determine how best to include sustainability in their courses. Providing such incentives lends institutional support to increased sustainability course offerings.

B. Criteria

Institution has an ongoing program or programs that offer incentives for faculty in multiple disciplines or departments to develop new sustainability courses and/or incorporate sustainability into existing courses or departments. The program specifically aims to increase student learning of sustainability.

Incentives may include release time, funding for professional development, and trainings offered by the institution.

Incentives for expanding sustainability offerings in academic, non-credit, and/or continuing education courses count for this credit.

C. Applicability

This credit applies to all institutions.

D. Scoring

Institutions earn 2 points for meeting the criteria outlined above. Partial points are not available for this credit.

E. Reporting Fields

Required

- ☐ Does the institution have an ongoing program or programs that offer incentives for faculty in multiple disciplines or departments to develop new sustainability courses and/or incorporate sustainability into existing courses? (The program must specifically aim to increase student learning of sustainability to count.)

If yes, provide:

- ☐ A brief description of the program(s), including positive outcomes during the previous three years (e.g., descriptions of new courses or course content resulting from the program)
- ☐ A brief description of the incentives that faculty members who participate in the program(s) receive

Optional

- ☐ The website URL where information about the programs or initiatives is available
- ☐ Additional documentation to support the submission (upload)

- Data source(s) and notes about the submission
- Contact information for a responsible party (a staff member, faculty member, or administrator who can respond to questions regarding the data once it is submitted and available to the public)

F. Measurement

Timeframe

Programs or incentives that were offered within the three years prior to the anticipated date of submission are eligible for this credit.

Sampling and Data Standards

Not applicable

G. Standards and Terms

Not applicable

AC 8: Campus as a Living Laboratory

4 points available

A. Credit Rationale

This credit recognizes institutions that utilize their infrastructure and operations as living environments for multidisciplinary learning and applied research that advances sustainability on campus. Students that actively participate in making their campuses more sustainable are well prepared to continue that work in their careers and communities after graduation.

B. Criteria

Institution is utilizing its infrastructure and operations for multidisciplinary student learning and applied research that contributes to understanding campus sustainability challenges or advancing sustainability on campus in at least one of the following areas:

- Air & Climate
- Buildings
- Energy
- Food & Dining
- Grounds
- Purchasing
- Transportation
- Waste
- Water
- Coordination & Planning
- Diversity & Affordability
- Investment & Finance
- Public Engagement
- Wellbeing & Work
- Other (e.g., arts and culture or technology)

This credit includes substantive work by students and/or faculty (e.g., class projects, thesis projects, term papers, published papers) that involves active and experiential learning (see *Credit Example*, below). On-campus internships and non-credit work that take place under supervision of faculty members, sustainability staff, or sustainability committees may count as long as the work has a formal learning component (i.e., there are opportunities to document and assess what students are learning).

This credit does not include immersive education programs, co-curricular activities, or community service, which are covered by the *Immersive Experience* credit, credits in Campus Engagement, and the *Community Service* credit in Public Engagement, respectively.

Projects that utilize the local community as a living laboratory to advance sustainability may be included under “Public Engagement”. A single, multidisciplinary living lab project may simultaneously address up to three of the areas listed above.

C. Applicability

This credit applies to all institutions where students attend the physical campus.

D. Scoring

Institutions earn 0.4 points for each area covered, regardless of how many projects there are in each area. Institutions with projects that cover 10 or more areas earn the maximum of 4 points available for this credit.

E. Reporting Fields

Required

- ☐ Is the institution utilizing its campus as a [living laboratory](#) for multidisciplinary student learning and applied research in relation in the following areas?
 - ☐ Air & Climate
 - ☐ Buildings
 - ☐ Energy
 - ☐ Food & Dining
 - ☐ Grounds
 - ☐ Purchasing
 - ☐ Transportation
 - ☐ Waste
 - ☐ Water
 - ☐ Coordination & Planning
 - ☐ Diversity & Affordability
 - ☐ Investment & Finance
 - ☐ Public Engagement
 - ☐ Wellbeing & Work
 - ☐ Other areas not covered by the above (e.g., arts and culture or technology)

For each area in which the institution has living lab projects, provide:

- ☐ A brief description of the student/faculty projects and how they contribute to understanding campus sustainability challenges or advancing sustainability on campus in relation to the topic

Optional

- ☐ The website URL where information about the programs or initiatives is available
- ☐ Additional documentation to support the submission (upload)
- ☐ Data source(s) and notes about the submission
- ☐ Contact information for a responsible party (a staff member, faculty member, or administrator who can respond to questions regarding the data once it is submitted and available to the public)

F. Measurement

Timeframe

Projects and initiatives currently in progress or conducted within the three years prior to the anticipated date of submission are eligible for this credit.

Sampling and Data Standards

Not applicable

G. Standards and Terms

Living laboratory

Consistent with the American Association of Community Colleges (AACC) [SEED Center](#), living laboratories are defined as campuses that “merge academics and... facilities management to provide students with real-world skills and, for the institution, a path to meet its sustainability goals”.

Credit Example: Campus as a Living Laboratory

Example University utilizes its infrastructure and operations for multidisciplinary student learning and applied research that advances sustainability on campus in the following ways:

- A student completed a capstone project evaluating local carbon offset opportunities for the university. (Air & Climate)
- Students living in LEED-certified housing used and developed “smart home” technologies as part of an independent study course. (Buildings)
- A student spent the summer interning with Physical Plant Continuous Commissioning Engineers surveying buildings, providing research on occupancy sensors, coordinating with lighting projects and developing installations packages that resulted in measurable energy savings. (Energy)
- A group of students conducted a semester-long project to analyze the application of clean and renewable energy on campus. (Energy)
- As a class project, students developed a business plan for a student-governed food cooperative. (Food & Dining)
- Students participated in a year-long study to catalog insect species found on campus. The results were used to inform the university’s integrated pest management program. (Grounds)
- A class completed a Life Cycle Assessment on university vendor practices. (Purchasing)
- A student developed and helped implement a proposal to install bicycle repair stations on campus as the capstone project of an independent study course. (Transportation)
- Students participated in the U.S. EPA Food Recovery Challenge and achieved measurable reductions in campus food waste. (Waste)
- Environmental Studies students constructed a water budget for the campus based on rainfall, evapo-transpiration rate, groundwater availability and other factors. The budget is used to inform campus water conservation strategies and goals. (Water)
- A class conducted a qualitative survey of local community members affected by a proposed campus expansion and presented the results to administrators. (Public Engagement)
- A planning student completed a thesis outlining a smart growth model for the campus. (Coordination & Planning)
- Students gathered and analyzed data for a sustainability report and STARS submission. (Coordination & Planning)
- Sociology students conducted a survey of gender neutral facilities on campus and delivered recommendations to administrators. (Diversity & Affordability)
- Students published a paper detailing the university’s investments in companies that practice and support hydraulic fracking. (Investment & Finance)
- An MD candidate studied health risks associated with pesticide use on campus. (Wellbeing & Work)
- Students in an economics course worked with faculty members to complete a wage study comparing the compensation of university employees with the local cost of living. (Wellbeing & Work)
- An art student’s thesis project examined the role of the creative and performing arts in communicating sustainability and culminated in a campus project to inspire behavior change. (Other - arts and culture)

Research

This subcategory seeks to recognize institutions that are conducting research on sustainability topics. Conducting research is a major function of many colleges and universities. By researching sustainability issues and refining theories and concepts, higher education institutions can continue to help the world understand sustainability challenges and develop new technologies, strategies, and approaches to address those challenges.

Credits		Points available: 18
AC 9	Research and Scholarship*	12
AC 10	Support for Research*	4
AC 11	Open Access to Research*	2

* credit does not apply to all institutions

Share your story

The My Submission section of the online Reporting Tool includes an optional reporting field for the institution to provide an overview of notable activities and accomplishments in this subcategory. This information is featured in the institution's public report.

- ☐ A brief summary of the institution's notable activities and accomplishments relevant to this subcategory

AC 9: Research and Scholarship

12 points available

A. Credit Rationale

This credit recognizes institutions where faculty and staff are conducting research and other forms of scholarship on sustainability topics. Conducting an inventory of an institution's sustainability research can serve as a valuable first step in identifying strengths and areas for development. Likewise, since sustainability requires collaboration that transcends traditional disciplines, conducting an inventory can help connect individuals, laboratories, research centers, and other campus community members with a shared interest in sustainability. The percentage of research faculty and staff and departments that are engaged in sustainability research are measures of the spread of sustainability research.

B. Criteria

Institution has conducted an inventory during the previous three years to identify its sustainability research activities and initiatives and makes the inventory publicly available. The research inventory should be based on the definition of "[sustainability research](#)" outlined in *G. Standards and Terms* and include, at minimum, the names and department affiliations of all faculty and staff members engaged in sustainability research. Research for which partial or incomplete information is provided may not be counted toward earning points for this credit.

Part 1

Institution produces sustainability research as measured by the percentage of faculty and staff engaged in research that are engaged in [sustainability research](#).

Part 2

Institution produces sustainability research as measured by the percentage of [academic departments](#) that conduct research that include at least one faculty or staff member who conducts sustainability research.

Any level of sustainability research is sufficient to be included for this credit. In other words, a researcher who conducts both sustainability research and other research may be included.

C. Applicability

This credit applies to all institutions where research is considered in faculty and/or staff promotion or tenure decisions. Institutions that do not consider research in promotion or tenure decisions as a matter of policy or standard practice may choose to either omit or include the Research subcategory. Pursuing one or more Research credits and omitting other credits in the subcategory as "not applicable" is not allowed.

D. Scoring

Each part is scored independently.

Part 1

Institutions earn the maximum of 6 points available for Part 1 of this credit when 15 percent or more of faculty and staff that are engaged in research are engaged in sustainability research. Incremental points are awarded based on the percentage of researchers that are engaged in sustainability research. For example, if 7.5 percent

of faculty and staff that are engaged in research are engaged in sustainability research, an institution would earn 3 points (half of the points available for Part 1).

Points for Part 1 of this credit are calculated automatically in the STARS Reporting Tool as follows:

Factor	Multiply	Faculty and staff engaged in sustainability research	Divide	Total faculty and staff engaged in research	Equals	Points earned
40	×	_____	÷	_____	=	Up to 6

Part 2

Institutions earn the maximum of 6 points available for Part 2 of this credit when 75 percent or more of departments that conduct research are engaged in sustainability research. Incremental points are available based on the percentage of departments that conduct sustainability research. For example, if 25 percent of departments that conduct research are engaged in sustainability research, an institution would earn 2 points ($\frac{1}{3}$ of the points available for Part 2).

Points for Part 2 of this credit are calculated automatically in the STARS Reporting Tool as follows:

Factor	Multiply	Departments that conduct sustainability research	Divide	Total number of departments that conduct research	Equals	Points earned
8	×	_____	÷	_____	=	Up to 6

E. Reporting Fields

Required

- ☐ Total number of the institution's faculty and/or staff that are engaged in research (headcount)
- ☐ Number of the institution's faculty and/or staff that are engaged in sustainability research (headcount)
- ☐ Total number of academic departments (or the equivalent) that include at least one faculty or staff member that conducts research
- ☐ Number of academic departments (or the equivalent) that include at least one faculty or staff member that conducts sustainability research
- ☐ A copy of the institution's inventory of its sustainability research that includes names and department affiliations of faculty and staff engaged in sustainability research (text or upload)
- ☐ A brief description of the methodology the institution followed to complete the research inventory (including the types of faculty and staff included as researchers)

Optional

- ☐ The website URL where information about the programs or initiatives is available
- ☐ Additional documentation to support the submission (upload)

- Data source(s) and notes about the submission
- Contact information for a responsible party (a staff member, faculty member, or administrator who can respond to questions regarding the data once it is submitted and available to the public)

F. Measurement

Timeframe

Report the most recent data available from within the three years prior to the anticipated date of submission.

Institutions may choose to report research activities from one, two, or three academic years, as long as both the total number of research faculty and staff and the number of faculty and staff engaged in sustainability research are measured during the same time.

Sampling and Data Standards

Each institution is free to choose a methodology to identify sustainability research that is most appropriate given its unique circumstances. For example, an institution may distribute a survey to all faculty members and ask them to self-identify as being engaged in sustainability research or ask the chairperson of each department to identify the sustainability research activities within his or her department.

The “total number of the institution’s faculty and/or staff that are engaged in research” must include, at minimum, all faculty members for whom research is considered in promotion and/or tenure decisions. Institutions may report on faculty only, or choose to include staff researchers and/or graduate student employees that conduct research, as long as they are reported in both the count of faculty and staff that are engaged in research and the count of faculty and staff that are engaged in sustainability research. Likewise, institutions may report on faculty and staff regardless of status (e.g., full-time, part-time, adjunct, graduate student), as long as they are counted consistently.

An institution that has developed a more refined approach to conducting the research inventory that is appropriate given its particular context may use that approach as long as it is consistent with the definitions and guidance provided in this Technical Manual. For example, a large research institution may limit the inventory to funded research.

Institutions that do not have academic departments should report fields of study, programs, subject areas or the equivalent.

G. Standards and Terms

Academic departments

An academic department is an administrative division of a college, university, or school faculty that is devoted to a particular academic discipline (e.g., Economics, Environmental Science, Sociology) or a closely related set of disciplines (e.g., Asian Studies or Physics & Astronomy). Departments may exist under other nomenclature and with coarser or finer divisions, depending upon each institution’s context. Fields of study, programs, subject areas or the equivalent may be considered to be “departments” in the absence of traditional administrative divisions.

Sustainability challenges

Consistent with [Transforming Our World: The 2030 Agenda for Sustainable Development](#) (United Nations, 2015), major sustainability challenges include (but are not limited to) climate change, global poverty and inequality, natural resource depletion, and environmental degradation. To identify courses, research, programs, and initiatives that contribute towards understanding or solving sustainability challenges, it is helpful to ask:

- Does it contribute towards realizing one or more of the principles outlined in the [Earth Charter](#)?
And/or
- Does it contribute towards achieving one or more of the targets embedded in the United Nations [Sustainable Development Goals](#) (SDGs)?

Sustainability research

Sustainability research is research that leads toward solutions that simultaneously support social wellbeing, economic prosperity, and ecological health. It includes research and scholarship that:

- Explicitly addresses sustainability and/or furthers our understanding of the interconnectedness of social, economic and environmental issues;
- Contributes directly toward solving one or more major sustainability challenge); and/or
- Engages community members with the aim of combining knowledge and action to achieve positive social, economic and environmental outcomes (e.g., participatory and community-based research and engaged scholarship).

AC 10: Support for Research

4 points available

A. Credit Rationale

This credit recognizes institutions that have programs in place to encourage students and faculty members to research sustainability. Providing support and incentives demonstrates that sustainability is an institutional priority and can help deepen students' understanding of sustainability issues and attract new researchers to the field. In addition, it helps faculty members explore new areas and encourages broader research on the topic. Addressing sustainability challenges requires solutions and understandings that often cover multiple academic disciplines. Giving interdisciplinary research equal weight as research from a single academic discipline provides an important foundation that allows faculty to pursue sustainability related research.

B. Criteria

Institution encourages and/or supports [sustainability research](#) through one or more of the following:

- An ongoing program to encourage students in multiple disciplines or academic programs to conduct research in sustainability. The program provides students with incentives to research sustainability. Such incentives may include, but are not limited to, fellowships, financial support, and mentorships. The program specifically aims to increase student sustainability research.
- An ongoing program to encourage faculty from multiple disciplines or academic programs to conduct research in sustainability topics. The program provides faculty with incentives to research sustainability. Such incentives may include, but are not limited to, fellowships, financial support, and faculty development workshops. The program specifically aims to increase faculty sustainability research.
- Written policies and procedures that give positive recognition to interdisciplinary, transdisciplinary, and multidisciplinary research during faculty promotion and/or tenure decisions.
- Ongoing library support for sustainability research and learning in the form of research guides, materials selection policies and practices, curriculum development efforts, sustainability literacy promotion, and/or e-learning objects focused on sustainability.

C. Applicability

This credit applies to all institutions where research is considered during faculty and/or staff promotion or tenure decisions. Institutions that do not consider research in promotion or tenure decisions as a matter of policy or standard practice may choose to omit or include the Research subcategory. Pursuing one or more Research credits and omitting other credits in the subcategory as “not applicable” is not allowed.

D. Scoring

Institutions earn the maximum of 4 points available for this credit by providing all of the incentives and supports listed in the criteria above. Partial points are available based on the number of incentives and/or supports provided. For example, an institution that provides 2 of the 4 incentives or supports listed would earn 2 points (half of the points available for this credit).

E. Reporting Fields

Required

- ☐ Does the institution have an ongoing program to encourage students in multiple disciplines or academic programs to conduct research in sustainability? (To count, the program must provide students with incentives to research sustainability and specifically aim to increase student sustainability research)

If yes, provide:

- ☐ A brief description of the student research program, including the incentives provided and any positive outcomes during the previous three years
- ☐ Does the institution have a program to encourage faculty from multiple disciplines or academic programs to conduct research in sustainability topics? (To count, the program must provide faculty with incentives to research sustainability and specifically aim to increase faculty sustainability research)

If yes, provide:

- ☐ A brief description of the faculty research program, including the incentives provided and any positive outcomes during the previous three years
- ☐ Has the institution published written policies and procedures that give positive recognition to interdisciplinary, transdisciplinary, and multidisciplinary research during faculty promotion and/or tenure decisions?

If yes, provide:

- ☐ A brief description of the institution's support for interdisciplinary, transdisciplinary, and multidisciplinary research, including any positive outcomes during the previous three years
- ☐ Does the institution have ongoing library support for sustainability research and learning in the form of research guides, materials selection policies and practices, curriculum development efforts, sustainability literacy promotion, and/or e-learning objects focused on sustainability?

If yes, provide:

- ☐ A brief description of the institution's library support for sustainability research, including any positive outcomes during the previous three years

Optional

- ☐ The website URL where information about the programs or initiatives is available
- ☐ Additional documentation to support the submission (upload)
- ☐ Data source(s) and notes about the submission
- ☐ Contact information for a responsible party (a staff member, faculty member, or administrator who can respond to questions regarding the data once it is submitted and available to the public)

F. Measurement

Timeframe

Active programs and policies and incentives offered within the three years prior to the anticipated date of submission are eligible for this credit.

Sampling and Data Standards

Not applicable

G. Standards and Terms

Sustainability research

Sustainability research is research that leads toward solutions that simultaneously support social wellbeing, economic prosperity, and ecological health. It includes research and scholarship that:

- Explicitly addresses sustainability and/or furthers our understanding of the interconnectedness of social, economic and environmental issues;
- Contributes directly toward solving one or more major sustainability challenge); and/or
- Engages community members with the aim of combining knowledge and action to achieve positive social, economic and environmental outcomes (e.g., participatory and community-based research and engaged scholarship).

AC 11: Open Access to Research

2 points available

A. Credit Rationale

This credit recognizes institutions that have policies and repository programs in place to ensure open access to new peer-reviewed research produced by their faculties. Institutions that empower faculty to distribute their scholarly writings freely help stimulate learning and innovation, and facilitate the translation of this knowledge into public benefits that advance sustainability.

B. Criteria

Institution has a published open access policy that ensures that versions of future [scholarly articles](#) by faculty and staff are deposited in a designated [open access](#) repository.

The policy may allow for publisher embargoes and/or provide a waiver option that allows authors to opt-out of the open access license/program for individual articles. Open access policies and programs that are strictly voluntary (opt-in) in nature (including open access policies published by external funding agencies) do not earn points unless the institution also provides financial incentives to support faculty members with article processing and other open access publication charges.

Policies and programs adopted by entities of which the institution is part (e.g., government or university system) may count for this credit as long as the policies apply to and are followed by the institution.

The open access repository may be managed by the institution or the institution may participate in a consortium with a consortial and/or outsourced open access repository.

C. Applicability

This credit applies to all institutions where research is considered during faculty and/or staff promotion or tenure decisions. Institutions that do not consider research in promotion or tenure decisions as a matter of policy or standard practice may choose to omit or include the Research subcategory. Pursuing one or more Research credits and omitting other credits in the subcategory as “not applicable” is not allowed.

D. Scoring

Institutions earn the maximum of 2 points available for this credit by having an open access policy that meets the criteria above covering the entire campus. Partial points are available if some, but not all, of the institution’s research-producing divisions (e.g., schools, colleges, departments) are covered by an open access policy. For example, an institution with an open access policy covering 2 of its 6 colleges that produce research would earn 1 point (half of the points available for this credit).

E. Reporting Fields

Required

- ☐ How many of the institution’s research-producing divisions are covered by a published open access policy that ensures that versions of future scholarly articles are deposited in a designated open access repository? (All, Some, or None/Don’t Know)

If the institution has an open access policy:

- Which of the following best describes the open access policy?
 - Mandatory (or mandatory with a waiver option)
 - Voluntary (strictly opt-in)
- Does the institution provide financial incentives to support faculty members with article processing and other open access publication charges?
- A brief description of the open access policy, including the date adopted, any incentives or supports provided, and the repository(ies) used
- The institution's open access policy (text or upload)
- The website URL where the open access repository is available

Optional

- ☐ Estimated percentage of scholarly articles published annually by the institution's faculty and staff that are deposited in a designated open access repository (0-100)
- ☐ A brief description of how the institution's library(ies) support open access to research
- ☐ The website URL where information about the programs or initiatives is available
- ☐ Additional documentation to support the submission (upload)
- ☐ Data source(s) and notes about the submission
- ☐ Contact information for a responsible party (a staff member, faculty member, or administrator who can respond to questions regarding the data once it is submitted and available to the public)

F. Measurement

Timeframe

Current policies and programs at the time of submission are eligible for this credit.

Sampling and Data Standards

Not applicable

G. Standards and Terms

Open access

Consistent with the [Budapest Open Access Initiative](#), open access is defined as follows:

By "open access" to [peer-reviewed research literature], we mean its free availability on the public internet, permitting any users to read, download, copy, distribute, print, search, or link to the full texts of these articles, crawl them for indexing, pass them as data to software, or use them for any other lawful purpose, without financial, legal, or technical barriers other than those inseparable from gaining access to the internet itself. The only constraint on reproduction and distribution, and the only role for copyright in this domain, should be to give authors control over the integrity of their work and the right to be properly acknowledged and cited.

An index of existing open access repositories is available at opendoar.org.

Scholarly articles

Scholarly articles are peer-reviewed articles covering the fruits of research, e.g., as presented in scholarly journals and conference proceedings.

Engagement (EN)

Campus Engagement

This subcategory seeks to recognize institutions that provide their students with sustainability learning experiences outside the formal curriculum. Engaging in sustainability issues through co-curricular activities allows students to deepen and apply their understandings of sustainability principles. Institution-sponsored co-curricular sustainability offerings, often coordinated by student affairs offices, help integrate sustainability into the campus culture and set a positive tone for the institution.

In addition, this subcategory recognizes institutions that support faculty and staff engagement, training, and development programs in sustainability. Faculty and staff members' daily decisions impact an institution's sustainability performance. Equipping faculty and staff with the tools, knowledge, and motivation to adopt behavior changes that promote sustainability is an essential activity of a sustainable campus.

Credits

Points available: 21

EN 1	Student Educators Program*	4
EN 2	Student Orientation*	2
EN 3	Student Life	2
EN 4	Outreach Materials and Publications	2
EN 5	Outreach Campaign	4
EN 6	Assessing Sustainability Culture	1
EN 7	Employee Educators Program	3
EN 8	Employee Orientation	1
EN 9	Staff Professional Development	2

* credit does not apply to all institutions

Share your story

The My Submission section of the online Reporting Tool includes an optional reporting field for the institution to provide an overview of notable activities and accomplishments in this subcategory. This information is featured in the institution's public report.

- ☐ A brief summary of the institution's notable activities and accomplishments relevant to this subcategory

EN 1: Student Educators Program

4 points available

A. Credit Rationale

This credit recognizes institutions with programs that engage students to serve as educators in peer-to-peer sustainability outreach. Such initiatives, sometimes known as "Eco-Reps" programs, help disseminate sustainability concepts and a sustainability ethic throughout the campus community. In addition, serving as an educator is a valuable learning experience for students that can deepen their understanding of sustainability while developing their outreach and education skills.

B. Criteria

Institution coordinates an ongoing [peer-to-peer](#) sustainability outreach and education program for students enrolled for credit. The institution:

- Selects or appoints students to serve as peer educators and formally designates the students as educators (paid and/or volunteer);
- Provides formal training to the student educators in how to conduct peer outreach; and
- Supports the program with financial resources (e.g., by providing an annual budget) and/or administrative coordination by faculty or staff.

This credit focuses on programs for degree-seeking students enrolled in a for-credit program. Continuing education students, non-credit students, and other students who are not recognized by the institution as seeking a degree, certificate, or other formal award are excluded.

This credit recognizes ongoing student educator programs that engage students as peers on a regular basis. For example, student educators may be responsible for serving (i.e., directly targeting) a particular subset of students, such as those living in residence halls or enrolled in certain academic subdivisions. Thus, a group of students may be served by a program even if not all of these students actively participate.

Sustainability outreach campaigns, sustainability events, and student clubs or groups are not eligible for this credit unless the criteria outlined above are met. These programs are covered by the *Outreach Campaign* and *Student Life* credits.

C. Applicability

This credit applies to all institutions that have [students enrolled for credit](#).

D. Scoring

Institutions earn the maximum of 4 points available for this credit by having one or more peer-to-peer educator programs that serve (i.e., directly target) all students enrolled for credit. Incremental points are awarded based on the percentage of students served by the peer-to-peer educator program(s). For example, an institution with a program that serves 50 percent of all students would earn 2 points (half of the points available for this credit).

Points for this credit are calculated automatically in the STARS Reporting Tool as follows:

Factor	Multiply	Total number of students served by a peer-to-peer outreach and education program	Divide	Number of students enrolled for credit	Equals	Points earned
4	×	_____	÷	_____	=	Up to 4

E. Reporting Fields

Required

- ☐ Number of students enrolled for credit (headcount)
- ☐ Total number of students enrolled for credit that are served (i.e., directly targeted) by a student peer-to-peer sustainability outreach and education program (avoid double-counting to the extent feasible)

If greater than zero, provide:

- ☐ Name of the student educators program
- ☐ Number of students served (i.e., directly targeted) by the program (headcount)
- ☐ A brief description of the program, including examples of peer-to-peer outreach activities
- ☐ A brief description of how the student educators are selected
- ☐ A brief description of the formal training that the student educators receive to prepare them to conduct peer outreach
- ☐ A brief description of the financial and/or administrative support the institution provides to the program (e.g., annual budget and/or faculty/staff coordination)

If reporting students served by additional peer-to-peer programs, for up to two additional programs, provide:

- ☐ Name of the student educators program
- ☐ Number of students served (i.e., directly targeted) by the program
- ☐ A brief description of the program, including examples of peer-to-peer outreach activities
- ☐ A brief description of how the student educators are selected
- ☐ A brief description of the formal training that the student educators receive to prepare them to conduct peer outreach
- ☐ A brief description of the financial and/or administrative support the institution provides to the program (e.g., annual budget and/or faculty/staff coordination)

If reporting students served by more than three programs, provide:

- ☐ A brief description of all other student peer-to-peer sustainability outreach and education programs, including the number of students served and how student educators are selected, trained, and supported by the institution

Optional

- ☐ Total number of hours student educators are engaged in peer-to-peer sustainability outreach and education activities annually (all programs)
- ☐ The website URL where information about the programs or initiatives is available
- ☐ Additional documentation to support the submission (upload)
- ☐ Data source(s) and notes about the submission
- ☐ Contact information for a responsible party (a staff member, faculty member, or administrator who can respond to questions regarding the data once it is submitted and available to the public)

F. Measurement

Timeframe

Report on current program status and offerings at the time of submission for ongoing programs. Use the most recent data available from within the three years prior to the anticipated date of submission to report the number of students served by each program and the total number of enrolled students.

Sampling and Data Standards

Include all students enrolled for credit (undergraduate and graduate); reporting on a sample or subset of students is not allowed.

G. Standards and Terms

Peer-to-peer education

Consistent with the My-Peer Toolkit hosted by [Curtin University](#):

A peer is an individual who is of equal standing with another and who belongs to a specific societal group, sharing distinct characteristics with this group.

There is no power imbalance within a peer relationship (e.g., as there would be in a faculty-student or manager-worker relationship).

Peer-to-peer outreach and education programs train members of specific social groups or networks (e.g., students or workers) to become “experts” in a certain topic. These individuals then become peer educators who share what they have learned with other members of the same group to catalyze change. Peer education is based on the understanding that people make changes not only based on what they know, but also on the opinions and actions of close trusted peers.

Students enrolled for credit

Consistent with U.S. [IPEDS](#), students enrolled for credit include all students enrolled in courses or programs that can be applied towards the requirements for a postsecondary degree, diploma, certificate, or other formal award, regardless of whether or not they are seeking a degree or certificate. This includes:

- Students enrolled for credit in off-campus centers
- High school students taking regular college courses for credit
- Students taking remedial courses if the student is degree-seeking for the purpose of student financial aid determination
- Students from overseas enrolled in U.S. courses for credit (e.g., online students)

- Graduate students enrolled for thesis credits, even when zero credits are awarded as these students are still enrolled and seeking their degree.

Scoring Example: Student Educators Program

Example University enrolls 5,000 students. The university has two peer-to-peer outreach programs for which the institution selects students to serve as educators, offers a formal designation or title to the student educators, provides formal training to the educators in how to conduct sustainability outreach, and dedicates staff time to coordinating the programs.

- 1) Example University's Eco-Reps Program trains volunteer representatives in residence halls. All residence halls at Example University participate in the Eco-Reps Program and house at least one Eco-Rep. This program serves 2,000 students (the residential population).
- 2) Example University's School of Law has a team of Student Sustainability Ambassadors who are paid a stipend and tasked with conducting sustainability outreach and training to fellow law students. All 500 students at the law school are served by this program.

The remainder of the university's students are not served (i.e., directly targeted) by the program.

Total number of students served by a peer-to-peer outreach program = 2,000 + 500 = 2,500

Factor	Multiply	Number of students served by a peer-to-peer outreach and education program	Divide	Total number of students enrolled for credit	Equals	Points Earned
4	×	<u>2,500</u>	÷	<u>5,000</u>	=	2

EN 2: Student Orientation

2 points available

A. Credit Rationale

This credit recognizes institutions that include sustainability in orientation activities and programming. Including sustainability in student orientation demonstrates that sustainability is an institutional goal and encourages students to adopt sustainable habits in their new school environments. Orientation sets the tone for the campus experience.

B. Criteria

Institution includes sustainability prominently in its student orientation activities and programming. Sustainability activities and programming are intended to educate about the principles and practices of sustainability. The topics covered include multiple dimensions of sustainability (i.e., social, environmental and economic).

As this credit is intended to recognize programming and student learning about sustainability, incorporating sustainability strategies into event planning (e.g., making recycling bins accessible or not serving bottled water) is not, in and of itself, sufficient for this credit. Such strategies may count if they are highlighted and are part of the educational offerings. For example, serving local food would not, in and of itself, be sufficient for this credit; however, serving local food and providing information about sustainable food systems during meals could contribute to earning this credit.

C. Applicability

This credit applies to all institutions that hold student orientation.

D. Scoring

Institutions earn the maximum of 2 points available for this credit when sustainability is included prominently in orientation activities and programming made available to all entering (i.e., new) students (including transfers). Incremental points are available based on the percentage of entering students that are provided an opportunity to participate in orientation activities and programming that prominently include sustainability. For example, an institution that offers activities and programming that meet the criteria to 50 percent of its entering students would earn 1 point (half of the points available for this credit).

Points for this credit are calculated automatically in the STARS Reporting Tool as follows:

Factor	Multiply	Percentage of entering students provided orientation activities and programming that include sustainability (0-100)	Equals	Points earned
.02	×	_____	=	Up to 2

E. Reporting Fields

Required

- ☐ Are the following students provided an opportunity to participate in orientation activities and programming that prominently include sustainability?
 - ☐ First-year students
 - ☐ Transfer students
 - ☐ Entering graduate students (if applicable)

If yes to any of the above, provide:

- ☐ Percentage of all entering (i.e., new) students (including transfers and graduate students) that are provided an opportunity to participate in orientation activities and programming that prominently include sustainability (0-100)
- ☐ A brief description of how sustainability is included prominently in new student orientation (including how multiple dimensions of sustainability are addressed)

Optional

- ☐ The website URL where information about the programs or initiatives is available
- ☐ Additional documentation to support the submission (upload)
- ☐ Data source(s) and notes about the submission
- ☐ Contact information for a responsible party (a staff member, faculty member, or administrator who can respond to questions regarding the data once it is submitted and available to the public)

F. Measurement

Timeframe

Institutions may choose to report activities from the most recent semester (or equivalent), the most recent year, or the three years prior to the anticipated date of submission.

Sampling and Data Standards

Include all entering (i.e., new) students (including transfers and graduate students).

G. Standards and Terms

Not applicable

Credit Example: Student Orientation

This credit is based on including sustainability prominently in student orientation activities. The following examples are provided to illustrate prominent inclusion of sustainability.

Example 1: Several strategies

The new student orientation at Example College included the following activities, which taken together amount to prominent inclusion of sustainability.

- Students received compact fluorescent light bulbs and tips for saving energy.
- There was a service learning fair highlighting local non-profit organizations and an optional service learning trip to restore wildlife habitat and to learn about the local ecosystem.
- All students were able to take a tour that highlighted the institution's sustainability features.
- The institution screened a film about sustainability.
- A faculty member gave a convocation lecture about her sustainability research and how the institution has integrated sustainability across the curriculum.

Example 2: A major sustainability event

All new students at Example University participated in faculty-led, small-group discussions about sustainability.

Scoring Example: Student Orientation

Example College had 400 entering students during the past year. 350 were first-year students and 50 were transfer students. At the beginning of each semester, the college provided orientation activities and programs that prominently included sustainability for all new first-year students. The activities and programs were not made available to transfer students.

- Total number of entering (i.e., new) students = 400
- Number of students provided orientation activities and programming that prominently include sustainability = 350
- The percentage of entering students provided orientation activities and programming that include sustainability = 87.5

Factor	Multiply	Percentage of entering students provided orientation activities and programming that include sustainability (0-100)	Equals	Points earned
.02	×	87.5	=	1.75

EN 3: Student Life

2 points available

A. Credit Rationale

This credit recognizes institutions that have co-curricular programs and initiatives that contribute to students learning about sustainability outside of the formal classroom. These programs and initiatives engage students by integrating sustainability into their lives, experiential learning experiences, and campus culture.

B. Criteria

Institution has co-curricular sustainability programs and initiatives. The programs and initiatives fall into one or more of the following categories:

- Active student groups focused on sustainability
- Gardens, farms, community supported agriculture (CSA) or fishery programs, and urban agriculture projects where students are able to gain experience in organic agriculture and sustainable food systems
- Student-run enterprises that include sustainability as part of their mission statements or stated purposes (e.g., cafés through which students gain sustainable business skills)
- Sustainable investment funds, green revolving funds or sustainable microfinance initiatives through which students can develop socially, environmentally and fiscally responsible investment and financial skills
- Conferences, speaker series, symposia or similar events related to sustainability that have students as the intended audience
- Cultural arts events, installations or performances related to sustainability that have students as the intended audience
- Wilderness or outdoors programs (e.g., that organize hiking, backpacking, kayaking, or other outings for students) that follow [Leave No Trace principles](#)
- Sustainability-related themes chosen for themed semesters, years, or first-year experiences (e.g., choosing a sustainability-related book for common reading)
- Programs through which students can learn sustainable life skills (e.g., a series of sustainable living workshops, a model room in a residence hall that is open to students during regular visitation hours and demonstrates sustainable living principles, or sustainability-themed housing where residents and visitors learn about sustainability together)
- Sustainability-focused student employment opportunities offered by the institution
- Graduation pledges through which students pledge to consider social and environmental responsibility in future job and other decisions
- Other co-curricular sustainability programs and initiatives that do not fall into one of the above categories

Multiple programs and initiatives may be reported for each category and each category may include institution-governed and/or student-governed programs.

C. Applicability

This credit applies to all institutions.

D. Scoring

Institutions earn 0.25 points for each category listed above for which it has one or more programs up to a maximum of 2 points available for this credit. Partial points are available based on the number of categories for which an institution has programs.

E. Reporting Fields

Required

- Does the institution have one or more co-curricular sustainability programs or initiatives in the following categories?
 - Active student groups focused on sustainability
 - Gardens, farms, community supported agriculture (CSA) or fishery programs, and urban agriculture projects where students are able to gain experience in organic agriculture and sustainable food systems
 - Student-run enterprises that include sustainability as part of their mission statements or stated purposes (e.g., cafés through which students gain sustainable business skills)
 - Sustainable investment funds, green revolving funds or sustainable microfinance initiatives through which students can develop socially, environmentally and fiscally responsible investment and financial skills
 - Conferences, speaker series, symposia or similar events related to sustainability that have students as the intended audience
 - Cultural arts events, installations or performances related to sustainability that have students as the intended audience
 - Wilderness or outdoors programs (e.g., that organize hiking, backpacking, kayaking, or other outings for students) that follow Leave No Trace principles
 - Sustainability-related themes chosen for themed semesters, years, or first-year experiences (e.g., choosing a sustainability-related book for common reading)
 - Programs through which students can learn sustainable life skills (e.g., a series of sustainable living workshops, a model room in a residence hall that is open to students during regular visitation hours and demonstrates sustainable living principles, or sustainability-themed housing where residents and visitors learn about sustainability together)
 - Sustainability-focused student employment opportunities offered by the institution
 - Graduation pledges through which students pledge to consider social and environmental responsibility in future job and other decisions
 - Other co-curricular sustainability programs and initiatives that do not fall into one of the above categories

For each category in which the institution has a program or initiative, provide:

- Name and a brief description of the program or initiative
- The website URL where information about the program or initiative is available (optional)

Optional

- Estimated percentage of students (full-time and part-time) that participate annually in sustainability-focused co-curricular education and outreach programs (0-100)
- Additional documentation to support the submission (upload)
- Data source(s) and notes about the submission
- Contact information for a responsible party (a staff member, faculty member, or administrator who can respond to questions regarding the data once it is submitted and available to the public)

F. Measurement

Timeframe

Report on currently available programs and on events that occurred during the three years prior to the anticipated date of submission.

Sampling and Data Standards

Not applicable

G. Standards and Terms

Leave No Trace principles

The [Leave No Trace Center for Outdoor Ethics](#) has produced [Seven Principles](#) covering responsible enjoyment of the outdoors.

EN 4: Outreach Materials and Publications

2 points available

A. Credit Rationale

This credit recognizes institutions that produce outreach materials and publications that enhance student learning about sustainability outside of the formal classroom.

B. Criteria

Institution produces outreach materials and/or publications that foster sustainability learning and knowledge. The publications and outreach materials include at least one the following:

- A central sustainability website that consolidates information about the institution's sustainability efforts
- A sustainability newsletter
- Regular coverage of sustainability in the main student newspaper, either through a regular column or a reporter assigned to the sustainability beat
- Social media platforms (e.g., Facebook, Twitter, interactive blogs) that focus specifically on campus sustainability
- A vehicle to publish and disseminate student research on sustainability
- Building signage that highlights green building features
- Signage and/or brochures that include information about sustainable food systems
- Signage on the grounds about sustainable groundskeeping and/or landscaping strategies employed
- A sustainability walking map or tour
- A guide for commuters about how to use more sustainable methods of transportation
- Navigation and educational tools for bicyclists and pedestrians (e.g., covering routes, inter-modal connections, policies, services, and safety)
- A guide for green living and/or incorporating sustainability into the residential experience
- Other sustainability outreach materials and publications not covered above

This credit is focused on ongoing outreach efforts. Materials and publications designed to promote a specific event or time-limited campaign are excluded and covered by other credits in this subcategory.

A single outreach material or publication that serves multiple purposes may be counted more than once. For example, a sustainability website that includes tools for bicyclists and pedestrians may be counted in both categories.

C. Applicability

This credit applies to all institutions.

D. Scoring

Institutions earn 0.25 points for each type of publication and/or outreach material described above, regardless of how many of each type are produced. Institutions with eight or more types of publications or outreach materials earn the maximum of 2 points available for this credit.

E. Reporting Fields

Required

- ☐ Does institution produce the following publications and outreach materials?
 - A central sustainability website that consolidates information about the institution's sustainability efforts
 - A sustainability newsletter
 - Social media platforms (e.g., Facebook, Twitter, interactive blogs) that focus specifically on campus sustainability
 - Regular coverage of sustainability in the main student newspaper (online or print), either through a regular column or a reporter assigned to the sustainability beat
 - A vehicle to publish and disseminate student research on sustainability
 - Building signage that highlights green building features
 - Signage and/or brochures that include information about sustainable food systems
 - Signage on the grounds about sustainable groundskeeping and/or landscaping strategies employed
 - A sustainability walking map or tour
 - A guide for commuters about how to use more sustainable methods of transportation
 - Navigation and educational tools for bicyclists and pedestrians (e.g., covering routes, inter-modal connections, policies, services, and safety)
 - A guide for green living and/or incorporating sustainability into the residential experience
 - Other sustainability outreach materials and publications not covered above

For each publication or material, provide at least one of the following:

- A brief description of the publication or material
- The website URL for the publication or material

Optional

- ☐ Additional documentation to support the submission (upload)
- ☐ Data source(s) and notes about the submission
- ☐ Contact information for a responsible party (a staff member, faculty member, or administrator who can respond to questions regarding the data once it is submitted and available to the public)

F. Measurement

Timeframe

Report on currently used outreach materials and publications at the time of submission.

Sampling and Data Standards

Not applicable

G. Standards and Terms

Not applicable

EN 5: Outreach Campaign

4 points available

A. Credit Rationale

This credit recognizes institutions that hold sustainability outreach campaigns that yield measurable, positive results in advancing the institution's sustainability performance (e.g., a reduction in energy or water consumption). Campaigns engage the campus community around sustainability issues and can help raise student and employee awareness about sustainability. In addition, campaigns encourage students and employees to adopt or try sustainable practices and lifestyles.

B. Criteria

Part 1

Institution holds at least one sustainability-related outreach campaign directed at students that yields measurable, positive results in advancing sustainability. The sustainability-related outreach campaign may be conducted by the institution, a student organization, or by students in a course.

Part 2

Institution holds at least one sustainability-related outreach campaign directed at employees that yields measurable, positive results in advancing sustainability. The sustainability-related outreach campaign may be conducted by the institution or by an employee organization.

The campaign(s) reported for this credit could take the form of a competition (e.g., a residence hall conservation competition), a rating or certification program (e.g., a green dorm or green office rating program), and/or a collective challenge (e.g., a campus-wide drive to achieve a specific sustainability target). A single campus-wide campaign may meet the criteria for both parts of this credit if educating students is a prime feature of the campaign and it is directed at both students and employees.

Measurable, positive results typically involve reductions in energy, waste or water use, cost savings and/or other benefits. To measure if a campaign yields measurable, positive results, institutions should compare pre-campaign performance to performance during or after the campaign. Increased awareness or increased membership of a mailing list or group is not sufficient in the absence of other positive results.

C. Applicability

This credit applies to all institutions.

D. Scoring

Each part is scored independently.

Part 1

An institution earns the maximum of 2 points available for Part 1 of this credit for having one or more sustainability-related outreach campaigns that are directed at students and yield measurable, positive results in advancing sustainability. Partial points are not available for Part 1 of this credit.

Part 2

An institution earns the maximum of 2 points available for Part 2 of this credit for having one or more sustainability-related outreach campaigns that are directed at employees and yield measurable, positive results in advancing sustainability. Partial points are not available for Part 2 of this credit.

E. Reporting Fields

Required

- ☐ Has the institution held at least one sustainability-related outreach campaign during the previous three years that was directed at students and yielded measurable, positive results in advancing sustainability?
- ☐ Has the institution held at least one sustainability-related outreach campaign during the previous three years that was directed at employees and yielded measurable, positive results in advancing sustainability?

If yes to either of the above, provide:

- ☐ Name of the campaign
- ☐ A brief description of the campaign, including how students and/or employees were engaged
- ☐ A brief description of the measured positive impact(s) of the campaign
- ☐ The website URL where information about the campaign is available (optional)

Optional

- ☐ Name of the campaign (2nd campaign)
 - ☐ A brief description of the campaign, including how students and/or employees were engaged (2nd campaign)
 - ☐ A brief description of the measured positive impact(s) of the campaign (2nd campaign)
 - ☐ The website URL where information about the campaign is available (2nd campaign)
- ☐ A brief description of other sustainability-related outreach campaigns, including measured positive impacts
- ☐ The website URL where information about the programs or initiatives is available
- ☐ Additional documentation to support the submission (upload)
- ☐ Data source(s) and notes about the submission
- ☐ Contact information for a responsible party (a staff member, faculty member, or administrator who can respond to questions regarding the data once it is submitted and available to the public)

F. Measurement

Timeframe

Report on the most recent campaign(s) for which data is available from within the three years prior to the anticipated date of submission. Campaigns held more than three years prior to the anticipated date of submission are not eligible for this credit.

Sampling and Data Standards

Institutions may use a representative sample to measure pre-campaign baseline and post-campaign performance.

G. Standards and Terms

Not applicable

Credit Example: Outreach Campaign

To earn this credit, an institution must demonstrate that an outreach campaign led to a measurable, positive impact on its sustainability performance. In order to measure whether the campaign positively impacted the institution's sustainability performance, institutions should compare performance before the campaign to results during or after the campaign. Examples of how to measure impacts from various campaigns follow.

Example 1: An on-campus competition

Example University had a residence hall vs. residence hall energy conservation competition in which on-campus residents learned energy conservation tips and tools. To measure the impact of the campaign, the university compared residence hall electricity consumption during the month before the competition to consumption during the month of the competition. (There were no major differences in occupancy or other factors that would influence electricity consumption during either month.) Since electricity consumption decreased during the month of the competition, the institution can demonstrate that the campaign led to a measurable, positive impact on its sustainability performance.

Example 2: A campus-wide challenge

Example Community College participated in RecycleMania, a nationwide competition between colleges and universities to increase recycling. During the competition, the institution conducted outreach and held events about the benefits of recycling. Prior to the competition the institution was recycling 30 percent of its total waste. Following the competition, the institution recycled 35 percent of its waste. (There were no other major events or changes that would have influenced the recycling rate during either month.) Since the recycling rate increased following the outreach campaign, the institution can demonstrate that the campaign led to a measurable, positive impact on its sustainability performance.

Example 3: An outreach campaign

Example College conducted an outreach campaign to decrease the consumption of bottled water on campus. Before the campaign, the bookstore sold about 5,000 bottles of water per week. After the campaign, bottled water sales dropped to 3,000 bottles per week. (There were no other major factors that would have influenced bottled water sales during either month). Since bottled water sales decreased after the outreach campaign, the institution can demonstrate that the campaign led to a measurable, positive impact on its sustainability performance.

EN 6: Assessing Sustainability Culture

1 point available

A. Credit Rationale

This credit recognizes institutions that are assessing the sustainability culture of the campus community. Such assessments help institutions evaluate the success of their sustainability outreach and education initiatives and develop insight into how these initiatives could be improved.

B. Criteria

Institution conducts an assessment of campus sustainability culture. The cultural assessment focuses on sustainability values, behaviors and beliefs, and may also address awareness of campus sustainability initiatives.

An assessment that covers a single sustainability topic (e.g., a transportation survey) does not count in the absence of a more comprehensive cultural assessment.

Assessments that exclusively address sustainability literacy (i.e., knowledge of sustainability topics and challenges) or student engagement in sustainability-related programs and activities are excluded. Literacy assessments are recognized in the *Sustainability Literacy Assessment* credit in Curriculum.

Participation by U.S. and Canadian institutions in the National Survey of Student Engagement (NSSE) Sustainability Education Consortium does not count, but may be reported as an Exemplary Practice in Innovation & Leadership.

An institution may use a single instrument that addresses sustainability literacy, culture, and/or engagement to meet the criteria for this credit if at least ten questions or a third of the assessment focuses on sustainability values, behaviors and beliefs.

C. Applicability

This credit applies to all institutions.

D. Scoring

Institutions earn the maximum of 1 point available for this credit by administering a longitudinal assessment to the entire campus community, directly or by representative sample. Partial points are available based on the population assessed and whether or not the assessment is conducted longitudinally, as follows:

Attributes of the sustainability culture assessment (points awarded)	Points earned
An assessment of sustainability culture (i.e., values, behaviors and beliefs) is: - Administered to the entire campus community (students, staff and faculty), directly or by representative sample (0.5 points) Or - Administered to a subset of the campus community or a sample that may not be representative of the entire community. (0.25 points)	_____
Administered longitudinally to measure change over time (i.e., with one or more follow-up assessments administered to the same cohort or representative samples of the same population).	× 2
Total points earned →	Up to 1

E. Reporting Fields

Required

- Does the institution conduct an assessment of sustainability culture (i.e., the assessment focuses on sustainability values, behaviors and beliefs, and may also address awareness of campus sustainability initiatives)?

If yes:

- Which of the following best describes the cultural assessment? The assessment is administered to:
 - The entire campus community (students, staff and faculty), directly or by representative sample (sample must be representative of students, staff and faculty).
 - A subset of the campus community or a sample that may not be representative of the entire community.
- Which of the following best describes the structure of the cultural assessment? The assessment is administered:
 - Longitudinally to measure change over time, i.e., with one or more follow-up assessments administered to the same cohort or representative samples of the same population.
 - Without a follow-up assessment of the same cohort or representative samples of the same population.
- A brief description of how and when the cultural assessment(s) were developed and/or adopted

- A copy or sample of the questions related to sustainability culture or the website URL where the assessment tool is available (text or upload)
- A brief description of how representative samples were reached (if applicable) and how the cultural assessment is administered
- A brief summary of results from the cultural assessment, including a description of any measurable changes over time

Optional

- The website URL where information about the programs or initiatives is available
- Additional documentation to support the submission (upload)
- Data source(s) and notes about the submission
- Contact information for a responsible party (a staff member, faculty member, or administrator who can respond to questions regarding the data once it is submitted and available to the public)

F. Measurement

Timeframe

Report the most recent data available from assessments administered within the three years prior to the anticipated date of submission. A structured longitudinal assessment for which an initial assessment has been conducted and one or more follow up assessments have been scheduled may count.

Sampling and Data Standards

Institutions may choose to measure sustainability culture by administering a survey to a [representative sample](#) of the population being assessed or by surveying the entire population being assessed (e.g., by making the assessment mandatory).

In conducting an assessment with a representative sample (e.g., an entire class or cohort of students), care should be taken so that participation in the assessment is not skewed toward individuals with an interest in sustainability, e.g., by employing appropriate sampling techniques or making the assessment mandatory. Recruiting students during a sustainability event or limiting the assessment to students enrolled in a sustainability course or program, for example, would not result in a representative sample.

Institutions may report on a single assessment or on multiple assessments that target different groups (e.g., students enrolled in specific programs, or separate assessments for staff and students).

G. Standards and Terms

Representative sample

A representative sample is a subset of a statistical population that accurately reflects the members of the entire population. A representative sample should be an unbiased indication of what the entire population is like. For example, in a student population of 1000 students in which 25 percent of the students are enrolled in a business school, 50 percent are enrolled in humanities programs, and 25 percent are enrolled in science programs, a representative sample might include 200 students: 50 business students, 100 humanities students, and 50 science students. Likewise, a representative sample of purchases should accurately reflect the institution's total purchases, accounting for seasonal and other variations in product availability and purchasing.

EN 7: Employee Educators Program

3 points available

A. Credit Rationale

This credit recognizes institutions that coordinate programs in which faculty and staff members educate and mobilize their peers around sustainability initiatives and programs. Engaging faculty and staff in peer educator roles can help disseminate sustainability messages more widely and encourage broader participation in sustainability initiatives.

B. Criteria

Institution administers or oversees an ongoing staff/faculty [peer-to-peer](#) sustainability outreach and education program that meets the following criteria:

- Employee sustainability educators are formally designated and receive formal training or participate in an institution-sponsored orientation to prepare them to conduct peer outreach to other employees;
- The institution supports the program with financial resources (e.g., by providing an annual budget) and/or administrative coordination by staff or faculty; and
- The peer educators represent diverse areas of campus; the outreach and education efforts of sustainability staff or a sustainability office do not count in the absence of a broader network of peer educators.

This credit recognizes ongoing programs that engage employees as peers on a regular basis. For example, employee educators may represent or be responsible for engaging workers in certain departments or buildings. Thus, a group of employees may be served (i.e., directly targeted) by a program even if not all of these employees actively participate.

Ongoing green office certification programs and the equivalent may count for this credit if they include formally designated and trained peer employee educators (e.g., “green leaders”).

Employee orientation activities and training and/or professional development opportunities in sustainability for staff are excluded from this credit. These activities are covered in the *Employee Orientation* and *Staff Professional Development* credits.

C. Applicability

This credit applies to all institutions.

D. Scoring

Institutions earn the maximum of 3 points for this credit by having a peer-to-peer educator program that serves (i.e., directly targets) all employees (full- and part-time staff and faculty). Incremental points are awarded based on the percentage of employees served by the peer-to-peer educator program. For example, an institution with a program that serves 50 percent of all employees would earn 1.5 points (half of the points available for this credit).

Points for this credit are calculated automatically in the STARS Reporting Tool as follows:

Factor	Multiply	Number of employees served by a peer-to-peer outreach program	Divide	Total number of employees	Equals	Points earned
3	×	_____	÷	_____	=	Up to 3

E. Reporting Fields

Required

- ☐ Total number of employees (staff + faculty, headcount)
- ☐ Number of employees served (i.e., directly targeted) by a peer-to-peer sustainability outreach and education program (avoid double-counting)

If greater than zero, provide:

- Name of the employee educators program
- Number of employees served (i.e., directly targeted) by the program (headcount)
- A brief description of the program, including examples of peer-to-peer outreach activities
- A brief description of how the employee educators are selected
- A brief description of the formal training that the employee educators receive to prepare them to conduct peer outreach
- A brief description of the financial and/or administrative support the institution provides to the program (e.g., annual budget and/or paid faculty/staff coordination)

If reporting employees served by additional peer-to-peer programs, provide:

- Name of the employee peer-to-peer educators program (2nd program)
- Number of employees served (i.e., directly targeted) by the program (headcount) (2nd program)
- A brief description of the program, including examples of peer-to-peer outreach activities (2nd program)
- A brief description of how the employee educators are selected (2nd program)
- A brief description of the formal training that the employee educators receive to prepare them to conduct peer outreach (2nd program)
- A brief description of the financial and/or administrative support the institution provides to the program (e.g., annual budget and/or paid faculty/staff coordination) (2nd program)

If reporting employees served by more than two programs, provide:

- A brief description of all other employee peer-to-peer sustainability outreach and education programs, including the number of employees served and how employee educators are selected, trained, and supported by the institution

Optional

- ☐ Total number of hours employee educators are engaged in peer-to-peer sustainability outreach and education activities annually
- ☐ The website URL where information about the programs or initiatives is available
- ☐ Additional documentation to support the submission (upload)
- ☐ Data source(s) and notes about the submission
- ☐ Contact information for a responsible party (a staff member, faculty member, or administrator who can respond to questions regarding the data once it is submitted and available to the public)

F. Measurement

Timeframe

Report on current program status and offerings at the time of submission.

Sampling and Data Standards

Include all regular full- and part-time staff and faculty; reporting on a sample or subset of regular employees is not allowed.

G. Standards and Terms

Peer-to-peer education

Consistent with the [My-Peer Toolkit](#) hosted by Curtin University:

A peer is an individual who is of equal standing with another and who belongs to a specific societal group, sharing distinct characteristics with this group.

There is no power imbalance within a peer relationship (e.g., as there would be in a faculty-student or manager-worker relationship).

Peer-to-peer outreach and education programs train members of specific social groups or networks (e.g., students or workers) to become “experts” in a certain topic. These individuals then become peer educators who share what they have learned with other members of the same group to catalyze change. Peer education is based on the understanding that people make changes not only based on what they know, but also on the opinions and actions of close trusted peers.

Scoring Example: Employee Educators Program

Example College employs 500 people. The university has two peer-to-peer outreach programs for which the institution selects employees to serve as educators, offers a formal designation or title to the educators, provides formal training to the educators in how to conduct sustainability outreach, and dedicates staff time to coordinating the programs.

- 1) Example College's Academic Department Green Teams train educators to represent their departments. All academic departments at Example University participate in the Green Teams and have at least one representative who serves on the institution-wide Green Team. This program serves 200 employees (the employees affiliated with an academic department).
- 2) Example College's maintenance department has designated Sustainability Ambassadors who are tasked with conducting sustainability outreach and training to fellow maintenance workers. All 50 employees on the maintenance crew are served by this program.

The remainder of the college's employees are not served (i.e., directly targeted) by the program. Total number of employees served by a peer-to-peer outreach program = $200 + 50 = 250$.

Factor	<i>Multiply</i>	Number of employees served by a peer-to-peer outreach program	<i>Divide</i>	Total number of employees	<i>Equals</i>	Points earned
3	×	<u>250</u>	÷	<u>500</u>	=	1.5

EN 8: Employee Orientation

1 point available

A. Credit Rationale

This credit recognizes institutions that address sustainability issues during new employee orientation. Including sustainability in new employee orientation helps establish sustainability as an institutional priority and part of the campus culture. Providing information and tools about the institution's sustainability programs and options at the time when an employee is getting acquainted with his or her new employer and developing new work routines and habits can help encourage the adoption of environmentally and socially preferable habits, routines, and choices.

B. Criteria

Institution covers sustainability topics in new employee orientation and/or in outreach and guidance materials distributed to new employees, including faculty and staff. The topics covered include multiple dimensions of sustainability (i.e., social, environmental and economic).

C. Applicability

This credit applies to all institutions.

D. Scoring

Institutions earn the maximum of 1 point available for this credit when sustainability topics are covered in orientation and/or outreach and guidance materials that are made available to all new employees. Incremental points are available based on the percentage of new employees that are offered orientation and/or outreach and guidance materials that cover sustainability topics. For example, an institution that offers outreach materials that meet the criteria to 50 percent of its new employees would earn 0.5 points (half of the points available for this credit).

Points for this credit are calculated automatically in the STARS Reporting Tool as follows:

Factor	Multiply	Percentage of new employees offered orientation and/or outreach and guidance materials that cover sustainability (0-100)	Equals	Points earned
0.01	×	_____	=	Up to 1

E. Reporting Fields

Required

- ☐ Percentage of new employees (faculty and staff) that are offered orientation and/or outreach and guidance materials that cover sustainability topics (0-100)

If greater than zero, provide:

- A brief description of how sustainability is included in new employee orientation (including how multiple dimensions of sustainability are addressed)

Optional

- The website URL where information about the programs or initiatives is available
- Additional documentation to support the submission (upload)
- Data source(s) and notes about the submission
- Contact information for a responsible party (a staff member, faculty member, or administrator who can respond to questions regarding the data once it is submitted and available to the public)

F. Measurement

Timeframe

Institutions may choose to report activities from the most recent 1, 2 or 3 years prior to the anticipated date of submission.

Sampling and Data Standards

Not applicable

G. Standards and Terms

Not applicable

Scoring Example: Employee Orientation

Example College employed **50** new people during the previous year (40 staff and 10 faculty). The university offers orientation activities that cover sustainability topics to all new staff members, but not to faculty.

Factor	Multiply	Percentage of new employees offered orientation and/or outreach and guidance materials that cover sustainability (0-100)	Equals	Points earned
0.01	×	<u>80</u>	=	0.8

EN 9: Staff Professional Development

2 points available

A. Credit Rationale

This credit recognizes institutions that ensure that staff members have the opportunity to participate in professional development and training opportunities in sustainability. By offering and supporting professional development and training opportunities in sustainability to all staff members, an institution helps equip its staff to implement sustainable practices and systems and to model sustainable behavior for students and the rest of the campus community.

B. Criteria

Part 1

Institution makes available [professional development and training](#) opportunities in sustainability to all staff at least once per year.

Part 2

Institution's regular (full-time and part-time) staff participate in sustainability professional development and training opportunities that are either provided or supported by the institution.

For both Part 1 and Part 2 of this credit, the opportunities may be provided internally (e.g., by departments or by the sustainability office) or externally as long as they are specific to sustainability. The opportunities include:

- Training to integrate sustainability knowledge and skills into the workplace.
- Lifelong learning and continuing education in sustainability.
- Sustainability accreditation and credential maintenance (e.g., LEED AP/GA).

This credit focuses on formal professional development and training opportunities, for example as delivered by trainers, managers, sustainability staff, and external organizations. Peer-to-peer educator programs and employee outreach campaigns are recognized in the *Employee Educators Program* and *Outreach Campaign* credits, respectively and should only be reported in this credit if such programs are formally recognized by the institution as professional development and training, for example in employee performance reviews.

For an external training or professional development and training opportunity to count, the institution must offer financial or other support (e.g., payment, reimbursement, or subsidy).

This credit applies to staff members only; it does not include faculty members. Faculty professional development in sustainability is recognized in the *Incentives for Developing Courses* credit in Curriculum.

C. Applicability

This credit applies to all institutions.

D. Scoring

Each part is scored independently.

Part 1

An institution earns 1 point by making available sustainability professional development and training opportunities to all staff members at least once a year. Partial points are not available for Part 1.

Part 2

An institution earns the maximum of 1 point available for Part 2 of this credit when 75 percent or more of regular (full-time and part-time) staff participate annually in sustainability professional development and training that is either provided or supported by the institution. Partial points are available based on the percentage of regular employees that participates, as follows:

Estimated percentage of regular staff that participates annually in sustainability professional development and training	Points earned
1 – 24%	0.25
25 – 49%	0.5
50 – 74%	0.75
75% or more	1

E. Reporting Fields

Required

- ☐ Does the institution make available professional development and training opportunities in sustainability to all staff at least once per year?
- ☐ Does the institution wish to pursue Part 2 of this credit (the rate of employee participation in sustainability professional development and training)?

If yes, provide:

- ☐ Estimated percentage of regular staff (full-time and part-time) that participates annually in sustainability professional development and training that is either provided or supported by the institution (0, 1-24%, 25-49%, 50-74%, 75% or more)

If sustainability professional development and training opportunities for staff are made available or supported, provide at least one of the following:

- ☐ A brief description of any internal sustainability professional development and training opportunities that the institution makes available to staff
- ☐ A brief description of any external professional development and training opportunities in sustainability that are supported by the institution (e.g., through payment, reimbursement, or subsidy)

Optional

- ☐ Estimated percentage of regular staff (full-time and part-time) for which sustainability is included in performance reviews (0, 1-24%, 25-49%, 50-74%, 75% or more)
- ☐ A brief description of how sustainability is included in staff performance reviews
- ☐ The website URL where information about the programs or initiatives is available
- ☐ Additional documentation to support the submission (upload)

- Data source(s) and notes about the submission
- Contact information for a responsible party (a staff member, faculty member, or administrator who can respond to questions regarding the data once it is submitted and available to the public)

F. Measurement

Timeframe

Report on current program status and offerings and professional development and training activities that occurred within the three years prior to the anticipated date of submission. Institutions may choose to report professional development and training activities from one, two, or three years, as long as both the total number of staff and the number of staff participating are measured during the same period.

Sampling and Data Standards

Not applicable

G. Standards and Terms

Professional development and training

Consistent with the Organisation for Economic Co-operation and Development (OECD), professional development and training is defined as “any activity which develops an individual’s skills, knowledge, expertise and other characteristics” as an employee. These include formal coursework, participation in activities of professional organizations, collaborative development of new approaches, and independent study and research.

Public Engagement

This subcategory seeks to recognize institutions that help catalyze sustainable communities through public engagement, community partnerships and service. Engagement in community problem-solving is fundamental to sustainability. By engaging with community members and organizations in the governmental, non-profit and for-profit sectors, institutions can help solve sustainability challenges. Community engagement can help students develop leadership skills while deepening their understandings of practical, real-world problems and the process of creating solutions. Institutions can contribute to their communities by harnessing their financial and academic resources to address community needs and by engaging community members in institutional decisions that affect them. In addition, institutions can contribute toward sustainability broadly through inter-campus collaboration, engagement with external networks and organizations, and public policy advocacy.

Credits		Points available: 20
EN 10	Community Partnerships	3
EN 11	Inter-Campus Collaboration	3
EN 12	Continuing Education*	5
EN 13	Community Service*	5
EN 14	Participation in Public Policy	2
EN 15	Trademark Licensing*	2

* credit does not apply to all institutions

Share your story

The My Submission section of the online Reporting Tool includes an optional reporting field for the institution to provide an overview of notable activities and accomplishments in this subcategory. This information is featured in the institution's public report.

- A brief summary of the institution's notable activities and accomplishments relevant to this subcategory

EN 10: Community Partnerships

3 points available

A. Credit Rationale

This credit recognizes institutions that have developed campus-community partnerships to advance sustainability. As community members and leaders, colleges and universities can be powerful catalysts, allies and partners in envisioning, planning and acting to create a sustainable future in the region and beyond.

B. Criteria

Institution has one or more [formal community partnership](#)(s) with school districts, government agencies, non-profit organizations, NGOs, businesses and/or other external entities, to work together to advance sustainability.

This credit recognizes campus-community partnerships that the institution supports (materially or financially) and that address sustainability challenges in the broader community. This may be demonstrated by having an active community partnership that meets one or more of the following criteria:

- The partnership is multi-year or ongoing, rather than a short-term project or event;
- The partnership simultaneously supports all three dimensions of sustainability, i.e., social equity and wellbeing, economic prosperity, and ecological health; and/or
- The partnership is inclusive and participatory, i.e., [underrepresented groups](#) and/or [vulnerable populations](#) are engaged as equal partners in strategic planning, decision-making, implementation and review.

A partnership is considered to be “transformative”, “collaborative”, or “supportive” based on the number of criteria that are met (see *D. Scoring*).

This credit is inclusive of partnerships with local and distant communities.

Participatory, community-based research and engaged scholarship around issues of sustainability may be included if it involves formal partnership(s). Although community service activities (e.g., academic service learning, co-curricular service learning and volunteer activities, Work-Study community service and paid community service internships) may involve partnerships and contribute toward sustainability, they are not included in this credit. Community service is covered by the *Community Service* credit.

C. Applicability

This credit applies to all institutions.

D. Scoring

Institutions earn the maximum of 3 points available for this credit for having at least one formal community partnership that is “transformative”, i.e., it meets all of the criteria outlined above. Partial points are available for institutions that have a partnership that meets at least one of the criteria, as follows:

Institution has at least one formal community partnership that is:	Points earned
Transformative – meets all three criteria	3
Collaborative – meets two of the three criteria	2
Supportive – meets one of the three criteria	1

Note that points are not earned cumulatively. For example, an institution that has one or more supportive partnerships *and* one or more collaborative partnerships would earn 2 points for this credit, not 3.

E. Reporting Fields

Required

- ☐ Name of the institution's formal community partnership to advance sustainability
- ☐ Does the institution provide financial or material support for the partnership?
- ☐ Which of the following best describes the partnership timeframe?
 - ☐ Short-term project or event
 - ☐ Multi-year or ongoing
- ☐ Which of the following best describes the partnership's sustainability focus?
 - ☐ The partnership simultaneously supports all three dimensions of sustainability, i.e., social equity and wellbeing, economic prosperity, and ecological health
 - ☐ The partnership supports at least one, but not all three, dimensions of sustainability (e.g., ecological health, but not social equity or economic prosperity)
- ☐ Are underrepresented groups and/or vulnerable populations engaged as equal partners in strategic planning, decision-making, implementation and review? (Yes, No, Unknown)
- ☐ A brief description of the institution's formal community partnership to advance sustainability, including website URL (if available) and information to support each affirmative response above

Optional

- ☐ For up to two additional partnerships, provide:
 - ☐ Name of the institution's formal community partnership to advance sustainability
 - ☐ Does the institution provide financial or material support for the partnership?
 - ☐ Which of the following best describes the partnership timeframe?
 - ☐ Short-term project or event
 - ☐ Multi-year or ongoing
 - ☐ Which of the following best describes the partnership's sustainability focus?
 - ☐ The partnership simultaneously supports all three dimensions of sustainability, i.e., social equity and wellbeing, economic prosperity, and ecological health

- The partnership supports at least one, but not all three, dimensions of sustainability (e.g., ecological health, but not social equity or economic prosperity)
- Are underrepresented groups and/or vulnerable populations engaged as equal partners in strategic planning, decision-making, implementation and review?
- A brief description of the institution's formal community partnership to advance sustainability, including website URL (if available) and information to support each affirmative response above
- A brief description of the institution's other community partnerships to advance sustainability
- The website URL where information about the programs or initiatives is available
- Additional documentation to support the submission (upload)
- Data source(s) and notes about the submission
- Contact information for a responsible party (a staff member, faculty member, or administrator who can respond to questions regarding the data once it is submitted and available to the public)

F. Measurement

Timeframe

Report on current partnerships and/or partnerships that were active during the three years prior to the anticipated date of submission.

Sampling and Data Standards

Not applicable

G. Standards and Terms

Formal community partnership

Formal community partnerships are purposeful, lasting, mutually beneficial relationships that link institutional resources with school districts, government agencies, non-profit organizations, NGOs, businesses and/or other external entities to work together to understand and address the core problems facing local communities. Successful community partnerships strengthen the capacity of both institutional and community partners to build healthy, just and resilient communities.

Sustainability challenges

Consistent with [Transforming Our World: The 2030 Agenda for Sustainable Development](#) (United Nations, 2015), major sustainability challenges include (but are not limited to) climate change, global poverty and inequality, natural resource depletion, and environmental degradation. To identify courses, research, programs, and initiatives that contribute towards understanding or solving sustainability challenges, it is helpful to ask:

- Does it contribute towards realizing one or more of the principles outlined in the [Earth Charter](#)?
And/or
- Does it contribute towards achieving one or more of the targets embedded in the United Nations [Sustainable Development Goals](#) (SDGs)?

Underrepresented groups

Consistent with the [University of California, Berkeley](#), underrepresented groups are groups who have been denied access and/or suffered past institutional discrimination and/or have been marginalized and are currently underrepresented. These groups may include, but are not limited to, racial, ethnic and immigrant populations; people with disabilities; lesbian, gay, bisexual, and transgender individuals; adult learners; veterans; and individuals from different religious groups and economic backgrounds.

Underrepresentation may be revealed by an imbalance in the representation of different groups in common pursuits such as education, jobs, housing, etc., resulting in marginalization for some groups and individuals and not for others, relative to the number of individuals who are members of the population involved.

Vulnerable populations

Consistent with the World Health Organization, vulnerable populations are defined by “the degree to which a population, individual or organization is unable to anticipate, cope with, resist and recover from the impacts of disasters”:

Children, pregnant women, elderly people, malnourished people, and people who are ill or immune-compromised, are particularly vulnerable when a disaster strikes, and take a relatively high share of the disease burden associated with emergencies. Poverty – and its common consequences such as malnutrition, homelessness, poor housing and destitution – is a major contributor to vulnerability.

EN 11: Inter-Campus Collaboration

3 points available

A. Credit Rationale

This credit recognizes institutions that collaborate with other colleges or universities to help build campus sustainability broadly. Institutions can make significant contributions to sustainability by sharing their experiences and expertise with other colleges and universities. Sharing best practices and lessons learned can help other institutions realize efficiencies that accelerate the movement to sustainability.

B. Criteria

Institution collaborates with other colleges and universities in one or more of the following ways to support and help build the campus sustainability community. The institution:

- Is an active member of a national or international sustainability network;
- Is an active member of a regional, state/provincial or local sustainability network;
- Has presented at a sustainability conference during the previous year;
- Has submitted a case study during the previous year to a sustainability resource center or awards program that is inclusive of multiple campuses;
- Has had staff, students, or faculty serving on a board or committee of a sustainability network or conference during the previous three years;
- Has an ongoing mentoring relationship with another institution through which it assists the institution with its sustainability reporting and/or the development of its sustainability program;
- Has had staff, faculty, or students serving as peer reviewers of another institution's sustainability data (e.g., GHG emissions or course inventory) and/or STARS submission during the previous three years;

And/or

- Has participated in other collaborative efforts around sustainability during the previous year, e.g., joint planning or resource sharing with other institutions.

C. Applicability

This credit applies to all institutions.

D. Scoring

Institutions earn 0.5 points for each initiative listed above up to the maximum of 3 points available for this credit.

E. Reporting Fields

Required

- ☐ Is the institution an active member of a national or international sustainability network?
If yes, provide:
 - ☐ The name of the national or international sustainability network(s)
- ☐ Is the institution an active member of a regional, state/provincial or local sustainability network?
If yes, provide:
 - ☐ The name of the regional, state/provincial or local sustainability network(s)
- ☐ Has the institution presented at a sustainability conference during the previous year?
If yes, provide:
 - ☐ A list or brief description of the conference(s) and presentation(s)
- ☐ Has the institution submitted a case study during the previous year to a sustainability awards program that is inclusive of multiple campuses?
If yes, provide:
 - ☐ A list or brief description of the awards program(s) and submission(s)
- ☐ Has the institution had staff, students or faculty serving on a board or committee of a sustainability network or conference during the previous three years?
If yes, provide:
 - ☐ A list or brief description of the board or committee appointment(s)
- ☐ Does the institution have an ongoing mentoring relationship with another institution through which it assists the institution with its sustainability reporting and/or the development of its sustainability program?
If yes, provide:
 - ☐ A brief description of the mentoring relationship and activities
- ☐ Has the institution had staff, faculty, or students serving as peer reviewers of another institution's sustainability data (e.g., GHG emissions or course inventory) and/or STARS submission during the previous three years?
If yes, provide:
 - ☐ A brief description of the peer review activities
- ☐ Has the institution participated in other collaborative efforts around sustainability during the previous year, e.g., joint planning or resource sharing with other institutions?
If yes, provide:
 - ☐ A brief description of other collaborative efforts around sustainability during the previous year

Optional

- ☐ The website URL where information about the programs or initiatives is available
- ☐ Additional documentation to support the submission (upload)
- ☐ Data source(s) and notes about the submission
- ☐ Contact information for a responsible party (a staff member, faculty member, or administrator who can respond to questions regarding the data once it is submitted and available to the public)

F. Measurement**Timeframe**

Unless otherwise specified above, report on current membership status and collaborations that were active during the three years prior to the anticipated date of submission.

Sampling and Data Standards

Not applicable

G. Standards and Terms

Not applicable

EN 12: Continuing Education

5 points available

A. Credit Rationale

This credit recognizes institutions that provide continuing education courses and programs in sustainability to the community. Such courses train community members in sustainability topics and help build knowledge about the subject. They can also provide the training people need to obtain and perform green jobs. Certificate programs offer professional recognition for sustainability training and are important tools in helping students obtain, perform, and advance their position in green jobs.

B. Criteria

Part 1

Institution has conducted an inventory during the previous three years to identify its [continuing education](#) courses that address sustainability. These course offerings may include:

- Continuing education courses that have been identified as [sustainability course offerings](#) using the definitions provided in *G. Standards and Terms*; and/or
- Continuing education courses that have been formally designated as sustainability course offerings in the institution's standard course listings or catalog.

For each course, the inventory provides:

- The title and department (or equivalent) of the course.
- A brief description of the course.

Courses for which partial or incomplete information is provided may not be counted toward earning points for Part 1 of this credit. Courses that are typically taken for academic credit are not included in this credit; they are covered in the Curriculum subcategory.

Part 2

Institution has at least one sustainability-themed certificate program through its continuing education or extension department.

Degree-granting programs (e.g., programs that confer Baccalaureate, Masters, and Associates degrees) and certificates that are part of academic degree programs are not included in this credit; they are covered in the Curriculum subcategory.

C. Applicability

This credit applies to institutions that offer [continuing education](#) or community education programs.

D. Scoring

Each part of this credit is scored independently.

Part 1

Institutions earn the maximum of 3 points for Part 1 of this credit when courses that address sustainability comprise 10 or more percent of all continuing education courses offered. Incremental points are awarded based on the percentage of continuing education course offerings that address sustainability. For example, an

institution where 5 percent of all continuing education courses offered were sustainability courses would earn 1.5 points (half of the points available for Part 1).

Points for Part 1 of this credit are calculated automatically in the STARS Reporting Tool as follows:

Factor	Multiply	Number of continuing education courses that address sustainability	Divide	Total number of continuing education courses offered	Equals	Points earned
30	×	_____	÷	_____	=	Up to 3

Part 2

Institutions earn 2 points in Part 2 of this credit for having at least one certificate program that meets the criteria outlined above. Partial points are not available for Part 2 of this credit.

E. Reporting Fields

Required

- ☐ Does the institution offer continuing education courses that address sustainability?

If yes, provide:

- ☐ Total number of continuing education courses offered
 - ☐ Number of continuing education courses offered that address sustainability
 - ☐ A list and brief description of the continuing education courses offered that address sustainability (text or upload)
- ☐ Do the figures reported above cover one, two, or three academic years?
- ☐ Does the institution have at least one sustainability-themed certificate program through its continuing education or extension department?

If yes, provide:

- ☐ A brief description of the certificate program(s), including the year the program was created

Optional

- ☐ The website URL where information about the programs or initiatives is available
- ☐ Additional documentation to support the submission (upload)
- ☐ Data source(s) and notes about the submission
- ☐ Contact information for a responsible party (a staff member, faculty member, or administrator who can respond to questions regarding the data once it is submitted and available to the public)

F. Measurement

Timeframe

Part 1

Report on the most recent data available from within the three years prior to the anticipated date of submission. Institutions may count course offerings from one, two, or three academic years, as long as the counts of continuing education courses and sustainability continuing education courses are drawn from the same time period.

Part 2

Report on current program status and offerings at the time of submission.

Sampling and Data Standards

Not applicable

G. Standards and Terms

Continuing education

Continuing education (also known as further education) includes non-credit courses and programs that train community members and help build knowledge about particular subjects. Continuing education is inclusive of non-credit, community education and extension courses and programs. Examples include non-degree career training, workforce training, credential maintenance courses, formal personal enrichment courses, self-directed learning and experiential learning (on and off campus). In some cases, non-credit students may earn continuing education units, certification or other evidence of class completion to meet personal or professional requirements.

Sustainability challenges

Consistent with [Transforming Our World: The 2030 Agenda for Sustainable Development](#) (United Nations, 2015), major sustainability challenges include (but are not limited to) climate change, global poverty and inequality, natural resource depletion, and environmental degradation. To identify courses, research, programs, and initiatives that contribute towards understanding or solving sustainability challenges, it is helpful to ask:

- Does it contribute towards realizing one or more of the principles outlined in the [Earth Charter](#)?
And/or
- Does it contribute towards achieving one or more of the targets embedded in the United Nations [Sustainable Development Goals](#) (SDGs)?

Sustainability course offerings

Sustainability course offerings include "sustainability courses" and "courses that include sustainability":

Sustainability Courses

Sustainability courses are courses in which the *primary and explicit* focus is on sustainability and/or on understanding or solving one or more major sustainability challenge. This includes:

- A. Foundational courses in which the primary and explicit focus is on sustainability as an integrated concept having social, economic, and environmental dimensions. Obvious examples include Introduction to Sustainability, Sustainable Development, and Sustainability Science, however courses may also count if their course descriptions indicate a primary and explicit focus on sustainability.

- B. Courses in which the primary and explicit focus is on the application of sustainability within a field. As sustainability is an interdisciplinary topic, such courses generally incorporate insights from multiple disciplines. Obvious examples include Sustainable Agriculture, Architecture for Sustainability, and Sustainable Business, however courses may also count if their course descriptions indicate a primary and explicit focus on sustainability within a field.
- C. Courses in which the primary focus is on providing skills and/or knowledge *directly* connected to understanding or solving one or more major sustainability challenges. A course might provide knowledge and understanding of the problem or tools for solving it, for example Climate Change Science, Renewable Energy Policy, Environmental Justice, or Green Chemistry. Such courses do not necessarily cover “sustainability” as a concept, but should address more than one of the three dimensions of sustainability (i.e., social wellbeing, economic prosperity, and environmental health).

While a foundational course such as chemistry or sociology might provide knowledge that is useful to practitioners of sustainability, it would not be considered a sustainability course. Likewise, although specific tools or practices such as GIS (Geographical Information Systems) or engineering can be applied towards sustainability, such courses would not count as sustainability courses unless their primary and explicit focus is on sustainable applications. If there is a sustainability unit, module or activity within one of these courses, but it is not the main focus, the course may be counted as a “course that includes sustainability”:

Courses That Include Sustainability

A course that includes sustainability is primarily focused on a topic other than sustainability, but incorporates a unit or module on sustainability or a sustainability challenge, includes one or more sustainability-focused activities, or integrates sustainability issues throughout the course.

While a foundational course such as chemistry or sociology might provide knowledge that is useful to practitioners of sustainability, it would not be considered to be inclusive of sustainability unless the concept of sustainability or a sustainability challenge is specifically integrated into the course. Likewise, although specific tools or practices such as GIS (Geographical Information Systems) or engineering can be applied towards sustainability, such courses would not count unless they incorporated a unit on sustainability or a sustainability challenge, included a sustainability-focused activity, or incorporated sustainability issues throughout the course.

Scoring Example: Continuing Education

Part 1

Example Community College offered **600** continuing education courses during the past year. Of those courses, **25** address sustainability.

Factor	<i>Multiply</i>	Number of continuing education courses that address sustainability	<i>Divide</i>	Total number of continuing education courses offered	<i>Equals</i>	Points earned
30	×	<u>25</u>	÷	<u>600</u>	=	1.25

Part 2

Example Community College offers a green building certificate program through its department of continuing education. Example Community College earns **2** points for this part of the credit.

Total Credit Score:

Part 1 + Part 2 = 1.25 + 2

Total points earned = **3.25**

EN 13: Community Service

5 points available

A. Credit Rationale

This credit recognizes institutions that engage their student bodies in community service, as measured by how widespread participation is at the institution. Volunteerism and the sense of compassion that community services help develop are fundamental to achieving sustainability. From tutoring children to removing invasive species to volunteering at a food bank, students can make tangible contributions that address sustainability challenges through community service. In addition, community engagement can help students develop leadership skills while deepening their understandings of practical, real-world problems.

B. Criteria

Part 1

Institution engages its student body in [community service](#), as measured by the percentage of students who participate in community service.

Part 2

Institution engages students in community service, as measured by the average hours contributed per student per year.

Institutions may exclude non-credit, continuing education, part-time, and/or graduate students from this credit.

C. Applicability

This credit applies to all institutions that have undergraduate [students enrolled for credit](#). Institutions that exclusively serve non-credit, continuing education, and/or graduate students may choose to pursue or omit this credit.

D. Scoring

Each part is scored independently.

Part 1

Institutions earn the maximum of 3 points available for Part 1 of this credit by engaging their entire student body in community service. Incremental points are awarded based on the percentage of students that contribute community service. For example, an institution where 50 percent of students contributed some community service would earn 1.5 points (half of the points available for Part 1 of this credit).

Points for Part 1 of this credit are calculated automatically in the STARS Reporting Tool as follows:

Factor	Multiply	Number of students engaged in community service	Divide	Total number of students	Equals	Points earned
3	×	_____	÷	_____	=	Up to 3

Part 2

Institutions earn the maximum of 2 points available for Part 2 of this credit by engaging their students in an average of 20 hours of community service per year. Incremental points are awarded based on the average number of hours contributed. For example, an institution where students contributed an average of 10 hours per year would earn 1 point (half of the points available for Part 2).

Points for Part 2 of this credit are calculated automatically in the STARS Reporting Tool as follows:

Factor	Multiply	Number of student community service hours contributed	Divide	Total number of students	Equals	Points earned
0.1	×	_____	÷	_____	=	Up to 2

E. Reporting Fields

Required

- ☐ Number of students enrolled for credit (headcount; part-time students, continuing education, and/or graduate students may be excluded)
- ☐ Number of students engaged in community service (headcount; part-time students, continuing education, and graduate students should be excluded if excluded above)
- ☐ Does the institution wish to pursue Part 2 of this credit (community service hours)?

If yes, provide:

- ☐ Total number of student community service hours contributed during the most recent one-year period

Optional

- ☐ The website URL where information about the programs or initiatives is available
- ☐ Does the institution include community service achievements on student transcripts?
- ☐ Does the institution provide incentives for employees to participate in community service (on- or off-campus)? (Incentives may include voluntary leave, compensatory time, or other forms of positive recognition)
- ☐ A brief description of the institution's employee community service initiatives
- ☐ Additional documentation to support the submission (upload)

- ❑ Data source(s) and notes about the submission
- ❑ Contact information for a responsible party (a staff member, faculty member, or administrator who can respond to questions regarding the data once it is submitted and available to the public)

F. Measurement

Timeframe

Report the most recent annual data available from within the three years prior to the anticipated date of submission.

Sampling and Data Standards

Include, at minimum, all full-time undergraduate [students enrolled for credit](#). Institutions may use a [representative sample](#) or survey to determine student participation in community service. Institutions may choose to exclude part-time, continuing education, and/or graduate students, as long as they are excluded from both the count of students engaged in community service and the count of total students.

G. Standards and Terms

Community service

Consistent with [The President's Higher Education Community Service Honor Roll](#) (U.S.), community service is defined as:

Activities designed to improve the quality of life of off-campus community residents, particularly low-income individuals. Community service activities may include but are not limited to: academic service learning, co-curricular service learning (not part of an academic course, but utilizing service-learning elements) and other co-curricular student volunteer activities, as well as Work-Study community service and paid community service internships. Community service includes both direct service to citizens (e.g., serving food to the needy) and indirect service (e.g., assessing community nutrition needs or managing a food bank).

Representative sample

A representative sample is a subset of a statistical population that accurately reflects the members of the entire population. A representative sample should be an unbiased indication of what the entire population is like. For example, in a student population of 1000 students in which 25 percent of the students are enrolled in a business school, 50 percent are enrolled in humanities programs, and 25 percent are enrolled in science programs, a representative sample might include 200 students: 50 business students, 100 humanities students, and 50 science students. Likewise, a representative sample of purchases should accurately reflect the institution's total purchases, accounting for seasonal and other variations in product availability and purchasing.

Students enrolled for credit

Consistent with U.S. [IPEDS](#), students enrolled for credit include all students enrolled in courses or programs that can be applied towards the requirements for a postsecondary degree, diploma, certificate, or other formal award, regardless of whether or not they are seeking a degree or certificate. This includes:

- Students enrolled for credit in off-campus centers
- High school students taking regular college courses for credit
- Students taking remedial courses if the student is degree-seeking for the purpose of student financial aid determination

- Students from overseas enrolled in U.S. courses for credit (e.g., online students)
- Graduate students enrolled for thesis credits, even when zero credits are awarded as these students are still enrolled and seeking their degree.

Scoring Example: Community Service

Part 1

Example Community College has **2,000** students. **750** Example Community College students engaged in community service during the past year.

Factor	Multiply	Number of students engaged in community service	Divide	Total number of students	Equals	Points earned
3	×	<u>750</u>	÷	<u>2,000</u>	=	1.13

Part 2

Example Community College enrolls **2,000** students. Example Community College students contributed **12,000** hours of community service during the past year.

Factor	Multiply	Number of student community service hours contributed	Divide	Total number of students	Equals	Points earned
0.1	×	<u>12,000</u>	÷	<u>2,000</u>	=	0.6

EN 14: Participation in Public Policy

2 points available

A. Credit Rationale

This credit recognizes institutions that promote sustainability through public policy advocacy. There are myriad public policies for which institutions can advocate that address sustainability, including policies specific to higher education. Given the prominence and importance of colleges and universities in their communities, institutions can be powerful voices in advancing sustainability through legislation and policy.

B. Criteria

Institution advocates for public policies that support campus sustainability or that otherwise advance sustainability. The advocacy may take place at one or more of the following levels:

- Municipal/local,
- State/provincial/regional,
- National, and/or
- International.

The policy advocacy must have the implicit or explicit support of the institution's top administrators and/or governing bodies to count. For example, advocacy by administrators, students, staff, or faculty who are acting as representatives of the institution or its governance bodies may count. Advocacy by students, staff, or faculty conducted in a personal capacity does not count unless it is formally endorsed at the institutional level.

Examples of advocacy efforts include supporting or endorsing legislation, ordinances, and public policies that advance sustainability; active participation in campaigns aiming to change public policy; and discussions with legislators in regard to the above.

This credit acknowledges institutions that advocate for policy changes and legislation to advance sustainability broadly. Advocacy efforts that are made exclusively to advance the institution's interests or projects may not be counted. For example, advocating for government funding for campus sustainability may be counted, whereas lobbying for the institution to receive funds that have already been appropriated may not.

C. Applicability

This credit applies to all institutions.

D. Scoring

Institutions earn 0.67 points for each level outlined above at which they advocate for public policies that support campus sustainability or that otherwise advance sustainability. A maximum of 2 points are available for this credit.

E. Reporting Fields

Required

- ☐ Does the institution advocate for public policies that support campus sustainability or that otherwise advance sustainability at the following levels?
 - ☐ Municipal/local
 - ☐ State/provincial/regional
 - ☐ National
 - ☐ International

For each positive response above, provide:

- ☐ A brief description of how the institution engages in public policy advocacy for sustainability, including the issues, legislation, and ordinances for or against which the institution has advocated

Optional

- ☐ A brief description of other political positions the institution has taken during the previous three years (if applicable)
- ☐ A brief description of political donations the institution made during the previous three years (if applicable)
- ☐ The website URL where information about the programs or initiatives is available
- ☐ Additional documentation to support the submission (upload)
- ☐ Data source(s) and notes about the submission
- ☐ Contact information for a responsible party (a staff member, faculty member, or administrator who can respond to questions regarding the data once it is submitted and available to the public)

F. Measurement

Timeframe

Report on sustainability policy advocacy efforts that took place during the three years prior to the anticipated date of submission. The report does not have to include all advocacy efforts.

Sampling and Data Standards

Not applicable

G. Standards and Terms

Not applicable

EN 15: Trademark Licensing

2 points available

A. Credit Rationale

This credit recognizes institutions that join a monitoring and verification organization to help ensure that apparel bearing the institution's name is produced under fair conditions. By ensuring that apparel bearing the institution's logo is made under fair working conditions, institutions promote health, safety, and secure livelihoods for domestic and global workers.

B. Criteria

Institution is a member of the [Fair Labor Association \(FLA\)](#) and/or the [Worker Rights Consortium \(WRC\)](#).

Please note that other initiatives to support fair labor standards in the supply chain are recognized in the *Sustainable Procurement* credit in Purchasing.

C. Applicability

This credit applies to institutions whose logo is trademarked and appears on apparel and that are eligible for FLA and/or WRC membership.

D. Scoring

Institutions earn 2 points by being a member of the Fair Labor Association or the Worker Rights Consortium. Partial points are not available for this credit.

E. Reporting Fields

Required

- ☐ Is the institution is a member of the Worker Rights Consortium?
- ☐ Is the institution is a member of the Fair Labor Association?

If yes to either of the above, provide:

- ☐ A brief description of the institution's WRC or FLA membership, including the year membership was last established or renewed

Optional

- ☐ The website URL where information about the programs or initiatives is available
- ☐ Additional documentation to support the submission (upload)
- ☐ Data source(s) and notes about the submission
- ☐ Contact information for a responsible party (a staff member, faculty member, or administrator who can respond to questions regarding the data once it is submitted and available to the public)

F. Measurement

Timeframe

Report on current participation status at the time of submission.

Sampling and Data Standards

Not applicable

G. Standards and Terms

Fair Labor Association

The [Fair Labor Association](#) (FLA) is comprised of apparel businesses, higher education institutions, and non-governmental organizations. Its mission is to promote compliance with international labor laws and standards.

Workers Rights Consortium

The [Worker Rights Consortium](#) (WRC) is an independent monitoring organization focused on protecting the rights of workers who make apparel and other products. Its membership is comprised of colleges and universities in the U.S., Canada and the U.K.

Operations (OP)

Air & Climate

This subcategory seeks to recognize institutions that are measuring and reducing their greenhouse gas and air pollutant emissions. Global climate change is having myriad negative impacts throughout the world, including increased frequency and potency of extreme weather events, sea level rise, species extinction, water shortages, declining agricultural production, and spread of diseases. The impacts are particularly pronounced for low-income communities and countries. In addition, institutions that inventory and take steps to reduce their air pollutant emissions can positively impact the health of the campus community, as well as the health of their local communities and regions.

Credits

Points available: 11

OP 1	Greenhouse Gas Emissions	10
OP 2	Outdoor Air Quality	1

Share your story

The My Submission section of the online Reporting Tool includes an optional reporting field for the institution to provide an overview of notable activities and accomplishments in this subcategory. This information is featured in the institution's public report.

- ☐ A brief summary of the institution's notable activities and accomplishments relevant to this subcategory

OP 1: Greenhouse Gas Emissions

10 points available

A. Credit Rationale

This credit recognizes institutions that have inventoried their greenhouse gas (GHG) emissions and that have reduced their adjusted net Scope 1 and Scope 2 GHG emissions.

B. Criteria

Part 1

Institution has conducted a publicly available greenhouse gas (GHG) emissions inventory that includes, at minimum, [Scope 1 and Scope 2 GHG emissions](#) and may also include [Scope 3 GHG emissions](#).

The inventory may also be verified by an independent, external third party and/or validated internally by campus personnel who are independent of the GHG accounting and reporting process.

Part 2

Institution reduced its adjusted net Scope 1 and Scope 2 GHG emissions per [weighted campus user](#) compared to a baseline.

Part 3

Institution's annual adjusted net Scope 1 and Scope 2 GHG emissions are less than the [minimum performance threshold](#) of 0.02 metric tons of carbon dioxide equivalent (MtCO₂e) per gross square foot (0.215 MtCO₂e per gross square metre) of floor area.

Performance for Part 3 of this credit is assessed using [EUI-adjusted floor area](#), a figure that accounts for significant differences in energy use intensity (EUI) between types of building space (see *G. Standards and Terms*).

For this credit, the following carbon offsets may be counted:

- [Third-party verified purchased carbon offsets](#)
- [Institution-catalyzed carbon offsets](#) (popularly known as "local offsets")
- Carbon sequestration due to land that the institution manages specifically for sequestration (as documented in policies, land management plans or the equivalent)
- Carbon storage from on-site composting

Purchased Renewable Energy Certificates (RECs) or Guarantees of Origin (GOs) may not be counted as carbon offsets. Emissions reductions attributable to RECs and GOs that are either Green-e Energy certified or meet Green-e Energy's technical requirements and are verified as such by a third party are reported separately (see *E. Reporting Fields*). Purchased carbon offsets and RECs/GOs that have not been third-party verified do not count.

Institution-catalyzed offsets, on-site composting, and carbon sequestration projects (on and off campus) that are to be counted as offsets must be third party verified or, at minimum, quantified using a method that addresses all of the following accounting issues:

- Selection of a baseline scenario (i.e, what would have happened in the absence of the project?);

- Demonstration of additionality (i.e., the project has resulted in emission reductions or removals in addition to what would have happened in the absence of the project);
- Identification and quantification of relevant secondary effects (i.e., small, unintended GHG consequences of a project, include leakage and changes in GHG emissions up- and downstream of the project);
- Consideration of reversibility (i.e., assessing the risk of reversibility, together with any mitigation or compensation measures included in the project design);
- Avoidance of double-counting (i.e., the reductions giving rise to the offset must occur at sources or sinks not included in the target or cap for which the offset is used).

Institutions that have sold or transferred emissions reductions, e.g. in the form of verified emissions reductions (VERs), may not count those reductions toward this credit. Those transactions are reported separately and net GHG emissions are automatically adjusted upward to reflect the sale or transfer of any institution-generated offsets that have been included as carbon offsets (see *D. Scoring*).

C. Applicability

This credit applies to all institutions.

D. Scoring

Each part is scored independently. Points earned are calculated according to the formulas below. Please note that users do not have to calculate the number of points earned themselves; points will be calculated automatically when the data listed under *E. Reporting Fields* is entered in the online Reporting Tool.

Scoring for Part 2 and Part 3 of this credit are based on adjusted net Scope 1 and 2 GHG emissions, a measure of an institution's overall climate impact (emissions minus carbon offsets generated and emissions reductions from REC/GO purchases). STARS calculates the figure according to the following formula:

$$\text{Adjusted net Scope 1 and 2 GHG emissions} = \{ [A + (B - C)] - (D + E + F + G - H) \}$$

- A = Gross Scope 1 GHG emissions (MtCO₂e)
- B = Gross Scope 2 GHG emissions (MtCO₂e)
- C = Emissions reductions from REC/GO purchases (MtCO₂e)
- D = Institution-catalyzed carbon offsets generated (MtCO₂e)
- E = Carbon sequestration (MtCO₂e)
- F = Carbon storage from on-site composting (MtCO₂e)
- G = Third-party verified carbon offsets purchased (MtCO₂e)
- H = Carbon offsets for which emissions reductions have been sold or transferred (MtCO₂e)

Part 1

An institution earns the maximum of 2 points available for Part 1 of this credit when its publicly available GHG emissions inventory has been validated or verified (internally or by a third party), covers all Scope 1 and Scope 2 GHG emissions, and includes emissions from six categories of Scope 3 GHG emissions. Partial points are available based on the categories of emissions included in the inventory and whether or not the inventory has been verified. Points are awarded as follows:

Components of the GHG Inventory	Points available	Points earned
Scope 1 and Scope 2 GHG emissions	1.0	
Scope 3 GHG emissions from: • Business travel • Commuting • Purchased goods and services • Capital goods • Fuel- and energy-related activities • Waste generated in operations • Other sources	0.083 each	Up to 0.5
Validation or verification (internal and/or third party)	0.5	
Total points earned for Part 1 →		Up to 2

Part 2

Institutions earn the maximum of 4 points available for Part 2 of this credit by achieving zero adjusted net Scope 1 and 2 GHG emissions. Incremental points are awarded for reducing adjusted net Scope 1 and 2 GHG emissions per weighted campus user compared to a baseline. For example, an institution that reduced its adjusted net GHG emissions per weighted campus user by 50 percent would earn 2 points (half of the points available for Part 2).

STARS awards only positive points; points will not be deducted if adjusted net GHG emissions per weighted campus user increased rather than decreased during the time period. Points for Part 2 of this credit are earned according to the following formula:

$$\text{Points Earned} = 4 \times \{ [(A/B) - (C/D)] / (A/B) \}$$

A = Adjusted net Scope 1 and 2 greenhouse gas emissions, baseline year (MtCO₂e)

B = Weighted campus users, baseline year

C = Adjusted net Scope 1 and 2 greenhouse gas emissions, performance year (MtCO₂e)

D = Weighted campus users, performance year

Part 3

Institutions earn the maximum of 4 points available for Part 3 of this credit by achieving zero adjusted net Scope 1 and 2 GHG emissions. Incremental points are awarded based on an institution's performance between the minimum performance threshold of 0.02 MtCO₂e per gross square foot (0.215 MtCO₂e per gross square metre) of floor area and zero. For example, an institution with annual adjusted net Scope 1 and 2 GHG emissions of 0.01 MtCO₂e per gross square foot of floor area would earn 2 points (half of the points available for Part 3).

Scoring for Part 3 of this credit is based on an [EUI-adjusted floor area](#) figure that accounts for significant differences in energy use intensity (EUI) between types of building space. Points for Part 3 of this credit are earned according to the following formula:

$$\text{Points Earned} = 4 \times \{ [A - (B/C)] / A \}$$

A = Minimum performance threshold (MtCO₂e per gross square foot/metre)

B = Adjusted net Scope 1 and 2 greenhouse gas emissions, performance year (MtCO₂e)

C = EUI-adjusted floor area, performance year (square feet/metres)

E. Reporting Fields

Required

Part 1

- ☐ Has the institution conducted a GHG emissions inventory that includes all Scope 1 and 2 emissions?
 - ☐ Does the institution's GHG emissions inventory include All, Some or None of its Scope 3 GHG emissions in the following categories? (All = all sources of GHG emissions in the category are accounted for; Some = a subset of all sources of GHG emissions in the category are accounted for; None = no GHG emissions in the category are accounted for)
 - ☐ Business travel (the transportation of employees and students for institution-related activities in vehicles owned or operated by third parties)
 - ☐ Commuting (regular commuting to and from the institution by students and employees)
 - ☐ Purchased goods and services (e.g., food, paper, office supplies, furniture, computers, telephones, travel services, outsourced administrative functions, consulting services, and janitorial and landscaping services)
 - ☐ Capital goods (construction materials, buildings, facilities, equipment, machinery, and vehicles)
 - ☐ Fuel- and energy-related activities not included in Scope 1 or Scope 2 (transmission and distribution losses from purchased electricity, upstream emissions of purchased fuels and electricity)
 - ☐ Waste generated in operations (disposal/treatment of solid waste and wastewater in facilities owned or operated by third parties)
 - ☐ Other categories (e.g., leased assets, investments, upstream transportation and distribution of purchased goods)
 - ☐ A copy of the most recent GHG emissions inventory (upload)
 - ☐ A brief description of the methodology and/or tool used to complete the GHG emissions inventory, including how the institution accounted for each category of Scope 3 emissions reported above
 - ☐ Has the GHG emissions inventory been validated internally by personnel who are independent of the GHG accounting and reporting process and/or verified by an independent, external third party?
- If yes, provide:*
- ☐ A brief description and/or documentation to support the internal and/or external verification process (text or upload)

- Does the institution wish to pursue Part 2 and Part 3 of this credit? (reductions in Scope 1 and Scope 2 GHG emissions)

If yes, provide the following:

Part 2

- Gross Scope 1 GHG emissions from stationary combustion, performance year (MtCO₂e)
- Gross Scope 1 GHG emissions from other sources (i.e., mobile combustion, process emissions, fugitive emissions), performance year (MtCO₂e)
- Gross Scope 2 GHG emissions from purchased electricity, performance year (unadjusted for purchased RECS/GOs) (MtCO₂e)
- Gross Scope 2 GHG emissions from other sources (i.e., purchased heating, cooling and steam), performance year (MtCO₂e).
- Gross Scope 1 GHG emissions from stationary combustion, baseline year (MtCO₂e)
- Gross Scope 1 GHG emissions from other sources (i.e., mobile combustion, process emissions, fugitive emissions), baseline year (MtCO₂e)
- Gross Scope 2 GHG emissions from purchased electricity, baseline year (unadjusted for purchased RECS/GOs) (MtCO₂e)
- Gross Scope 2 GHG emissions from other sources (i.e., purchased heating, cooling and steam), baseline year (MtCO₂e)
- Start date, performance year or 3-year period
- End date, performance year or 3-year period
- Start date, baseline year or 3-year period
- End date, baseline year or 3-year period

If end date of the baseline year/period is 2004 or earlier, provide:

- A brief description of when and why the GHG emissions baseline was adopted (e.g., in sustainability plans and policies or in the context of other reporting obligations)
- Figures needed to determine total carbon offsets, performance year:
 - Third-party verified carbon offsets purchased, performance year (exclude purchased RECS/GOs) (MtCO₂e)
 - Institution-catalyzed carbon offsets generated, performance year (MtCO₂e)
 - Carbon sequestration due to land that the institution manages specifically for sequestration, performance year (MtCO₂e)
 - Carbon storage from on-site composting, performance year (MtCO₂e)

If total performance year carbon offsets are greater than zero, provide:

- A brief description of the offsets in each category reported above, including vendor, project source, verification program and contract timeframes (as applicable)
 - Carbon offsets included above for which the emissions reductions have been sold or transferred by the institution, e.g. in the form of verified emissions reductions (VERs) (MtCO₂e)

- Emissions reductions attributable to REC/GO purchases, performance year (i.e., the amount the institution's gross Scope 2 GHG emissions reported above should be adjusted down due to REC/GO purchases) (MtCO₂e)

If greater than zero, provide:

- A brief description of the purchased RECs/GOs including vendor, project source and verification program
- Figures needed to determine total carbon offsets, baseline year:
 - Third-party verified carbon offsets purchased, baseline year (exclude purchased RECs/GOs) (MtCO₂e)
 - Institution-catalyzed carbon offsets generated, baseline year (MtCO₂e)
 - Carbon sequestration due to land that the institution manages specifically for sequestration, baseline year (MtCO₂e)
 - Carbon storage from on-site composting, baseline year (MtCO₂e)

If total baseline year carbon offsets are greater than zero, provide:

- Carbon offsets included above for which the emissions reductions have been sold or transferred by the institution, e.g. in the form of verified emissions reductions (VERs) (MtCO₂e)
- Emissions reductions attributable to REC/GO purchases, baseline year (i.e., the amount the institution's gross Scope 2 GHG emissions reported above should be adjusted down due to REC/GO purchases) (MtCO₂e)
- Figures needed to determine "weighted campus users" during the performance year:
 - Number of students resident on-site, performance year
 - Number of employees resident on-site, performance year
 - Number of other individuals resident on-site and/or staffed hospital beds (if applicable), performance year
 - Total full-time equivalent student enrollment, performance year
 - Full-time equivalent of employees (staff + faculty), performance year
 - Full-time equivalent of students enrolled exclusively in distance education, performance year
- Figures needed to determine "weighted campus users" during the baseline year:
 - Number of students resident on-site, baseline year
 - Number of employees resident on-site, baseline year
 - Number of other individuals resident on-site and/or staffed hospital beds (if applicable), baseline year
 - Total full-time equivalent student enrollment, baseline year
 - Full-time equivalent of employees (staff + faculty), baseline year
 - Full-time equivalent of students enrolled exclusively in distance education, baseline year

Part 3

- Gross floor area of building space, performance year (square feet/metres)

- ❑ Floor area of laboratory space, performance year (square feet/metres)
- ❑ Floor area of healthcare space, performance year (square feet/metres)
- ❑ Floor area of other [energy intensive space](#), performance year (square feet/metres)

Optional

- ❑ Scope 3 GHG emissions (performance year) from:
 - Business travel (MtCO₂e)
 - Commuting (MtCO₂e)
 - Purchased goods and services (MtCO₂e)
 - Capital goods (MtCO₂e)
 - Fuel- and energy-related activities not included in Scope 1 or Scope 2 (MtCO₂e)
 - Waste generated in operations (MtCO₂e)
 - Other categories (MtCO₂e)
- ❑ A brief description of the institution's GHG emissions reduction initiatives, including efforts made during the previous three years
- ❑ The website URL where information about the programs or initiatives is available
- ❑ Additional documentation to support the submission (upload)
- ❑ Data source(s) and notes about the submission
- ❑ Contact information for a responsible party (a staff member, faculty member, or administrator who can respond to questions regarding the data once it is submitted and available to the public)

F. Measurement

Timeframe

Performance Year

Report the most recent data available from the three years prior to the anticipated date of submission. Institutions may use the most recent single year for which data is available or an average from throughout the period. Institutions may choose the annual start and end dates that work best with the data they have (e.g., fiscal or calendar year), as long as data are reported from a consecutive 12-month (or 3-year) period.

Report building space and population figures from the same time period as that from which GHG emissions data are drawn (e.g., the consecutive 12-month or 3-year period that most closely overlaps with the emissions performance period). Institutions may report building space using an average from throughout the period or a snapshot at a single representative point during the period.

Baseline Year

Report data from the baseline year, which may be:

- Any year from 2005 to the present
- A baseline year, 1990 to 2004, that the institution has adopted as part of its sustainability plans or policies or in the context of other reporting obligations

Recommended best practices for defining a baseline include:

- Using the average of three consecutive years to reduce the impact of outliers.
- Using the same baseline year for multiple credits to reduce reporting requirements. For example, institutions using 2005 for all STARS credits that are baseline-based would only have to calculate baseline weighted campus user data once.
- Ensuring that baseline and performance year data are valid and reliable (e.g., that the data were gathered in the same manner).

Institutions without valid and reliable historical data should use performance year data for both the baseline and performance year. Following this approach, an institution would not be able to claim points for reductions during its first STARS submission, but would be able to use its newly established baseline for subsequent submissions. Institutions without valid and reliable historical data should use performance year data for both the baseline and performance year.

Institutions may choose the start and end dates that work best with the data they have (e.g., fiscal or calendar year), as long as data are reported from a consecutive 12-month (or 3-year) period.

Report building space and population figures from the same period as that from which GHG emissions data are drawn (e.g., the consecutive 12-month or 3-year period that most closely overlaps with the emissions baseline period). Institutions may report building space using an average from throughout the period or a snapshot at a single representative point during the period.

Sampling and Data Standards

To conduct a GHG emissions inventory, campuses may use the [Campus Carbon Calculator/CarbonMAP](#), the [Scope 3 Evaluator](#) tool, and/or any methodology or calculator that is consistent with the World Resources Institute (WRI) [Greenhouse Gas Protocol Corporate Standard](#) and the [Scope 3 calculation guidance](#) provided by WRI.

To account for Institution-catalyzed offsets, on-site composting, and carbon sequestration projects, institutions may pursue third party verification or else use a credible methodology that addresses all of the accounting issues outlined in *B. Criteria*. Examples include:

- [GHG Protocol for Project Accounting](#) (World Resources Institute)
- [Land Use, Land Change and Forestry](#) (IPCC)
- [Forest Project Protocol](#) (Climate Action Reserve),
- [Framework for Forest Management Offset Protocols](#) (Canadian Council of Forest Ministers)
- The [Compliance Offset Protocols](#) (COP) adopted by the California Air Resources Board (CARB).

Reductions should only be counted as offsets once, i.e., toward no more than one of the offset categories outlined in the credit criteria.

G. Standards and Terms

Emissions inventory

An emissions inventory is a list of emissions sources and estimates of emissions from these sources.

Energy intensive space

Energy intensive space includes “laboratory space”, “healthcare space”, and “other energy intensive space”. “Other energy intensive space” is reported separately from laboratory space and healthcare space and may

include data centers, food production space, convenience stores, and other facilities that the institution has determined to have an average energy use intensity (EUI) that is at least twice that of office/administrative space. Energy use intensity is a unit of measurement that represents the energy consumed by a building relative to its size, e.g., 1,000 MMBtu per square metre. For more information, see [ENERGY STAR Portfolio Manager Technical Reference: U.S. Energy Use Intensity by Property Type](#).

EUI-adjusted floor area

EUI-adjusted floor area is a figure that adjusts each institution's actual floor area to account for significant differences in energy use intensity (EUI) between types of building space. Energy use intensity is a unit of measurement that represents the energy consumed by a building relative to its size, for example 1,000 MMBtu per square metre.

STARS calculates the figure according to the following formula. Please note that users will not have to calculate this figure themselves; the result will be calculated automatically when data are entered into the online Reporting Tool.

$$\text{EUI-adjusted floor area} = \{ A + [2 \times (B + C)] + D \}$$

A = Gross floor area of building space (square feet/metres)

B = Floor area of laboratory space (square feet/metres)

C = Floor area of healthcare space (square feet/metres)

D = Floor area of other energy intensive space (square feet/metres)

Green-e

[Green-e](#), a program of the Center for Resource Solutions, is an independent certification and verification program for renewable energy and greenhouse gas emission reductions in the retail market. Green-e Climate is a voluntary certification program launched in 2008 that sets consumer-protection and environmental-integrity standards for greenhouse gas (GHG) emission reductions sold in the voluntary market. Green-e Energy is an independent certification and verification program for renewable energy.

Greenhouse Gas Protocol Corporate Standard

The GHG Protocol [Corporate Standard](#), developed by the World Resources Institute and the World Business Council for Sustainable Development, is the most widely used international accounting tool for quantifying GHG emissions. It provides the accounting framework for nearly every GHG program and standard in the world, including the Chicago Climate Exchange and the California Climate Action Registry.

Gross floor area of building space

Gross floor area of building space refers to the total amount of building space that is included within the institutional boundary. Any standard definition of building space may be used (e.g., ASHRAE, ANSI/BOMA, IECC) as long as it is used consistently. Parking structures are included. For guidance on calculating gross square footage of a building, you may also consult [3.2.1 Gross Area](#) of the U.S. Department of Education's *Postsecondary Education Facilities Inventory and Classification Manual*.

Buildings within the overall STARS boundary that the institution leases entirely (i.e., the institution is the only tenant) should be included.

Buildings that are not owned by the institution and in which the institution is one of multiple tenants may be excluded. If the institution chooses to include such buildings, it must include all multi-tenant buildings that are included in the institution's overall STARS boundary and in which the institution is a tenant; institutions cannot

choose to include some leased spaces and omit others. If an institution chooses to include leased spaces, the institution should count only the square footage of building space it occupies and not the entire building.

Guarantees of origin

A Guarantee of Origin (GO) is a certificate issued by European energy authorities to certify that electricity was produced from renewable energy sources.

Healthcare space

The total amount of building space within the institutional boundary that may be categorized as "Health Care Facilities" (e.g., codes in the 800 series under the [Space Use Codes](#) in the US Department of Education's Postsecondary Education Facilities Inventory and Classification Manual). To simplify reporting, institutions with hospitals may report all floor area within hospitals as healthcare space.

Institution-catalyzed carbon offsets

Institution-catalyzed carbon offsets are generated by what are commonly referred to as "local offsets" programs. In such programs, institutions offset their greenhouse gas emissions by implementing projects that reduce greenhouse gas emissions in the local community. For example, a local offsets program may engage students in weatherizing homes in the surrounding community. As part of the arrangement with the homeowner, the institution would "own" the emissions reductions that result from the program. Local projects that are to be used as offsets must be third party verified or, at minimum, quantified using a method that is consistent with the World Resources Institute's [GHG Protocol for Project Accounting](#).

Laboratory space

The total amount of building space within the institutional boundary that may be categorized as "research laboratories" (e.g., code 250 under the [Space Use Codes](#) in the US Department of Education's Postsecondary Education Facilities Inventory and Classification Manual). To simplify reporting, institutions may report all floor area within buildings that contain research laboratories as laboratory space.

Minimum performance threshold

Minimum performance thresholds are benchmarks against which campus performance may be assessed for scoring purposes. The thresholds used in this version of STARS were calculated at the first decile for institutions reporting under STARS 2.0 as of July 31, 2015 and rounded to the nearest hundredth. In other words, 90 percent of institutions rated under STARS 2.0 before July 31, 2015 performed better than the minimum threshold. Extreme outliers were excluded from the calculations.

Renewable energy certificates

Green-e provides the following [definition of Renewable Energy Certificates \(RECs\)](#) (also known as green tags, renewable energy credits, renewable electricity certificates, and tradable renewable certificates):

When a renewable energy facility operates, it creates electricity that is delivered into a vast network of transmission wires, often referred to as "the grid." The grid is segmented into regional power networks called pools. To help facilitate the sale of renewable electricity nationally, a system was established that separates renewable electricity generation into two parts: the electricity or electrical energy produced by a renewable generator and the renewable "attributes" of that generation. (These attributes include the tons of greenhouse gas that were avoided by generating electricity from renewable resources instead of conventional fuels, such as coal, nuclear, oil, or gas.) These renewable ("green") attributes are sold separately as renewable energy certificates (RECs). One REC is issued for each megawatt-hour (MWh) unit of renewable electricity produced. The electricity that was split from

the REC is no longer considered "renewable" and cannot be counted as renewable or zero-emissions by whoever buys it.

RECs contain specific information about the renewable energy generated, including where, when, at what facility, and with what type of generation. Purchasers of RECs are buying the renewable attributes of those specific units of renewable energy, which helps offset conventional electricity generation in the region where the renewable generator is located. In Europe, the equivalent of a REC is a Guarantee of Origin (GO). There are equivalents available in other regions as well.

Scope 1 and Scope 2 GHG Emissions

Scope 1 GHG emissions are direct GHG emissions occurring from sources that are owned or controlled by the institution. Scope 1 emission sources include:

- Combustion of fuels to produce electricity, steam, heat, or power using equipment in a fixed location such as boilers, burners, heaters, furnaces, incinerators
- Combustion fuels by institution-owned cars, tractors, buses, and other transportation devices

Scope 2 GHG emissions are indirect GHG emissions that are a consequence of activities that take place within the organizational boundaries of the institution, but that occur at sources owned or controlled by another entity. Scope 2 emission sources include purchased electricity, purchased heating, purchased cooling, and purchased steam.

Scope 3 GHG Emissions

Scope 3 GHG emissions are all indirect emissions not covered in Scope 2. Consistent with the [WRI Corporate Value Chain \(Scope 3\) Standard](#), Scope 3 GHG emissions sources include:

Upstream Scope 3 emissions

- Purchased goods and services
- Capital goods
- Fuel- and energy-related activities (not included in scope 1 or scope 2)
- Upstream transportation and distribution
- Waste generated in operations
- Business travel
- Commuting (employee and student)
- Upstream leased assets

Downstream Scope 3 emissions

- Downstream transportation and distribution
- Processing of sold products
- Use of sold products
- End-of-life treatment of sold products
- Downstream leased assets
- Franchises
- Investments

Third-party verified purchased carbon offsets

Third-party verified carbon offsets are purchased from outside vendors. The Verified Carbon Standard and the Gold Standard are two organizations that provide project-level third-party certification for carbon offsets. These

standards provide assurance that offsets are real, measured, permanent, verified, and beyond business-as-usual GHG emission reductions. Green-e Climate is a retail standard and certification for carbon offsets that requires use of high-quality offset project standards like VCS and Gold Standard and also provides assurances related to the accurate and exclusive sale and delivery of carbon offsets in the retail market.

Weighted campus user

“Weighted campus user” is a measurement of an institution’s population that is adjusted to accommodate how intensively certain community members use the campus. This figure is used to normalize resource consumption and environmental impact figures in order to accommodate the varied impacts of different population groups. For example, an institution where a high percentage of students live on campus would witness higher greenhouse gas emissions, waste generation, and water consumption figures than otherwise comparable non-residential institution since students’ residential impacts and consumption would be included in the institution’s totals.

STARS calculates the figure according to the following formula. Please note that users will not have to calculate this figure themselves; the result will be calculated automatically when the data are entered into the online Reporting Tool.

$$\text{Weighted campus users} = (A + B + C) + 0.75 [(D - A) + (E - B) - F]$$

- A= Number of students resident on-site
- B= Number of employees resident on-site
- C= Number of other individuals resident on-site and/or staffed hospital beds
- D= Total full-time equivalent student enrollment
- E= Full-time equivalent of employees (staff + faculty)
- F= Full-time equivalent of students enrolled exclusively in distance education

Scoring Example: Greenhouse Gas Emissions

Part 1

Example University has completed an inventory of its greenhouse gas emissions. The inventory covers Scope 1 and Scope 2 GHG emissions and is publicly available on the institution's website. The inventory also includes Scope 3 GHG emissions from the following categories:

- 1) Business travel
- 2) Commuting
- 3) Purchased goods and service (paper purchases)
- 4) Fuel- and energy-related activities (transmission and distribution losses)

The inventory has not been validated or verified by personnel who are independent of the GHG accounting and reporting process (internally or externally).

Components of the GHG Inventory	Points available	Points earned
Scope 1 and Scope 2 GHG emissions	1	<u>1</u>
Scope 3 GHG emissions from: • Business travel • Commuting • Purchased goods and services • Capital goods • Fuel- and energy-related activities • Waste generated in operations • Other sources	0.083 each	<u>0.332</u>
Validation or verification (internal and/or third party)	0.5	<u>0</u>
Total points earned →		<u>1.332</u>

Part 2

A. Adjusted net Scope 1 and 2 greenhouse gas emissions, baseline year:

- Metric tons of Scope 1 gross GHG emissions = 48,195
- Metric tons of Scope 2 gross GHG emissions = 11,475
- Metric tons of institution-catalyzed carbon offsets generated = 650

Baseline adjusted net Scope 1 and 2 greenhouse gas emissions

$$\begin{aligned}
 &= (48,195 + 11,475) - (650) \\
 &= 59,670 - 650 \\
 &= \mathbf{59,020 \text{ MtCO}_2 \text{ e}}
 \end{aligned}$$

B. Weighted campus users, baseline year:

- A. Number of students resident on-site = 5,800
- B. Number of employees resident on-site = 200
- C. Number of other individuals resident on-site and/or staffed hospital beds = 0
- D. Total full-time equivalent student enrollment = 6,750
- E. Full-time equivalent of employees = 1,200

F. Full-time equivalent of students enrolled in exclusively in distance education = 250

$$\begin{aligned}\text{Baseline weighted campus users} &= (a + b + c) + 0.75 [(d - a) + (e - b) - f] \\ &= (5,800 + 200 + 0) + 0.75 [(6,750 - 5,800) + (1,200 - 200) - (250)] \\ &= 6,000 + 0.75 (950 + 1,000 - 250) \\ &= 6,000 + 0.75 (1,700) \\ &= \mathbf{7,275}\end{aligned}$$

C. Adjusted net Scope 1 and 2 greenhouse gas emissions, performance year:

- Metric tons of Scope 1 gross GHG emissions = 42,133
- Metric tons of Scope 2 gross GHG emissions = 11,599
- Metric tons of institution-catalyzed carbon offsets generated = 4,400

$$\begin{aligned}\text{Performance year adjusted net Scope 1 and 2 greenhouse gas emissions} &= (42,133 + 11,599) - 4,400 \\ &= 53,732 - 4,400 \\ &= \mathbf{49,332 \text{ MtCO}_2\text{e}}\end{aligned}$$

D. Weighted campus users, performance year:

- A. Number of students resident on-site = 6,000
- B. Number of employees resident on-site = 180
- C. Number of other individuals resident on-site and/or staffed hospital beds = 0
- D. Total full-time equivalent student enrollment = 7,000
- E. Full-time equivalent of employees = 1,200
- F. Full-time equivalent of students enrolled exclusively in distance education = 350

$$\begin{aligned}\text{Performance year weighted campus users} &= (a + b + c) + 0.75 [(d - a) + (e - b) - f] \\ &= (6,000 + 180 + 0) + 0.75 [(7,000 - 6,000) + (1,200 - 180) - (350)] \\ &= 6,180 + 0.75 (1,000 + 1,020 - 350) \\ &= 6,180 + 0.75 (1,670) \\ &= \mathbf{7,432.5}\end{aligned}$$

Calculating Points Earned for Part 2

$$\begin{aligned}\text{Points earned} &= 4 \times \{ [(A/B) - (C/D)] / (A/B) \} \\ &= 4 \times \{ [(59,020 / 7,275) - (49,332 / 7,432.5)] / (59,020 / 7,275) \} \\ &= 4 \times \{ [8.11 - 6.64] / 8.11 \} \\ &= 4 \times \{ 1.47 / 8.11 \} \\ &= 4 \times 0.182 \\ &= \mathbf{0.73 \text{ points}}\end{aligned}$$

Part 3

EUI-Adjusted Floor Area

- A. Gross floor area of building space = 4,000,000 ft²
- B. Floor area of laboratory space = 80,000 ft²

- C. Floor area of healthcare space = 0 ft²
- D. Floor area of other energy intensive space = 24,000 ft²

$$\begin{aligned}
 \text{EUI-adjusted floor area} &= \{ A + [2 \times (B + C)] + D \} \\
 &= \{ 4,000,000 + [2 \times (80,000 + 0)] + 24,000 \} \\
 &= 4,000,000 + [2 \times 80,000] + 24,000 \\
 &= 4,000,000 + 184,000 \\
 &= \mathbf{4,184,000}
 \end{aligned}$$

Calculating Points Earned for Part 3

- A. Minimum performance threshold = 0.02 MtCO₂e/ ft²
- B. Adjusted net Scope 1 and 2 greenhouse gas emissions, performance year = 49,332 Mt CO₂e
- C. EUI-adjusted floor area, performance year = 4,184,000 ft²

$$\begin{aligned}
 \text{Points earned} &= 4 \times \{ [A - (B/C)] / A \} \\
 &= 4 \times \{ [0.02 - (49,332/4,184,000)] / 0.02 \} \\
 &= 4 \times \{ [0.02 - (.0118)] / 0.02 \} \\
 &= 4 \times \{ 0.0082 / 0.02 \} \\
 &= 4 \times 0.41 \\
 &= \mathbf{1.64} \text{ points}
 \end{aligned}$$

OP 2: Outdoor Air Quality

1 point available

A. Credit Rationale

This credit recognizes institutions that are working to protect ecosystems and human health by minimizing atmospheric pollution and protecting outdoor air quality. Conducting an inventory of air emissions is helpful in determining compliance with international conventions and national regulations, identifying significant emissions, and acting to minimize those emissions.

B. Criteria

Part 1

Institution has written policies or guidelines to improve outdoor air quality and minimize air pollutant emissions from [mobile sources](#) on campus. Policies and/or guidelines may include prohibiting vehicle idling, restrictions on the use of powered lawn care equipment, and similar strategies.

Policies and guidelines that support cleaner and more fuel-efficient fleet vehicles and more sustainable commuting options are covered by credits in the Transportation subcategory.

Policies adopted by entities of which the institution is part (e.g., government or university system) may count for Part 1 of this credit as long as the policies apply to and are followed by the institution.

Part 2

Institution has completed an inventory of [significant air emissions](#) from [stationary sources](#) on campus or else verified that no such emissions are produced. Significant emissions include nitrogen oxides (NO_x), sulfur oxides (SO_x), and other standard categories of air emissions identified in environmental permits held by the institution, international conventions, and/or national laws or regulations.

C. Applicability

This credit applies to all institutions.

D. Scoring

Each part is scored independently.

Part 1

Institutions earn the maximum of 0.5 points available for Part 1 of this credit for having policies or guidelines in place to improve outdoor air quality and minimize air pollutant emissions from mobile sources. Partial points are not available for Part 1 of this credit.

Part 2

Institutions earn the maximum of 0.5 points available for Part 2 of this credit by having completed an inventory of significant air emissions from stationary campus sources or else verified that no such emissions are produced. Partial points are not available for Part 2 of this credit.

E. Reporting Fields

Required

- ☐ Does the institution have policies and/or guidelines in place to improve outdoor air quality and minimize air pollutant emissions from mobile sources on campus (e.g., prohibiting vehicle idling, restrictions on the use of powered lawn care equipment, and similar strategies for minimizing on-site mobile emissions)?

If yes, provide:

- ☐ A brief description of the policies and/or guidelines to improve outdoor air quality and minimize air pollutant emissions from on-site mobile sources
- ☐ Has the institution completed an inventory of significant air emissions from stationary campus sources or else verified that no such emissions are produced?

If yes, provide the following:

- ☐ Weight of emissions (short tons/tonnes) for:
 - ☐ Nitrogen oxides (NO_x)
 - ☐ Sulfur Oxides (SO_x)
 - ☐ Carbon monoxide (CO)
 - ☐ Particulate matter (PM)
 - ☐ Ozone (O₃)
 - ☐ Lead (Pb)
 - ☐ Hazardous air pollutants (HAPs)
 - ☐ Ozone-depleting compounds (ODCs)
 - ☐ Other standard categories of air emissions identified in permits and/or regulations
 - ☐ A brief description of the methodology(ies) the institution used to complete its air emissions inventory

Optional

- ☐ The website URL where information about the programs or initiatives is available
- ☐ Additional documentation to support the submission (upload)
- ☐ Data source(s) and notes about the submission
- ☐ Contact information for a responsible party (a staff member, faculty member, or administrator who can respond to questions regarding the data once it is submitted and available to the public)

F. Measurement

Timeframe

Part 1

Report on current programs, policies and practices at the time of submission.

Part 2

Report inventories of annual emissions completed or updated within the three years prior to the anticipated date of submission.

Sampling and Data Standards

Part 1

Not applicable

Part 2

To the extent possible, report all significant air emissions generated by stationary sources within the institutional boundary when reporting for this credit. There are a number of methodologies for measuring air emissions, including direct measurement, calculation based on site-specific data and/or published criteria, and estimation (see for example, U.S. EPA document [AP-42](#) and [tools](#)). If data for all sources and/or an entire year are not available, institutions may use representative samples.

G. Standards and Terms

Emissions inventory

An emissions inventory is a list of emissions sources and estimates of emissions from these sources.

Mobile sources

Mobile sources of air pollutants includes emissions from cars, buses, car, tractor engines, lawn care equipment, and other motor vehicles, engines and equipment that can be moved from one location to another.

Significant air emissions

Significant air emissions include sources that are regulated under international conventions and/or national laws or regulations, including those listed on environmental permits for the institution's operations. For example, according to the [Environmental Resource Center for Higher Education](#), campus operations that are regulated under the various programs of the U.S. Clean Air Act, or that may produce regulated emissions, include:

- Boilers, emergency generators, and other combustion sources
- Bakeries
- Paint booths
- Book preservation operations
- Degreasing operations
- Petroleum storage tanks
- Art studios and other production facilities
- Chillers and HVAC equipment
- Wastewater treatment plants
- Swimming pools disinfected with chlorine gas
- Ammonia refrigeration plants
- Offsite waste and recovery operations (OSWROs)
- Hospital/medical/infectious waste incinerators (HMIWIs)
- Publicly owned treatment works (POTWs)
- Pharmaceuticals production
- Printing/publishing

Stationary sources

Stationary sources of air pollutant emissions include boilers, furnaces, generators and other significant, non-moving sources of air emissions. (Generators are considered to be stationary sources, even though they may be portable).

Buildings

This subcategory seeks to recognize institutions that are taking steps to improve the sustainability performance of their buildings. Buildings are generally the largest user of energy and the largest source of greenhouse gas emissions on campuses. Buildings also use significant amounts of potable water. Institutions can design, build, and maintain buildings in ways that provide a safe and healthy indoor environment for inhabitants while simultaneously mitigating the building's impact on the outdoor environment.

Credits

Points available: 8

OP 3	Building Operations and Maintenance*	5
OP 4	Building Design and Construction*	3

* credit does not apply to all institutions

Share your story

The My Submission section of the online Reporting Tool includes an optional reporting field for the institution to provide an overview of notable activities and accomplishments in this subcategory. This information is featured in the institution's public report.

- ☐ A brief summary of the institution's notable activities and accomplishments relevant to this subcategory

OP 3: Building Operations and Maintenance

5 points available

A. Credit Rationale

This credit recognizes institutions that operate and maintain their buildings in ways that protect the health of building occupants and the environment. An institution's existing building stock is typically the largest source of campus energy consumption and greenhouse gas emissions. By adopting and following a sustainable operations and maintenance framework, institutions can conserve energy and water, minimize impacts on the surrounding site, reduce waste and water consumption, promote indoor environmental quality, and support markets for environmentally preferable materials while providing healthy and productive work, learning, and living spaces. While other credits also capture many of the impacts of green buildings (e.g., on campus energy consumption and water use), this credit specifically recognizes institutions that have comprehensive sustainable operations and maintenance programs and that pursue third party certification for those programs.

B. Criteria

Institution owns and operates buildings that are:

- 1) Certified under a green building rating system focused on the operations and maintenance of existing buildings, e.g., [LEED®](#): Building Operations + Maintenance (O+M)

And/or

- 2) Operated and maintained in accordance with published sustainable operations and maintenance guidelines and policies that include one or more of the following:
 - [Indoor air quality \(IAQ\) management](#) policy or protocol
 - Green cleaning policy, program or contract
 - Energy management or benchmarking program
 - Water management or benchmarking program

Energy and water management and benchmarking programs include dashboards, analytics tools, and other mechanisms to assess performance, set goals, create and implement action plans, and evaluate progress. See, for example [ENERGY STAR Guidelines for Energy Management](#) and [U.S. EPA Portfolio Manager](#).

Building space that meets multiple criteria listed above should not be double-counted.

Building space that is certified under a green building rating system for new construction and major renovation must also be certified under a rating system focusing on operations and maintenance to count as certified space for this credit. For example, a building that is certified under LEED: Building Design + Construction (BD+C) but not LEED: Building Operations + Maintenance (O+M) should not be counted as certified space. Sustainability in new construction and major renovation projects is covered in the *Building Design and Construction* credit.

C. Applicability

This credit applies to all institutions that have occupied building space that is eligible for certification under a green building rating system for existing buildings. See "[Eligible building space \(operations and maintenance\)](#)" in *G. Standards and Terms*.

D. Scoring

Institutions earn the maximum of 5 points available for this credit by having all eligible building space certified at the highest achievable level under a rating system for existing buildings used by an [Established Green Building Council \(GBC\)](#) in the institution's locality, e.g., LEED O+M, certification level Platinum. Incremental points are awarded based on the percentage of building space that is certified at each level and/or maintained in accordance with sustainable operations and maintenance policies (see tables below). For example, an institution that had 100 percent of its eligible building space certified at the minimum level would earn 2.5 points for this credit, while an institution that had 50 percent of its eligible building space certified at the minimum level would earn 1.25 points.

Points for **certified space** are calculated automatically in the STARS Reporting Tool as follows:

Operations and maintenance level	Factor	Multiply	Floor area of building space certified at each level	Divide	Total floor area of building space	Equals	Points earned
Certified LEED O+M Platinum or at the highest achievable level under another GBC rating system	5	×	_____	÷	_____	=	
Certified LEED O+M Gold or at the 2nd highest level under another 4- or 5-tier GBC rating system	4		_____				
Certified at mid-level under a 3- or 5-tier GBC rating system (e.g., BREEAM-In Use, CASBEE for Existing Buildings, DGNB, Green Star Performance)	3.5		_____				
Certified LEED O+M Silver or at a step above minimum level under another 4 -or 5-tier GBC rating system	3		_____				
LEED O+M Certified or certified at minimum level under another GBC rating system	2.5		_____				
Certified at any level under a non-GBC rating system (e.g., BOMA BEST, Green Globes CIEB)	2.5		_____				
Total points earned for certified space ➔							Up to 5

Points for **uncertified space** are calculated automatically in the STARS Reporting Tool as follows:

Floor area of uncertified space = (Total floor area of building space) - (Floor area of certified space)

Maintained under a(n):	Factor		Percentage of uncertified space maintained under each policy or program (0-100)		Floor area of uncertified space		Total floor area of building space		Points earned
Indoor air quality (IAQ) management policy or protocol	0.005	×	_____	×	_____	÷	_____	=	
Green cleaning policy, program or contract	0.005		_____						
Energy management or benchmarking program	0.005		_____						
Water management or benchmarking program	0.005		_____						
Total points earned for uncertified space ➔									Up to 2

E. Reporting Fields

Required

- ☐ Total floor area of building space (square feet/square metres)
- ☐ Floor area of building space that is certified at each level under a green building rating system for the operations and maintenance of existing buildings used by an Established Green Building Council (square feet/square metres):
 - ☐ Certified LEED O+M Platinum or at the highest achievable level under another GBC rating system for the operations and maintenance of existing buildings
 - ☐ Certified LEED O+M Gold or at the 2nd highest level under another 4- or 5-tier GBC rating system for the operations and maintenance of existing buildings
 - ☐ Certified at mid-level under a 3- or 5-tier GBC rating system for the operations and maintenance of existing buildings (e.g., DGNB, Green Star Performance, BREEAM-In Use, CASBEE for Existing Buildings)
 - ☐ Certified LEED O+M Silver or at a step above minimum level under another 4 -or 5–tier GBC rating system for the operations and maintenance of existing buildings
 - ☐ LEED O+M Certified or certified at minimum level under another GBC rating system for the operations and maintenance of existing buildings

- Floor area of building space that is certified under a non-GBC rating system for the operations and maintenance of existing buildings, e.g., BOMA BEST, Green Globes CIEB (square feet/square metres)

If reporting certified space, provide:

- A brief description of the green building rating system(s) used and/or a list or sample of certified buildings and ratings

If reporting uncertified space:

- Of the institution's uncertified building space, what percentage of floor area is maintained in accordance with the following?
 - A published indoor air quality (IAQ) management policy or protocol (0-100)
 - A published green cleaning policy, program or contract (0-100)
 - An energy management or benchmarking program (0-100)
 - A water management or benchmarking program (0-100)

If reporting an IAQ management policy or protocol, provide:

- A copy of the IAQ management policy or protocol or the website where the policy/protocol may be found (upload or URL)

If reporting a green cleaning policy, program or contract, provide:

- A copy of the green cleaning policy or a brief description of how green cleaning is incorporated into cleaning contracts (upload or text)

If reporting an energy management or benchmarking program, provide:

- A brief description of the energy management or benchmarking program

If reporting a water management or benchmarking program, provide:

- A brief description of the water management or benchmarking program

Optional

- The website URL where information about the programs or initiatives is available
- Additional documentation to support the submission (upload)
- Data source(s) and notes about the submission
- Contact information for a responsible party (a staff member, faculty member, or administrator who can respond to questions regarding the data once it is submitted and available to the public)

F. Measurement

Timeframe

Report on the current certification status of buildings at the time of submission.

Buildings for which certification has lapsed should not be counted as certified space. Likewise, buildings for which certification is pending should not be counted as certified space; these buildings may be excluded from the calculations for this credit for up to 2 years following registration with LEED or another rating system. Finally, buildings that have been certified under a rating system that focuses on design and construction (e.g.,

LEED BD+C) may be excluded from the calculations for this credit for up to 5 years following the date of certification.

Sampling and Data Standards

Include all [eligible building space \(operations and maintenance\)](#) as defined in *G. Standards and Terms* that is part of the institution's overall STARS institutional boundary. Reporting on a sample or subset of eligible building space is not allowed for this credit.

An institution may use any standard definition of floor area (e.g., ASHRAE, ANSI/BOMA, IECC), as long as it uses the same definition for both the total floor area of eligible building space and the floor area of building space that is certified and/or sustainably operated and maintained.

Buildings that are not owned by the institution and in which the institution is one of multiple tenants may be excluded. If the institution chooses to include such buildings, it must include all multi-tenant buildings that are included in the institution's overall STARS boundary (see *Institutional Characteristics*) and in which the institution is a tenant; institutions cannot choose to include some leased spaces and omit others. If an institution chooses to include leased spaces, the institution should count only the square footage of building space it occupies and not the entire building.

Buildings that the institution leases entirely (i.e., the institution is the only tenant) should be included.

G. Standards and Terms

Eligible building space (operations and maintenance)

"Eligible building space (operations and maintenance)" includes the total floor area of all building space that is eligible for certification under a rating system for existing buildings. To be included, building space must meet the minimum program requirements of a rating system for existing buildings. See, for example, [LEED O+M Minimum Program Requirements](#). Buildings that do not meet minimum program requirements and are therefore ineligible for certification under a green building rating system for existing buildings (e.g., unoccupied buildings such as parking garages, and buildings that serve less than 1 Full Time Equivalent occupant) should be excluded.

Established Green Building Council

An [Established Green Building Council](#) (GBC) has been granted 'Established' membership status by the World Green Building Council (WGBC). Rating systems for existing buildings used by Established GBCs include LEED, BREEAM, CASBEE, DGNB, Green Star, and IGBC. Further information about GBCs and rating systems/tools is available on the [WGBC website](#).

Green cleaning

Green cleaning refers to the use of cleaning products and methods that are safer for human health and the environment than conventional, chemical-based cleaning products and methods. A green cleaning program includes established policies and procedures and staff training in safe, effective and ecologically preferable cleaning practices.

Indoor air quality management

An indoor air quality (IAQ) management policy or protocol should be consistent with the U.S. Environmental Protection Agency's [Indoor Air Quality Building Education and Assessment Model \(I-BEAM\)](#) and/or ASHRAE's *Large Building Guidance on Indoor Air Quality* and include, at minimum:

- Regular auditing or monitoring,

- A mechanism for occupants to register complaints, and
- Action plans to implement any corrective measures required in response to audits, monitoring or complaints.

LEED

LEED (Leadership in Energy and Environmental Design) is described by the U.S. Green Building Council as “a voluntary, consensus-based, market-driven program that provides third-party verification of green buildings”. LEED rating systems include Building Design + Construction (BD+C), Interior Design + Construction (ID+C), Building Operations + Maintenance (O+M), and Neighborhood Development (ND).

Scoring Example: Building Operations and Maintenance

Calculating points earned for certified space

Example University owns and operates 100,000 ft² of existing, occupied building space. Of that, the following buildings that are certified under LEED O+M::

- 20,000 ft² building that is certified under LEED for Existing Buildings: O+M, certification level Silver.
- 20,000 ft² building that is certified under LEED for Existing Buildings: O+M, certification level Gold.
- 10,000 ft² building that is certified under LEED for Existing Buildings: O+M, certification level Platinum.

Operations and maintenance level	Factor	Multiply	Floor area of building space certified at each level	Divide	Total floor area of eligible building space	Equals	Points earned
LEED O+M Platinum Certified	5	×	<u>10,000</u>	÷	<u>100,000</u>	=	0.5
LEED O+M Gold Certified	4		<u>20,000</u>				0.8
LEED O+M Silver Certified	3		<u>20,000</u>				0.6
LEED O+M Certified	2.5		<u>0</u>				0
Certified at any level under a non-GBC rating system (e.g., BOMA BEST, Green Globes CIEB)	2.5		<u>0</u>				0
Total points earned for certified space ➡							1.9

Scoring Example: Building Operations and Maintenance

Calculating points earned for certified space

Example University owns and operates 100,000 ft² of existing, occupied building space. Of that, the following buildings that are certified under LEED O+M::

- 20,000 ft² building that is certified under LEED for Existing Buildings: O+M, certification level Silver.
- 20,000 ft² building that is certified under LEED for Existing Buildings: O+M, certification level Gold.
- 10,000 ft² building that is certified under LEED for Existing Buildings: O+M, certification level Platinum.

Operations and maintenance level	Factor	Multiply	Floor area of building space certified at each level	Divide	Total floor area of eligible building space	Equals	Points earned
LEED O+M Platinum Certified	5	×	<u>10,000</u>	÷	<u>100,000</u>	=	0.5
LEED O+M Gold Certified	4		<u>20,000</u>				0.8
LEED O+M Silver Certified	3		<u>20,000</u>				0.6
LEED O+M Certified	2.5		<u>0</u>				0
Certified at any level under a non-GBC rating system (e.g., BOMA BEST, Green Globes CIEB)	2.5		<u>0</u>				0
Total points earned for certified space ➡							1.9

Calculating points earned for uncertified space

In addition to the certified space reported above, Example University owns and operates the following buildings:

- 5,000 ft² building managed under an IAQ policy and a green cleaning contract
- 10,000 ft² building managed under an IAQ policy and a green cleaning contract
- 10,000 ft² building managed under an IAQ policy and a green cleaning contract
- 20,000 ft² building managed under an IAQ policy, a green cleaning contract, and an energy and water benchmarking program
- 5,000 ft² building managed under an IAQ policy, a green cleaning contract, and an energy and water benchmarking program

Floor area of uncertified space = (Total floor area of building space) - (Floor area of certified space)
 = 100,000 - 50,000
 = 50,000 ft²

Maintained under a(n):	Factor	Percentage of uncertified space	Floor area of uncertified	Total floor area of	Points earned
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			maintained under each policy or program (0- 100)		space		building space		
Indoor air quality (IAQ) management policy or protocol	0.005	×	<u>100</u>	×	<u>50,000</u>	÷	<u>100,000</u>	=	0.25
Green cleaning policy, program or contract	0.005		<u>100</u>						0.25
Energy management or benchmarking program	0.005		<u>50</u>						0.125
Water management or benchmarking program	0.005		<u>50</u>						0.125
Total points earned for uncertified space →									0.75

Total points earned for the credit = 1.9 + 0.75
= 2.65

OP 4: Building Design and Construction

3 points available

A. Credit Rationale

This credit recognizes institutions that have incorporated environmental features into their design and construction projects. Decisions made during the design phase, such as where to locate the building and how it is oriented, can yield significant energy savings and reduce impacts on the site. By designing and building for enhanced indoor environmental quality (IEQ), institutions can ensure their buildings provide safe, healthy, and productive spaces for the campus community. While other credits also capture many of the impacts of green buildings (e.g., on campus energy consumption and water use), this credit recognizes institutions that have comprehensive green construction and renovation programs and that pursue third party certification of new campus buildings.

B. Criteria

Institution-owned buildings that were constructed or underwent major renovations in the previous five years are:

- 1) Certified under a green building rating system for new construction and major renovations, e.g., [LEED®](#): Building Design & Construction (BD+C)
 - 2) Certified Living under the [Living Building Challenge](#)
- And/or
- 3) Designed and built in accordance with published [green building codes](#), guidelines and/or policies that cover one or more of the following:
 - Impacts on the surrounding site (e.g., guidelines to reuse previously developed land, protect environmentally sensitive areas, and otherwise minimize site impacts)
 - Energy consumption (e.g., policies requiring a minimum level of energy efficiency for buildings and their systems)
 - Building-level energy metering
 - Use of environmentally preferable materials (e.g., guidelines to minimize the life cycle impacts associated with building materials)
 - Indoor environmental quality (i.e., guidelines to protect the health and comfort of building occupants)
 - Water consumption (e.g., requiring minimum standards of efficiency for indoor and outdoor water use)
 - Building-level water metering

Building space that meets multiple criteria listed above should not be double-counted.

C. Applicability

This credit applies to institutions that have new construction and renovation projects completed within the previous five years that are eligible for certification under a green building rating system for new construction. See “[Eligible building space \(design and construction\)](#)” in *G. Standards and Terms*.

D. Scoring

Institutions earn the maximum of 3 points for this credit by having all eligible building space completed during the previous five years certified at the highest achievable level under a green building rating system for new construction and major renovations used by an [Established Green Building Council \(GBC\)](#) (e.g., LEED BD+C, certification level Platinum) and/or certified Living under the Living Building Challenge. Incremental points are awarded based on the percentage of eligible building space that is certified at various levels and/or designed and constructed in accordance with green building policies or guidelines. For example, an institution that had 100 percent of its eligible building space certified at the minimum level would earn 1.5 points for this credit, while an institution that had 50 percent of its eligible building space certified at the minimum level would earn 0.75 points.

Points for this credit are calculated automatically in the STARS Reporting Tool as follows:

Design and construction level	Factor	Multiply	Floor area of building space certified at each level	Divide	Total floor area of newly constructed and renovated building space	Equals	Points earned
Certified Living under the Living Building Challenge	3.5	×	_____	÷	_____	=	
Certified LEED BD+C Platinum or at the highest achievable level under another GBC rating system	3		_____				
Certified LEED BD+C Gold or at the 2nd highest level under another 4- or 5-tier GBC rating system	2.5		_____				
Certified at mid-level under a 3- or 5-tier GBC rating system (e.g., BREEAM, CASBEE, DGNB, Green Star)	2		_____				
Certified LEED BD+C Silver or at a step above minimum level under another 4- or 5-tier GBC rating system	1.875		_____				
LEED BD+C Certified or certified at minimum level under another GBC rating system	1.5		_____				
Certified at any level under a non-GBC rating system (e.g., Green Globes NC, Certified Passive House)	1.5		_____				
Not certified, but constructed according to green building guidelines or policies	0.18 - 1.25*		_____				
Total points earned ➔							Up to 3

* The factor used to calculate points earned for an institution reporting floor area that is not certified, but that was designed and constructed in accordance with published green building design and construction guidelines and policies varies as follows:

Institution's published green building design and construction guidelines and policies cover:	Factor	Factor to be applied
Impacts on the surrounding site	0.18	
Energy consumption	0.18	
Building-level energy metering	0.18	
Usage of environmentally preferable materials	0.18	
Indoor environmental quality	0.18	
Water consumption	0.18	
Building-level water metering	0.18	
Total factor to be applied →		Up to 1.25

E. Reporting Fields

Required

- ❑ Total floor area of newly constructed or renovated building space (include projects completed within the previous five years) (square feet/metres)
- ❑ Floor area of newly constructed or renovated building space certified Living under the Living Building Challenge (square feet/metres)
- ❑ Floor area of newly constructed or renovated building space certified at each level under a rating system for design and construction used by an Established Green Building Council (GBC) (square feet/metres):
 - Certified LEED BD+C Platinum or at the highest achievable level under another GBC rating system for design and construction
 - Certified LEED BD+C Gold or at the 2nd highest level under another 4- or 5-tier GBC rating system for design and construction
 - Certified at mid-level under a 3- or 5-tier GBC rating system for design and construction (e.g., BREEAM, CASBEE, DGNB, Green Star)
 - Certified LEED BD+C Silver or at a step above minimum level under another 4- or 5-tier GBC rating system for design and construction
 - LEED BD+C Certified or certified at minimum level under another GBC rating system for design and construction

- Floor area of newly constructed or renovated building space certified under a non-GBC rating system for design and construction (e.g., Green Globes NC, Certified Passive House) (square feet/metres)

If reporting certified space, provide:

- A brief description of the green building rating system(s) used and/or a list of certified buildings and ratings
- Floor area of newly constructed or renovated building space that is NOT certified, but that was designed and constructed in accordance with published green building guidelines and policies (square feet/metres)

If reporting published green building guidelines or policies, provide:

- A copy of the green building guidelines or policies (text or upload)
- Do the green building guidelines or policies cover the following?
 - Impacts on the surrounding site (e.g., guidelines to reuse previously developed land, protect environmentally sensitive areas, and otherwise minimize site impacts)
 - Energy consumption (e.g., policies requiring a minimum level of energy efficiency for buildings and their systems)
 - Building-level energy metering
 - Use of environmentally preferable materials (e.g., guidelines to minimize the life cycle impacts associated with building materials)
 - Indoor environmental quality (i.e., guidelines to protect the health and comfort of building occupants)
 - Water consumption (e.g., requiring minimum standards of efficiency for indoor and outdoor water use)
 - Building-level water metering
- A brief description of the green building guidelines or policies and/or a list or sample of buildings covered
- A brief description of how the institution ensures compliance with green building design and construction guidelines and policies

Optional

- The website URL where information about the programs or initiatives is available
- Additional documentation to support the submission (upload)
- Data source(s) and notes about the submission
- Contact information for a responsible party (a staff member, faculty member, or administrator who can respond to questions regarding the data once it is submitted and available to the public)

F. Measurement

Timeframe

Report on the current certification status of buildings at the time of submission. Buildings for which certification is pending should not be counted as certified space, and these buildings may be excluded from the institution's profile for up to 2 years following registration with a rating system.

This credit focuses on buildings for which construction was completed within the five years prior to the anticipated date of submission.

Sampling and Data Standards

Include all buildings that meet the criteria for [eligible building space \(design and construction\)](#) as defined in *G. Standards and Terms*; reporting on a sample or subset of buildings is not allowed.

An institution may use any standard definition of floor area (e.g., ASHRAE, ANSI/BOMA, IECC), as long as it uses the same definition for both the total floor area of eligible building space and the floor area of building space that is certified and/or sustainably designed and constructed.

G. Standards and Terms

Eligible building space (design and construction)

"Eligible building space (design and construction)" includes the total floor area of all building space that is eligible for certification under a green building rating system for new construction and for which construction or major renovation was completed during the previous 5 years. To be included, building space must meet the minimum program requirements of a rating system for new construction and major renovations. See, for example [LEED BD+C Minimum Program Requirements](#) and other LEED ratings systems for new construction and major renovation: Core & Shell, Schools, Retail, Hospitality, Data Centers, Warehouses & Distribution Centers, Healthcare, Commercial Interiors, and Retail and Hospitality.

Projects that are not intended for occupancy and/or are designed to serve less than 1 Full Time Equivalent (FTE) occupant should be excluded (e.g., parking garages and sheds).

Established Green Building Council

An [Established Green Building Council](#) (GBC) has been granted 'Established' membership status by the World Green Building Council (WGBC). Rating systems for existing buildings used by Established GBCs include LEED, BREEAM, CASBEE, DGNB, Green Star, and IGBC. Further information about GBCs and rating systems/tools is available on the [WGBC website](#).

Green building codes

Consistent with the [U.S. Department of Energy](#), green building codes:

...go beyond minimum code requirements, raising the bar for energy efficiency. They can serve as a proving ground for future standards, and incorporate elements beyond the scope of the model energy codes, such as water and resource efficiency. As regional and national green building codes and programs become more available, they provide jurisdictions with another tool for guiding construction and development in an overall less impactful, more sustainable manner.

Examples include the International Green Construction Code (IgCC), ASHRAE Standard 189.1 for the Design of High-Performance Green Buildings, and regional codes such as the California Green Building Standards Code (CALGreen Code).

LEED

[LEED](#) (Leadership in Energy and Environmental Design) is described by the U.S. Green Building Council as “a voluntary, consensus-based, market-driven program that provides third-party verification of green buildings”. LEED rating systems include Building Design + Construction (BD+C), Interior Design + Construction (ID+C), Building Operations + Maintenance (O+M), and Neighborhood Development (ND).

Living Building Challenge

The Living Building Challenge (LBC) is a program of the [International Living Future Institute](#), a “non-governmental organization (NGO) committed to catalyzing a global transformation toward true sustainability”. The [Living Building Challenge](#), a philosophy, advocacy tool and certification program that addresses development at all scales. It is comprised of seven performance areas (Site, Water, Energy, Health, Materials, Equity and Beauty), which are further subdivided into a total of twenty Imperatives.

Scoring Example: Building Design and Construction

Example Community College has completed construction on the following four buildings in the past three years:

- 1) A 500 m² building that was not designed and built in accordance with formal green building policies or guidelines nor certified under a green building rating system.
- 2) A 1,000 m² building that was not certified, but that was designed and built in accordance with formal green building policies or guidelines that cover all of the topics outlined in *B. Criteria*.
- 3) A 500 m² building that is certified under LEED BD+C, certification level Silver.
- 4) A 2,000 m² building that is certified under LEED BD+C, certification level Platinum.

Total eligible building space = 500 m² + 1,000 m² + 500 m² + 2,000 m² = 4,000 m²

Design and construction level	Factor	Multiply	Floor area of building space certified at each level	Divide	Total floor area of newly constructed or renovated building space	Equals	Points earned
Certified Living under the Living Building Challenge	3.5	×	<u>0</u>	÷	<u>4,000</u>	=	0
LEED BD+C Platinum Certified	3		<u>2,000</u>				1.5
LEED BD+C Gold Certified	2.5		<u>0</u>				0
LEED BD+C Silver Certified	1.875		<u>500</u>				0.234
LEED BD+C Certified	1.5		<u>0</u>				0
Certified at any level under a non-GBC rating system (e.g., Green Globes NC, Certified Passive House)	1.5		<u>0</u>				0
Not certified, but constructed according to green building guidelines or policies	1.25*		<u>1,000</u>				0.313
Total points earned ➡							2.05

* The factor used to calculate points earned for an institution reporting floor area that is not certified, but constructed in accordance with formal green building guidelines and policies varies based on the extent of the guidelines and policies (see D. Scoring).

Energy

This subcategory seeks to recognize institutions that are reducing their energy consumption through conservation and efficiency, and switching to cleaner and renewable sources of energy such as solar, wind, geothermal, and low-impact hydropower. For most institutions, energy consumption is the largest source of greenhouse gas emissions, which cause global climate change. Global climate change is having myriad negative impacts throughout the world, including increased frequency and potency of extreme weather events, sea level rise, species extinction, water shortages, declining agricultural production, ocean acidification, and spread of diseases. The impacts are particularly pronounced for vulnerable and poor communities and countries. In addition to causing global climate change, energy generation from fossil fuels, especially coal, produces air pollutants such as sulfur dioxide, nitrogen oxides, mercury, dioxins, arsenic, cadmium and lead. These pollutants contribute to acid rain as well as health problems such as heart and respiratory diseases and cancer. Coal mining and oil and gas drilling can also damage environmentally and/or culturally significant ecosystems. Nuclear power creates highly toxic and long-lasting radioactive waste. Large-scale hydropower projects flood habitats and disrupt fish migration and can involve the relocation of entire communities.

Implementing conservation measures and switching to renewable sources of energy can help institutions save money and protect them from utility rate volatility. Renewable energy may be generated locally and allow campuses to support local economic development. Furthermore, institutions can help shape markets by creating demand for cleaner, renewable sources of energy.

Credits

Points available: 10

OP 5	Building Energy Consumption	6
OP 6	Clean and Renewable Energy	4

Share your story

The My Submission section of the online Reporting Tool includes an optional reporting field for the institution to provide an overview of notable activities and accomplishments in this subcategory. This information is featured in the institution's public report.

- ☐ A brief summary of the institution's notable activities and accomplishments relevant to this subcategory

OP 5: Building Energy Consumption

6 points available

A. Credit Rationale

This credit recognizes institutions that have reduced their building energy usage.

B. Criteria

Part 1

Institution has reduced its total building energy consumption per gross square foot/metre of floor area compared to a baseline.

Part 2

Institution's annual building energy consumption is less than the [minimum performance threshold](#) of 65 Btu per gross square foot per Fahrenheit degree day (389 Btu per gross square metre per Celsius degree day).

Performance for Part 2 of this credit is assessed using [EUI-adjusted floor area](#), a figure that accounts for significant differences in energy use intensity (EUI) between types of building space (see *G. Standards and Terms*).

C. Applicability

This credit applies to all institutions.

D. Scoring

Each part is scored independently. Points earned are calculated according to the formulas below. Please note that users do not have to calculate the number of points earned themselves; points will be calculated automatically when the data listed under *E. Reporting Fields* is entered in the online Reporting Tool.

Part 1

Institutions earn the maximum of 3 points available for Part 1 of this credit by reducing building energy consumption per gross square foot/metre of floor area by 50 percent compared to a baseline. Partial points are awarded based on the reduction achieved. For example, an institution that reduced building energy consumption per gross square foot/metre of floor area by 25 percent would earn 1.5 points (half of the points available for Part 1 of this credit).

Scoring for Part 1 is based on source energy, a figure that accounts for the energy used off-site to generate and transport grid-purchased electricity and district steam/hot water to the institution. For scoring purposes, grid-purchased electricity and district steam/hot water are converted to source energy through the use of an appropriate [source-site ratio](#).

The STARS Reporting Tool calculates total building energy consumption (source energy) according to the following formula:

$$\text{Total building energy consumption (source energy)} = (A \times B) + C + (D \times E) + F$$

A = Grid-purchased electricity (MMBtu)

B = Source-site ratio for grid-purchased electricity (see *F. Measurement*)

- C = Electricity from on-site renewables (MMBtu)
- D = District steam/hot water (MMBtu)
- E = Source-site ratio for district steam/hot water (see *F. Measurement*)
- F = Energy from all other sources (MMBtu)

Points earned for Part 1 of this credit are calculated according to the formula below. STARS awards only positive points; points will not be deducted if building energy consumption per gross square foot/metre of floor area increased rather than decreased during the time period.

$$\text{Points Earned} = 6 \times \{ [(A/B) - (C/D)] / (A/B) \}$$

- A = Total building energy consumption (source energy), baseline year (MMBtu)
- B = Gross floor area of building space, baseline year (gross square feet/metres)
- C = Total building energy consumption (source energy), performance year (MMBtu)
- D = Gross floor area of building space, performance year (gross square feet/metres)

Part 2

An institution earns the maximum of 3 points available for Part 2 when its annual building energy consumption is 90 percent or more below the minimum performance threshold of 65 Btu per gross square foot per Fahrenheit degree day (389 Btu per gross square metre per Celsius degree day).

Incremental points are awarded based on the institution's performance below the threshold. For example, an institution whose annual building energy consumption per gross square foot per degree day is 35.75 Btu (i.e., 45 percent below the 65 Btu threshold) would earn 1.5 points (half of the points available for Part 2).

Scoring for Part 2 of this credit is based on site energy and an [EUI-adjusted floor area](#) figure that accounts for significant differences in energy use intensity (EUI) between types of building space.

Points earned for Part 2 of this credit are calculated according to the following formula:

$$\text{Points Earned} = 3\frac{1}{3} \times \{ [(A) - (B/C)/D] / A \}$$

- A = Minimum performance threshold (in MMBtu per square foot/metre per degree day)
- B = Total building energy consumption (site energy), performance year (MMBtu)
- C = EUI-adjusted floor area, performance year (square feet/metres)
- D = Total degree days, performance year (heating + cooling)

E. Reporting Fields

Required

Part 1

- Figures needed to determine total building energy consumption during the performance year:
 - Grid-purchased electricity, performance year (MMBtu)
 - Electricity from on-site renewables, performance year (geothermal, low-impact hydro, solar, wave/tidal, or wind installations) (MMBtu)

- District steam/hot water, performance year (MMBtu)
- Energy from all other sources (excluding transportation fuels), performance year (e.g., natural gas, fuel oil, propane/LPG, district chilled water, coal/coke, biomass) (MMBtu)
- Total building energy consumption (all sources excluding transportation fuels), performance year (MMBtu)
- Figures needed to determine total building energy consumption during the baseline year:
 - Grid-purchased electricity, baseline year (MMBtu)
 - Electricity from on-site renewables, baseline year (geothermal, low-impact hydro, solar, wave/tidal, or wind installations) (MMBtu)
 - District steam/hot water, baseline year (MMBtu)
 - Energy from all other sources (excluding transportation fuels), baseline year (e.g., natural gas, fuel oil, propane/LPG, district chilled water, coal/coke, biomass) (MMBtu)
- Total building energy consumption (all sources excluding transportation fuels), baseline year (MMBtu)
- Start date, performance year or 3-year period
- End date, performance year or 3-year period
- Start date, baseline year or 3-year period
- End date, baseline year or 3-year period
- If end date of the baseline year/period is 2004 or earlier provide:*
 - A brief description of when and why the building energy consumption baseline was adopted (e.g., in sustainability plans and policies or in the context of other reporting obligations)
- Gross floor area of building space, performance year (gross square feet/metres)
- Gross floor area of building space, baseline year (gross square feet/metres)
- Source-site ratio for grid-purchased electricity (see *F. Measurement*)

Part 2

- Heating degree days, performance year (Fahrenheit degree days, base 65 °F / Celsius degree days, base 18 °C)
- Cooling degree days, performance year (Fahrenheit degree days, base 65 °F / Celsius degree days, base 18 °C)
- Floor area of laboratory space, performance year (square feet/metres)
- Floor area of healthcare space, performance year (square feet/metres)
- Floor area of other [energy intensive space](#), performance year (square feet/metres)

Optional

- Documentation (e.g., spreadsheet or utility records) to support the performance year energy consumption figures reported above (upload)
- A brief description of any of the following energy conservation and efficiency technologies or strategies employed by the institution:

- Initiatives to shift individual attitudes and practices in regard to energy efficiency (e.g., outreach and education efforts)
- Energy use standards and controls (e.g., building temperature standards, occupancy and vacancy sensors)
- Light Emitting Diode (LED) lighting and other energy-efficient lighting strategies
- Passive solar heating, geothermal systems, and related strategies
- Co-generation, e.g., combined heat and power (CHP)
- Initiatives to replace energy-consuming appliances, equipment and systems with high efficiency alternatives (e.g., building re-commissioning or retrofit programs)
- The website URL where information about the programs or initiatives is available
- Data source(s) and notes about the submission
- Contact information for a responsible party (a staff member, faculty member, or administrator who can respond to questions regarding the data once it is submitted and available to the public)

F. Measurement

Timeframe

Performance Year

Report the most recent data available from the three years prior to the anticipated date of submission. Institutions may use the most recent single year for which data is available or an average from throughout the period. Institutions may choose the annual start and end dates that work best with the data they have (e.g., fiscal or calendar year), as long as data are reported from a consecutive 12-month (or 3-year) period.

Report degree day and building space figures from the same time period as that from which energy consumption data are drawn (e.g., the consecutive 12-month or 3-year period that most closely overlaps with the building energy consumption performance period). Institutions may use average building space from throughout the period or a snapshot at a single representative point during the period.

Baseline Year

Report data from the baseline year, which may be:

- Any year from 2005 to the present
- A baseline year, 1990 to 2004, that the institution has adopted as part of its sustainability plans or policies or in the context of other reporting obligations

Recommended best practices for defining a baseline include:

- Using the average of three consecutive years to reduce the impact of outliers.
- Using the same baseline year for multiple credits to reduce reporting requirements. For example, institutions using 2005 for all STARS credits that are baseline-based would only have to calculate baseline weighted campus user data once.
- Ensuring that baseline and performance year data are valid and reliable (e.g., that the data were gathered in the same manner)

Institutions without valid and reliable historical data should use performance year data for both the baseline and performance year. Following this approach, an institution would not be able to claim points for reductions

during its first STARS submission, but would be able to use its newly established baseline for subsequent submissions.

Institutions may choose the start and end dates that work best with the data they have (e.g., fiscal or calendar year), as long as data are reported from a consecutive 12-month (or 3-year) period.

Report degree day and building space data from the same period as that from which energy consumption data are drawn (e.g., the consecutive 12-month or 3-year period that most closely overlaps with the building energy consumption baseline period). Institutions may use average building space from throughout the period or a snapshot at a single representative point during the period.

Sampling and Data Standards

Include all building energy consumption, i.e., all stationary energy that was consumed by the institution (as the institution is defined in the overall STARS institutional boundary). Transportation fuels are excluded. Reporting on a sample or subset of buildings is not allowed for this credit.

Institutions that convert fuel on-site (e.g., on-campus cogeneration facilities and boilers) should report only the amount of fuel purchased/converted toward the total energy consumption figure, not the resulting heat, steam, hot/chilled water or electricity.

All reported energy consumption figures should be based on site energy (the amount of energy consumed by campus buildings) rather than source energy (the amount of energy consumed on campus plus the energy used off-site to generate and transport the energy to the institution). Source energy will be calculated automatically when the data listed under *E. Reporting Fields* is entered in the online Reporting Tool,

Consistent with [U.S. EPA's Portfolio Manager](#) and available national standards, the following source-site ratios (i.e., primary energy factors) are used:

Energy Source	Canada	Australasia, Latin America	Europe	U.S., Africa, Asia
Grid-purchased electricity	2.05	2.25	2.50	3.14
Electricity from on-site renewables	1	1	1	1
District steam/hot water	1.20	1.20	1.20	1.20
Energy from all other sources	1	1	1	1

Institutions located outside the U.S. and Canada that have available national or regional primary energy factors (PEFs) for grid-purchased electricity may report those figures in lieu of the above and should document the source of the data in “Data source(s) and notes about the submission”. Please note that PEFs should be calculated on the basis that the PEF for on-site renewable energy equals 1 (as opposed to zero).

To aggregate energy consumption data from multiple sources, figures should be converted into MMBtu (one million British thermal units—a standard measure of energy) using the following equivalents:

Energy Unit	MMBtu Equivalent
1 kWh	0.003412
1 MWh	3.412
1 therm	0.1
1 kBtu	0.001
1 ton-hour	0.012
1 MJ	0.000948

A unit conversion tool that includes more detailed conversion factors (e.g., for liquid fuels) is [available in the online STARS Reporting Tool](#) (.xls).

Heating and cooling degree day data should use a base of 65 °F (18 °C) and be reported for the institution’s main campus location. Degree day data may be downloaded from [DegreeDays.net](#) (global data), [Weather Data Depot](#) (U.S. data), [U.S. NOAA/National Weather Service](#) (U.S. data), or another official source of national or international weather data.

G. Standards and Terms

Degree day

Degree days are a representation of outside air-temperature data widely used to normalize the effect of outside air temperature on building energy consumption. According to [Degree Days.net](#):

“Heating degree days”, or “HDD”, are a measure of how much (in degrees), and for how long (in days), outside air temperature was lower than a specific “base temperature” (or “balance point”). They are used for calculations relating to the energy consumption required to heat buildings.

“Cooling degree days”, or “CDD”, are a measure of how much (in degrees), and for how long (in days), outside air temperature was higher than a specific base temperature. They are used for calculations relating to the energy consumption required to cool buildings.

Energy intensive space

Energy intensive space includes “laboratory space”, “healthcare space”, and “other energy intensive space”. “Other energy intensive space” is reported separately from laboratory space and healthcare space and may include data centers, food production space, convenience stores, and other facilities that the institution has determined to have an average energy use intensity (EUI) that is at least twice that of office/administrative space. Energy use intensity is a unit of measurement that represents the energy consumed by a building relative to its size, e.g., 1,000 MMBtu per square metre. For more information, see [ENERGY STAR Portfolio Manager Technical Reference: U.S. Energy Use Intensity by Property Type](#).

EUI-adjusted floor area

EUI-adjusted floor area is a figure that adjusts each institution’s actual floor area to account for significant differences in energy use intensity (EUI) between types of building space. Energy use intensity is a unit of measurement that represents the energy consumed by a building relative to its size, for example 1,000 MMBtu per square metre.

STARS calculates the figure according to the following formula. Please note that users will not have to calculate this figure themselves; the result will be calculated automatically when data are entered into the online Reporting Tool.

$$\text{EUI-adjusted floor area} = \{ A + [2 \times (B + C)] + D \}$$

- A = Gross floor area of building space (square feet/metres)
- B = Floor area of laboratory space (square feet/metres)
- C = Floor area of healthcare space (square feet/metres)
- D = Floor area of other energy intensive space (square feet/metres)

Gross floor area of building space

Gross floor area of building space refers to the total amount of building space that is included within the institutional boundary. Any standard definition of building space may be used (e.g., ASHRAE, ANSI/BOMA, IECC) as long as it is used consistently. Parking structures are included. For guidance on calculating gross square footage of a building, you may also consult [3.2.1 Gross Area](#) of the U.S. Department of Education's *Postsecondary Education Facilities Inventory and Classification Manual*.

Buildings within the overall STARS boundary that the institution leases entirely (i.e., the institution is the only tenant) should be included.

Buildings that are not owned by the institution and in which the institution is one of multiple tenants may be excluded. If the institution chooses to include such buildings, it must include all multi-tenant buildings that are included in the institution's overall STARS boundary and in which the institution is a tenant; institutions cannot choose to include some leased spaces and omit others. If an institution chooses to include leased spaces, the institution should count only the square footage of building space it occupies and not the entire building.

Healthcare space

The total amount of building space within the institutional boundary that may be categorized as "Health Care Facilities" (e.g., codes in the 800 series under the [Space Use Codes](#) in the U.S. Department of Education's *Postsecondary Education Facilities Inventory and Classification Manual*). To simplify reporting, institutions with hospitals may report all floor area within hospitals as healthcare space.

Laboratory space

The total amount of building space within the institutional boundary that may be categorized as "research laboratories" (e.g., code 250 under the [Space Use Codes](#) in the U.S. Department of Education's *Postsecondary Education Facilities Inventory and Classification Manual*). To simplify reporting, institutions may report all floor area within buildings that contain research laboratories as laboratory space.

Minimum performance threshold

Minimum performance thresholds are benchmarks against which campus performance may be assessed for scoring purposes. The thresholds used in this version of STARS were calculated at the first decile for institutions reporting under STARS 2.0 as of July 31, 2015 and rounded to the nearest hundredth. In other words, 90 percent of institutions rated under STARS 2.0 before July 31, 2015 performed better than the minimum threshold. Extreme outliers were excluded from the calculations.

Source-site ratio

Also known as "primary energy factor (PEF)", the [U.S. Environmental Protection Agency](#) (EPA) defines source-site ratio in the following way:

Most building managers are familiar with site energy, the amount of heat and electricity consumed by a building as reflected in utility bills. Site energy may be delivered to a facility in one of two forms: primary and/or secondary energy. Primary energy is the raw fuel that is burned to create heat and electricity, such as natural gas or fuel oil used in onsite generation. Secondary energy is the energy product (heat or electricity) created from a raw fuel, such as electricity purchased from the grid or heat received from a district steam system. A unit of primary and a unit of secondary energy consumed at the site are not directly comparable because one represents a raw fuel while the other represents a converted fuel. Therefore, in order to assess the relative efficiencies of buildings with varying proportions of primary and secondary energy consumption, it is necessary to convert these two types of energy into equivalent units of raw fuel consumed to generate that one unit of energy consumed on-site. To achieve this equivalency, EPA uses the convention of source energy.

When primary energy is consumed on site, the conversion to source energy must account for losses that are incurred in the storage, transport and delivery of fuel to the building. When secondary energy is consumed on site, the conversion must account for losses incurred in the production, transmission, and delivery to the site. The factors used to restate primary and secondary energy in terms of the total equivalent source energy units are called the source-site ratios.

Scoring Example: Building Energy Consumption

The following data describe Example University (U.S.):

- Grid-purchased electricity, baseline year = 100,000 MMBtu
- Electricity from on-site renewables = 0 MMBtu
- District steam/hot water, baseline year = 0 MMBtu
- Energy from all other sources = 60,000 MMBtu
- Gross floor area of building space, baseline year = 2,000,000 ft²
- Grid-purchased electricity, performance year = 100,000 MMBtu
- Electricity from on-site renewables = 30,000 MMBtu
- District steam/hot water, performance year = 0 MMBtu
- Energy from all other sources = 40,000 MMBtu
- Gross floor area of building space, performance year = 2,500,000 ft²
- Total degree days (HDD + CDD), performance year = 6,000 degree-days (°F)

Part 1

Source Energy

Total building energy consumption (source energy) = (A × B) + C + (D × E) + F

A = Grid-purchased electricity (MMBtu)

B = Source-site ratio for grid-purchased electricity (3.14)

C = Electricity from on-site renewables (MMBtu)

D = District steam/hot water (MMBtu)

E = Source-site ratio for district steam/hot water (1.2)

F = Energy from all other sources (MMBtu)

Points Earned for Part 1

- A. Total building energy consumption, baseline year (source energy) = 374,000 MMBtu [(100,000 MMBtu grid-purchased electricity × 3.14) + 60,000 MMBtu from other sources]
- B. Gross floor area of building space, baseline year = 2,000,000 ft²
- C. Total building energy consumption, performance year (source energy) = 384,000 MMBtu [(100,000 MMBtu grid-purchased electricity × 3.14) + 70,000 MMBtu from other sources]
- D. Gross floor area of building space, performance year = 2,500,000 ft²

Points earned = $6 \times \{ [(A/B) - (C/D)] / (A/B) \}$

$$= 6 \times \{ [(374,000/2,000,000) - (384,000/2,500,000)] / (374,000/2,000,000) \}$$

$$= 6 \times [(0.187 - 0.1536) / 0.187]$$

$$= 6 \times (0.0334 / 0.187)$$

$$= 6 \times 0.1786 = \mathbf{1.07} \text{ points}$$

Part 2

EUI-Adjusted Floor Area

- A. Gross floor area of building space, performance year = 2,500,000 ft²
- B. Floor area of laboratory space, performance year = 200,000 ft²
- C. Floor area of healthcare space, performance year = 0
- D. Floor area of other energy intensive space, performance year = 100,000 ft²

$$\text{EUI-adjusted floor area} = \{ A + [2 \times (B + C)] + D \}$$

$$= \{ 2,500,000 + [2 \times (200,000 + 0)] + 100,000 \}$$

$$= \{ 2,500,000 + [2 \times (200,000)] + 100,000 \}$$

$$= 2,500,000 + 400,000 + 100,000$$

$$= 3,000,000 \text{ ft}^2$$

Points Earned for Part 2

- A. Minimum performance threshold = 65 Btu per square foot per degree day (i.e., .000065 MMBtu)
- B. Total building energy consumption, performance year = 170,000 MMBtu
- C. EUI-adjusted floor area, performance year = 3,000,000 ft²
- D. Total degree days (HDD + CDD), performance year = 6,000

$$\text{Points earned} = 3\frac{1}{3} \times \{ [(A) - (B/C)/D] / A \}$$

$$= 3\frac{1}{3} \times \{ [(.000065) - (B/C)/D] / .000065 \}$$

$$= 3\frac{1}{3} \times \{ [(.000065) - (170,000/3,000,000) / 6,000] / (.000065) \}$$

$$= 3\frac{1}{3} \times \{ [.000065 - (.0567/6,000)] / .000065 \}$$

$$= 3\frac{1}{3} \times [(.000065 - .0000094) / .000065]$$

$$= 3\frac{1}{3} \times (.0000556 / .000065) = \mathbf{2.85} \text{ points}$$

$$\text{Total Points Earned} = 1.07 + 2.85$$

$$= 3.92 \text{ points}$$

OP 6: Clean and Renewable Energy

4 points available

A. Credit Rationale

This credit recognizes institutions that support the development and use of energy from clean and renewable sources.

B. Criteria

Institution supports the development and use of clean and renewable energy sources, using any one or combination of the following options.

- Option 1: Generating electricity from clean and renewable energy sources on campus and retaining or retiring the rights to the environmental attributes of such electricity. (In other words, if the institution has sold Renewable Energy Credits for the clean and renewable energy it generated, it may not claim such energy here.) The on-site renewable energy generating devices may be owned and/or maintained by another party as long as the institution has contractual rights to the associated environmental attributes.
- Option 2: Using renewable sources on-site to generate energy other than electricity, e.g., using biomass for heating.
- Option 3: Catalyzing the development of off-site clean and renewable energy sources (e.g., an off-campus wind farm that was designed and built to supply electricity to the institution) and retaining the environmental attributes of that energy.
- Option 4: Purchasing the environmental attributes of electricity in the form of [Renewable Energy Certificates \(RECs\)](#), [Guarantees of Origin \(GOs\)](#) or similar renewable energy products that are either [Green-e](#) Energy certified or meet Green-e Energy's technical requirements (or local equivalents) and are verified as such by a third party, or purchasing renewable electricity through the institution's electric utility through a certified green power purchasing option.

Since this credit is intended to recognize institutions that are actively supporting the development and use of clean and renewable energy, neither the electric grid mix for the region in which the institution is located nor the grid mix reported by the electric utility that serves the institution (i.e., the utility's standard or default product) count for this credit.

The following renewable systems are eligible for this credit:

- Concentrated solar thermal
- Geothermal systems that generate electricity
- Low-impact hydroelectric power
- Solar photovoltaic
- Wave and tidal power
- Wind

Biofuels from the following sources are eligible:

- Agricultural crops
- Agricultural waste
- Animal waste
- Landfill gas
- Untreated wood waste
- Other organic waste

Technologies that reduce the amount of energy used but do not generate renewable energy do not count for this credit (e.g., daylighting, passive solar design, ground-source heat pumps). The benefits of such strategies, as well as the improved efficiencies achieved through using cogeneration technologies, are captured by the *Greenhouse Gas Emissions* and *Building Energy Consumption* credits.

Transportation fuels, which are covered by the *Greenhouse Gas Emissions* and *Campus Fleet* credits, are not included.

C. Applicability

This credit applies to all institutions.

D. Scoring

Institutions earn the maximum of 4 points for this credit by obtaining energy from clean and/or renewable sources (Options 1-3) and/or by purchasing RECs/GOs or green power from the electric utility (Option 4) equivalent to 100 percent of total campus energy consumption. Incremental points are awarded based on the amount of clean and renewable energy generated or purchased compared to total campus energy consumption. For example, an institution that obtained an amount of energy from clean and renewable sources equivalent to half of its total energy consumption would earn 2 points (half of the points available for this credit).

Points for this credit are calculated automatically in the STARS Reporting Tool as follows:

Clean and renewable energy option (see Criteria)	Factor	Multiply	Energy generated or purchased that meets criteria (MMBtu)	Divide	Total energy consumption (MMBtu)	Equals	Points earned
Option 1	4	×	_____	÷	_____	=	
Option 2			_____				
Option 3			_____				
Option 4			_____				
Total points earned ➡							Up to 4

E. Reporting Fields

Required

- Total energy consumption (all sources, excluding transportation fuels), performance year (MMBtu)
- Total clean and renewable electricity generated on-site during the performance year and for which the institution retains or has retired the associated environmental attributes (MMBtu)

If greater than zero, provide:

- A brief description of on-site renewable electricity generating devices
- Non-electric renewable energy generated on-site, performance year (MMBtu)

If greater than zero, provide:

- A brief description of on-site renewable non-electric energy devices
- Total clean and renewable electricity generated by off-site projects that the institution catalyzed and for which the institution retains or has retired the associated environmental attributes, performance year (MMBtu)

If greater than zero, provide:

- A brief description of off-site, institution-catalyzed, renewable electricity generating devices
- Total third-party certified RECs, GOs and/or similar renewable energy products (including renewable electricity purchased through a utility-provided certified green power option) purchased during the performance year (MMBtu)

If greater than zero, provide:

- A brief description of the RECs, GOs and/or similar renewable energy products, including contract timeframes

Optional

- The website URL where information about the programs or initiatives is available
- Additional documentation to support the submission (upload)
- Data source(s) and notes about the submission
- Contact information for a responsible party (a staff member, faculty member, or administrator who can respond to questions regarding the data once it is submitted and available to the public)

Sierra magazine requests the following information from U.S. and Canadian institutions that wish to share data with that organization:

- Electricity use, by source (percentage of total, 0-100). Report the institution's best estimate of the source of all electricity used, including the institution's regional grid mix (e.g., US eGRID subregion).
 - Biomass
 - Coal
 - Geothermal
 - Hydro
 - Natural gas
 - Nuclear
 - Solar photovoltaic
 - Wind
 - Other (please specify and explain)

- Energy used for heating buildings, by source (percentage of total, 0-100):
 - Biomass
 - Coal
 - Electricity
 - Fuel oil
 - Geothermal
 - Natural gas
 - Other (please specify and explain)

F. Measurement

Timeframe

Report the most recent data available from within the three years prior to the anticipated date of submission. Institutions may choose the annual start and end dates that work best with the data they have (e.g., fiscal or calendar year), as long as data are reported from a consecutive 12-month period.

Sampling and Data Standards

Report all on-site, stationary energy that was consumed by the institution (as the institution is defined in the overall STARS institutional boundary). Transportation fuels are excluded. Reporting on a sample or subset of energy generation and consumption is not allowed for this credit.

All reported energy figures should be based on site energy (the amount of energy consumed on campus) rather than source energy (the amount of energy consumed on campus plus the energy used off-site to generate and transport the energy to the institution).

Institutions that convert fuel on-site (e.g., on-campus cogeneration facilities and boilers) should report only the amount of fuel purchased/converted toward the total energy consumption figure, not the resulting heat, steam, hot/chilled water or electricity.

To aggregate energy consumption data from multiple sources, figures should be converted into MMBtu (one million British thermal units—a standard measure of energy) using the following equivalents:

Energy Unit	MMBtu Equivalent
1 kWh	0.003412
1 MWh	3.412
1 therm	0.1
1 kBtu	0.001
1 ton-hour	0.012
1 MJ	0.000948

A unit conversion tool that includes more detailed conversion factors (e.g., for liquid fuels) is [available in the online STARS Reporting Tool](#) (.xls).

G. Standards and Terms

Green-e

[Green-e](#), a program of the Center for Resource Solutions, is an independent certification and verification program for renewable energy and greenhouse gas emission reductions in the retail market. Green-e Climate is a voluntary certification program launched in 2008 that sets consumer-protection and environmental-integrity standards for greenhouse gas (GHG) emission reductions sold in the voluntary market. Green-e Energy is an independent certification and verification program for renewable energy.

Guarantees of origin

A Guarantee of Origin (GO) is a certificate issued by European energy authorities to certify that electricity was produced from renewable energy sources.

Renewable energy certificates

Green-e provides the following [definition of Renewable Energy Certificates \(RECs\)](#) (also known as green tags, renewable energy credits, renewable electricity certificates, and tradable renewable certificates):

When a renewable energy facility operates, it creates electricity that is delivered into a vast network of transmission wires, often referred to as “the grid.” The grid is segmented into regional power networks called pools. To help facilitate the sale of renewable electricity nationally, a system was established that separates renewable electricity generation into two parts: the electricity or electrical energy produced by a renewable generator and the renewable “attributes” of that generation. (These attributes include the tons of greenhouse gas that were avoided by generating electricity from renewable resources instead of conventional fuels, such as coal, nuclear, oil, or gas.) These renewable (“green”) attributes are sold separately as renewable energy certificates (RECs). One REC is issued for each megawatt-hour (MWh) unit of renewable electricity produced. The electricity that was split from the REC is no longer considered “renewable” and cannot be counted as renewable or zero-emissions by whoever buys it.

RECs contain specific information about the renewable energy generated, including where, when, at what facility, and with what type of generation. Purchasers of RECs are buying the renewable attributes of those specific units of renewable energy, which helps offset conventional electricity generation in the region where the renewable generator is located. In Europe, the equivalent of a REC is a Guarantee of Origin (GO). There are equivalents available in other regions as well.

Scoring Example: Clean and Renewable Energy

Step 1: Gather Required Data

Example College uses electricity and natural gas. During the past year, the college consumed:

- A. Total electricity: 1,000,000 kWh
- B. Total natural gas: 10,000 therms

Example College generated or purchased the following during the past year.

- C. Electricity from an on-site solar photovoltaic installation (Option 1): 250,000 kWh
- D. Renewable Energy Certificates (Option 4): 300 MWh

Step 2: Convert Energy Figures into Common Units (MMBtu)

- Total electricity consumed: $1,000,000 \text{ kWh} \times 0.003412 \text{ MMBtu/kWh} = 3,412 \text{ MMBtu}$
- Total natural gas consumed: $10,000 \text{ Therms} \times 0.1 \text{ MMBtu/Therm} = 1,000 \text{ MMBtu}$
 - Total energy consumed = $3,412 + 1,000 = \mathbf{4,412 \text{ MMBtu}}$
- Electricity from an on-site solar photovoltaic installation (Option 1):
 $250,000 \text{ kWh} \times 0.003412 \text{ MMBtu/kWh} = \mathbf{853 \text{ MMBtu}}$
- Renewable Energy Certificates (Option 4):
 $300 \text{ MWh} \times 3.412 \text{ MMBtu/MWh} = \mathbf{1,023 \text{ MMBtu}}$

Step 3: Calculate Points Earned Using MMBtu

Clean and renewable energy option (see B. Criteria)	Factor	Multiply	Energy generated or purchased that meets criteria (MMBtu)	Divide	Total energy consumption (MMBtu)	Equals	Points earned
Option 1	4	×	<u>853</u>	÷	<u>4,412</u>	=	0.77
Option 2			<u>0</u>				0
Option 3			<u>0</u>				0
Option 4			<u>1,023</u>				0.93
Total points earned ➔							1.7

Food & Dining

This subcategory seeks to recognize institutions that are supporting a sustainable food system. Modern industrial food production often has deleterious environmental and social impacts. Pesticides and fertilizers used in agriculture can contaminate ground and surface water and soil, which can in turn have potentially dangerous impacts on wildlife and human health. The production of animal-derived foods often subjects animals to inhumane treatment and animal products have a higher per-calorie environmental intensity than plant-based foods. Additionally, farm workers are often directly exposed to dangerous pesticides, subjected to harsh working conditions, and paid substandard wages. Furthermore, food is often transported long distance to institutions, producing greenhouse gas emissions and other pollution, as well as undermining the resiliency of local communities.

Institutions can use their purchasing power to require transparency from their distributors and find out where the food comes from, how it was produced, and how far it traveled. Institutions can use their food purchases to support their local economies; encourage safe, environmentally friendly and humane farming methods; and help eliminate unsafe working conditions and alleviate poverty for farmers. These actions help reduce environmental impacts, preserve regional farmland, improve local food security, and support fair and resilient food systems.

Dining services can also support sustainable food systems by preventing food waste and diverting food materials from the waste stream, by making low impact dining options available, and by educating its customers about more sustainable options and practices.

Credits

Points available: 8

OP 7	Food and Beverage Purchasing*	6
OP 8	Sustainable Dining*	2

* credit does not apply to all institutions

Share your story

The My Submission section of the online Reporting Tool includes an optional reporting field for the institution to provide an overview of notable activities and accomplishments in this subcategory. This information is featured in the institution's public report.

- ☐ A brief summary of the institution's notable activities and accomplishments relevant to this subcategory

OP 7: Food and Beverage Purchasing

6 points available

A. Credit Rationale

This credit recognizes institutions that are supporting sustainable food systems through their food and beverage purchases. Institutions can do this by prioritizing the purchase of environmentally and socially preferable food and beverage items and by minimizing the purchase of industrially produced animal products. These actions reduce the social and environmental impacts of food production and help foster robust local economies and food security; improved conditions for farm workers; healthier animals, soils and waterways; and secure livelihoods for farmers.

B. Criteria

Institution and/or its primary dining services contractor conducts an inventory to identify food and beverage purchases that have the following attributes:

1. **Third Party Verified.** The product is sustainably and/or ethically produced as determined by one or more [recognized food and beverage sustainability standards](#) (see G. Standards and Terms).
2. **Local & Community Based.** The product does not qualify as Third Party Verified, but meets the criteria outlined in the table below. This category provides a path for campus farms and gardens and small and mid-sized producers to be recognized in the absence of third party certification.

Consistent with the [Real Food Standards](#), a product must meet the following criteria to qualify as Local & Community Based:

Single-Ingredient Products	A single-ingredient product must meet ALL of the following criteria: A. <i>Ownership.</i> Producer must be a privately or cooperatively owned enterprise. Wild-caught seafood must come from owner-operated boats. B. <i>Size.</i> Produce: Gross annual sales for individual farms must not exceed \$5 million (US/Canadian). Meat, poultry, eggs, dairy, fish/seafood, grocery/staple items (e.g., grains): Producing company's gross annual sales must not exceed \$50 million (US/Canadian). C. <i>Distance.</i> All production, processing, and distribution facilities must be within a 250 mile (400 kilometre) radius of the institution. This radius is extended to 500 miles (800 kilometres) for meat (i.e., beef, lamb, pork, game).
Single-Ingredient Products Aggregated From Multiple Sources (e.g., fluid milk)	At least 75 percent of the product (by volume) must meet the Ownership, Size, and Distance criteria outlined above.
Multi-Ingredient Products (e.g., baked goods)	Producing company must meet ALL of the following criteria: A. <i>Ownership.</i> Company must be a privately or cooperatively owned enterprise. B. <i>Size.</i> Company's gross annual sales must be less than or equal to \$50 million (US/Canadian). C. <i>Distance.</i> All processing and distribution facilities must be within a 250 mile (400 kilometre) radius of the institution.

	AND At least 50 percent of the ingredients must come from farms meeting the Ownership, Size, and Distance criteria for Single-Ingredient Products outlined above.
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Products from [intensive livestock operations](#) (e.g., CAFO-permitted facilities in the U.S.) are excluded. Due to the prevalence of industrial livestock production, meat, poultry, egg, and dairy producers should be assumed to be intensive operations unless the institution can verify otherwise through third party certification, transparent information from the supplier, and/or an appropriate regulatory body.

For additional guidance in identifying products that are Local & Community Based, see the [Real Food Calculator](#).

The institution may also choose to identify purchases that have Other Sustainability Attributes (see E. Reporting Fields), i.e., that are environmentally or socially preferable in ways that are not recognized above. Examples include expenditures on products with [credible sustainability claims](#) and labels not formally recognized in the Third Party Verified category and products from local companies and regional farms that do not fully meet the Local & Community Based criteria. Although products reported in this category are considered to be conventionally produced and do not count toward scoring, identifying them can provide a more comprehensive picture of the institution’s sustainable purchasing efforts.

Products that meet more than one of the criteria outlined above (e.g., products from small and mid-sized local producers that are Certified Organic) should not be double-counted.

While products with sustainability attributes may be sourced through distributors or other third parties, the attributes of distributors do not count. For example, a product purchased from a local distributor may only be considered local if the product itself meets the criteria outlined above.

Transparency in the supply chain is a fundamental component of a sustainable food system. Products without verifiable sustainability attributes do not count in any of the categories outlined above. For each product that has one or more verifiable sustainability attributes, the inventory provides (at minimum):

- Product description/type.
- Label, brand or producer.
- The category in which the product is being counted (e.g., Third Party Verified, Local & Community-Based), and/or a brief description of the specific sustainability attribute(s) for which it is being counted (i.e., information about the producer and any sustainability certifications or claims justifying its inclusion, e.g., “Certified Organic”, “local farm-to-institution program”).

Institutions in the U.S. and Canada with students running the [Real Food Calculator](#) may upload Calculator results to fulfill the inventory requirement. Likewise, products that have been formally verified through the use of the Real Food Calculator to be “[Real Food A](#)” or “[Real Food B](#)” may be counted as “third party verified... or Local & Community-Based” (see E. Reporting Fields).

For transparency and to help ensure comparability across institutions, it is strongly recommended that institutions not reporting Real Food Calculator results use the [STARS Food and Beverage Purchasing Inventory template](#) to record their purchases, and upload the results as documentation.

This credit includes food and beverage purchases for on-campus dining halls and catering services operated by the institution or the institution’s primary dining services contractor (e.g., Aramark, Bon Appétit Management Company, Chartwells, Sodexo). Outlets that are unique to the institution or its primary contractor (e.g., retail

concepts developed and managed by the institution or contractor) are included. On-site franchises (e.g., national or global brands), convenience stores, vending services, and concessions may be excluded; they are covered in the *Sustainable Procurement* credit in Purchasing.

Part 1

Institution's dining services purchase food and beverage products that are third party verified under one or more [recognized food and beverage sustainability standards](#) or Local & Community-Based.

Part 2

Institution's dining services minimize the purchase of [conventional animal products](#), as measured by the percentage of total dining services food and beverage expenditures on such products. Conventional animal products include all meat, fish/seafood, poultry, eggs, and dairy products that do NOT qualify in either the Third Party Verified category or the Local & Community-Based category (as outlined above). Please note that products reported in the "other sustainability attributes" category are considered to be conventionally produced.

C. Applicability

This credit applies to all institutions that have on-campus dining services operated by the institution or the institution's primary on-site contractor.

D. Scoring

Each part is scored independently.

Part 1

Institutions earn the maximum of 4 points available for Part 1 of this credit when 75 percent of total food and beverage expenditures are on products that qualify as Third Party Verified or Local & Community-Based. Incremental points are awarded based on the percentage of total food and beverage expenditures dedicated to products that meet the criteria. For example, an institution with expenditures on third party verified and local community-based products totaling 18.75 percent of total food and beverage expenditures would earn 1 point (¼ of the points available).

Points for Part 1 of this credit are calculated automatically in the STARS Reporting Tool as follows:

Attribute	Factor	Multiply	Percentage of total dining services food and beverage expenditures on products that meet the criteria (0-100)	Equals	Points earned for Part 1
Third Party Verified or Local & Community-Based	0.053	x	_____	=	
Other Sustainability Attributes	0		_____		
Total points earned ➡					

Part 2

Institutions earn the maximum of 2 points available for Part 2 of this credit by purchasing no [conventional animal products](#). Incremental points are available for institutions for which conventional animal products comprise less than 30 percent of total dining services food and beverage expenditures comprised of conventional animal products. For example, an institution for which conventional animal products comprise 15 percent of its total food purchases would earn 1 point (half of the points available for Part 2).

Points earned for Part 2 of this credit are calculated according to the formula below. STARS awards only positive points; points will not be deducted if purchases of conventional animal products exceed 30 percent of the institution's total food and beverage expenditures.

$$\text{Points Earned} = 2 \times \{ [(100 - A) - 70] / 30 \}$$

A= Percentage of total dining services food and beverage expenditures comprised of conventional animal products (0-100)

E. Reporting Fields

Required

- ☐ Percentage of dining services food and beverage expenditures on products that are third party verified under one or more [recognized food and beverage sustainability standards](#) or Local & Community-Based (0-100) (Real Food Calculator users report "Real Food A" and "Real Food B" here)
- ☐ Does the institution wish to pursue Part 2 of this credit (expenditures on conventional animal products)? (If data is not available, respond "No")

If yes, provide:

- ☐ Percentage of total dining services food and beverage expenditures on conventional animal products (meat, poultry, fish/seafood, eggs, and dairy products that do NOT qualify in either the Third Party Verified category or the Local & Community-Based category) (0-100)
- ☐ A brief description of the sustainable food and beverage purchasing program, including how the sustainability impacts of products in specific categories are addressed (e.g., meat, poultry, fish/seafood, eggs, dairy, produce, tea/coffee)
- ☐ An inventory of the institution's sustainable food and beverage purchases that includes for each product: the description/type; label, brand or producer; and the category in which it is being counted and/or a description of the sustainability attribute(s) for which it is being included (upload) (The [STARS Food and Beverage Purchasing Inventory template](#) is strongly recommended)
- ☐ A brief description of the methodology used to conduct the inventory, including the timeframe and how representative samples accounted for seasonal variation (if applicable)

If uploading output from the Real Food Calculator, provide:

- ☐ Percentage of total dining services expenditures on Real Food A (0-100)
 - ☐ Percentage of total dining services expenditures on Real Food B (0-100)
- ☐ Which of the following food service providers are present on campus and included in the figures reported above?
 - ☐ Dining operations and catering services operated by the institution

- Dining operations and catering services operated by a contractor
- Student-run food/catering services
- Franchises (e.g., national or global brands)
- Convenience stores
- Vending services
- Concessions

Optional

- A brief description of purchased food and beverage products that have other sustainability attributes not recognized above (e.g., local products that do not qualify as Local & Community-Based, regionally sourced products, and products with [credible sustainability claims](#))
- Additional percentage of dining services food and beverage expenditures on conventional products with other sustainability attributes not recognized above (0-100)
- The website URL where information about the programs or initiatives is available
- Additional documentation to support the submission (upload)
- Data source(s) and notes about the submission
- Contact information for a responsible party (a staff member, faculty member, or administrator who can respond to questions regarding the data once it is submitted and available to the public)

F. Measurement

Timeframe

Report the most recent data available from within the three years prior to the anticipated date of submission.

Sampling and Data Standards

Institutions may choose to track food and beverage purchases for a 12-month consecutive period or use a representative sample that includes data from at least two full months during a 12-month consecutive period (e.g., fiscal or academic year). When using samples, institutions must accommodate seasonal and other variations in sustainable food and beverage availability and purchasing. For example, an institution could select one month in the autumn when seasonal produce is still available (e.g., September or October) and one month in the winter or early spring that falls outside the normal growing season (e.g., February or March).

This credit is based on total food and beverage expenditures in the following categories:

- Dairy - fluid milk, cheese, yogurt, ice cream
- Meat - beef, lamb, pork, game; including frozen or canned meat products
- Poultry - chicken, turkey, other fowl
- Eggs - shelled eggs, liquid egg product, powdered egg
- Fish/Seafood - all fish or seafood products, including frozen or canned products
- Produce - fresh, cut, or frozen fruits and vegetables
- Grocery/Staple - grains; staples; vegetarian/vegan meat alternatives; most boxed, bottled, jarred, and canned products

- Tea/Coffee - hot and cold coffee and tea products including bottled beverages, coffee beans, loose and bagged tea
- Other Beverages (non-dairy) - soft drinks, sports drinks, milk alternatives
- Baked Goods - baked products (pastries, breads, sweets)

To the extent feasible, all of the product categories and types outlined above should be included in the total food and beverage expenditures figure. If data tracking limitations make it necessary to exclude a product type or category, all products of that type or category must be excluded from both the numerator (expenditures on products that meet credit criteria) and the denominator (total food and beverage expenditures). Exclusions must be documented in the public “Data sources(s) and notes about the submission” field.

G. Standards and Terms

Conventional animal products

Conventional animal products include meat, poultry, fish/seafood, eggs, and dairy products that are not third party verified to meet recognized sustainability standards and do not qualify in the Local & Community-Based category. The percentage of total dining services food and beverage expenditures on conventional animal products should be calculated using the following formula:

$$100 \times [(A - B) / C]$$

A = Expenditures on animal products (meat, poultry, fish/seafood, eggs, and dairy products)

B = Expenditures on animal products that are third party verified under one or more recognized sustainability standards or Local & Community-Based

C = Total food and beverage expenditures

Credible sustainability claims

Consistent with the ISEAL Alliance, credible sustainability claims are clear, accurate and relevant, and are backed up by systems that are transparent and robust. For guidance in determining whether a particular claim is credible or not, visit <http://www.challengethelabel.org/>

Intensive livestock operations

Consistent with the U.S. Environmental Protection Agency (EPA), intensive livestock operations (ILOs) are:

...agricultural operations where animals are kept and raised in confined situations. [These operations] congregate animals, feed, manure and urine, dead animals, and production operations on a small land area. Feed is brought to the animals rather than the animals grazing or otherwise seeking feed in pastures, fields, or on rangeland.

These industrial facilities are also known as “factory farms” or concentrated animal feeding operations (CAFOs). Because of their potential negative impacts on water quality, air quality, human health, and animal welfare, ILOs are typically regulated by national, state or provincial authorities, e.g., departments of natural resources, water, or the environment.

Because of the prevalence of industrial livestock production in many regions, a producer of animal products should be assumed to be an intensive operation unless the institution can verify otherwise through third party certification, transparent information from the supplier, or an appropriate regulatory body, e.g., the U.S. [National Pollutant Discharge Elimination System \(NPDES\) permit program](#).

For guidance in identifying ILOs, see the [Real Food Assessment Tips](#).

See also:

- [NPDES Permit Writers' Manual for CAFOs and the Regulatory Definitions of Large CAFOs, Medium CAFO, and Small CAFOs](#) (U.S.)
- [A Review of Selected Jurisdictions and Their Approach to Regulating Intensive Farming Operations](#) (Ontario Ministry of Agriculture, Food and Rural Affairs)
- [Report from the Commission on the reviews undertaken under Article 30\(9\) and Article 73 of Directive 2010/75/EU on industrial emissions addressing emissions from intensive livestock rearing and combustion plants.](#)

Local & Community-Based

Consistent with the [Real Food Standards](#), food and beverage products that are Local & Community Based:

...can be traced to nearby farms, ranches, boats and businesses that are locally owned and operated. Supporting small and mid-size food businesses challenges trends towards consolidation in the food industry and supports local economies.

For guidance in determining if a product qualifies as Local & Community Based, see the [Real Food Standards](#) and section B. Criteria, above.

Real Food Calculator

The [Real Food Calculator](#) is a tool to track institutional food and beverage purchasing over time. College and university students in the U.S. and Canada can use the Calculator as a platform for discussion and action with dining services and administrators. The Calculator is managed and hosted by the [Real Food Challenge](#), a U.S.-based campaign and network of student food activists.

Recognized food and beverage sustainability standards

Products with the following attributes may be reported as Third Party Verified for the *Food and Beverage Purchasing* credit:

Global Standards (applicable to all institutions)

- [Biodynamic Certified](#) (Demeter)
- [Certified Bird Friendly](#) (coffee)
- [Certified Humane Raised and Handled](#)
- Certified Organic under an [IFOAM-endorsed standard](#)
- [Certified Sustainably Grown](#) (SCS)
- Fair Trade Certified:
 - [Ecocert Fair Trade](#) certified (EFT)
 - [Fair for Life](#) and other IMO certifications
 - [Fairtrade](#) mark (Fairtrade International)
 - [FairWild Certified](#)
 - [Hand in Hand certified](#) (Rapunzel Fairtrade)
 - [Small Producers' Symbol](#) (SPP)
- [Green List](#) (i.e. "best choice") fish and seafood (WWF)
- [LEAF Marque](#) (Linking Environment and Farming)
- [Marine Stewardship Council Blue Ecolabel](#) (paired with MSC Chain of Custody certification)
- [Participatory Guarantee Systems](#) (IFOAM)

- [Rainforest Alliance Certified](#) (SAN Standard for Sustainable Agriculture)
- Local, national, and regional third party certifications that are consistent with IFOAM's [Common Objectives and Requirements of Organic Standards](#) (COROS) and/or standards set by [ISEAL Alliance](#) and/or [Global Ecolabelling Network](#) members.

U.S. and Canadian Standards

- [AGA-Certified Grassfed](#)
- [American Humane Certified](#) Free Range & Pasture (egg layers)
- [American National Standard for Sustainable Agriculture](#) (ANSI/LEO-4000) Certified Gold or Platinum
- [Animal Welfare Approved](#) and [AWA Grass Fed](#)
- [Certified Local Sustainable](#) (Land Food People)
- [Equitable Food Initiative](#) certified (EFI)
- [Fair Food Program](#) (Fair Food Standards Council / Coalition of Immokalee Workers)
- [Fair Trade Certified](#) (Fair Trade USA)
- [Food Alliance Certified](#)
- [Food Justice Certified](#) (Agricultural Justice Project)
- [Global Animal Partnership Certified](#) (Steps 3-5+ only)
- Green List (i.e. “best choice”) fish and seafood:
 - [Monterey Bay Aquarium Seafood Watch](#) (U.S.)
 - [Sea Choice](#) (Canada)
- [Milk with Dignity](#) (Migrant Justice)
- [PCO Certified 100% Grassfed](#)
- [Protected Harvest Certified](#)
- [Salmon Safe Certified](#)
- Transitional Organic (USDA)
- Additional certifications recognized in the [Real Food Guide](#) as Green Light or Yellow Light

Scoring Example: Food and Beverage Purchasing

Part 1

Example College spent \$10 million on food and beverages during the past year. An inventory of those purchases reveals that:

- A. \$500,000 was spent on Certified Organic produce, dairy products and meat; Fairtrade coffee and chocolate, Rainforest Alliance certified tea and bananas, and Certified Humane animal products (counted as Third Party Verified)
- B. \$750,000 was spent on produce, dairy products and eggs purchased directly from small local producers and through a local farm-to-institution program (counted as Local & Community-Based)
- C. \$150,000 was spent on dairy products from a regional cooperative that aggregates milk from many producers, the majority of which are large farms and/or located more than 250 miles from the institution (counted as Other Sustainability Attributes).
- D. \$100,000 was spent on products from a local bakery that does not fully meet the Local & Community-Based criteria (counted as Other Sustainability Attributes).

The College's remaining purchases were on products that do not meet any of the credit criteria. Therefore, expenditures on products that are Third Party Verified or Local & Community-Based (A + B) total \$1.25 million (12.5 percent of the total). Expenditures on products with Other Sustainability Attributes (C + D) total \$250,000 (2.5 percent of the total).

Attributes	Factor	Multiply	Percentage of total dining services food and beverage expenditures on products in each category (0-100)	Equals	Points earned
Third Party Verified or Local & Community-Based	0.053	×	<u>12.5</u>	=	0.6625
Other Sustainability Attributes	0		<u>2.5</u>		0
Total points earned for Part 1 ➡					0.663

Part 2

Of the above purchases, \$3 million was spent on animal products, \$0.5 million of which were Third Party Verified or Local & Community-Based. The remaining \$2.5 million was spent on conventional animal products (both with and without sustainability attributes). Therefore, the percentage of total dining services food purchases comprised of conventionally produced animal products = \$2.5 million ÷ \$10 million = 25 percent.

- A. Percentage of total dining services food and beverage expenditures on conventional animal products = 25 percent

$$\begin{aligned}
 \text{Points earned} &= 2 \times \{ [(100 - A) - 70] / 30 \} \\
 &= 2 \times \{ [(100 - 25) - 70] / 30 \} \\
 &= 2 \times \{ 5 / 30 \} = \mathbf{0.33} \text{ points}
 \end{aligned}$$

OP 8: Sustainable Dining

2 points available

A. Credit Rationale

This credit recognizes institutions that are supporting sustainable food systems and minimizing the impacts of their dining service operations. An institution can operate its dining services sustainably through its procurement policies and decisions, by preventing food waste and diverting food materials from the waste stream, by making low impact dining options available, and by educating its customers about more sustainable options and practices.

B. Criteria

Part 1

Institution's dining services support sustainable food systems in one or more of the following ways. The institution or its primary dining services contractor:

- Has a published sustainable dining policy that includes specific criteria to support the procurement of environmentally and socially preferable food and beverage products and/or includes guidelines to reduce or minimize the adverse environmental and social impacts of dining operations;
 - Sources food from a campus garden or farm;
 - Hosts a farmers market, community supported agriculture (CSA) or fishery program, and/or urban agriculture project, or supports such a program in the local community;
 - Has a vegan dining program that makes diverse, [complete-protein vegan options](#) available to every member of the campus community at every meal;
 - Hosts low impact dining events (e.g., Meatless Mondays);
 - Hosts sustainability-themed meals (e.g., local harvest dinners);
 - Hosts a sustainability-themed food outlet on-site, either independently or in partnership with a contractor or retailer;
 - Informs customers about low impact food choices and sustainability practices through labeling and signage in dining halls;
 - Engages in outreach efforts to support learning and research about sustainable food systems;
- And/or
- Other sustainability-related initiatives (e.g., health and wellness initiatives, making culturally diverse options available)

Part 2

Institution's dining services minimize food and dining [waste](#) in one or more of the following ways. The institution or its primary dining services contractor:

- Participates in a competition or commitment program (e.g., U.S. EPA Food Recovery Challenge) and/or uses a food waste prevention system (e.g., LeanPath) to track and improve its food management practices;

- Has implemented trayless dining (in which trays are removed from or not available in dining halls) and/or modified menus/portions to reduce post-consumer food waste;
- Donates food that would otherwise go to waste to feed people;
- Diverts food materials from the landfill, incinerator or sewer for animal feed or industrial uses (e.g., converting cooking oil to fuel, on-site anaerobic digestion);
- Has a pre-consumer composting program;
- Has a post-consumer composting program;
- Utilizes reusable service ware for “dine in” meals;
- Provides reusable and/or third party certified compostable containers and service ware for “to-go” meals (in conjunction with an on-site composting program);
- Offers discounts or other incentives to customers who use reusable containers (e.g., mugs) instead of disposable or compostable containers in “to-go” food service operations;

And/or

- Other materials management initiatives to minimize waste not covered above (e.g., working with vendors and other entities to reduce waste from food packaging).

This credit includes on-campus dining operations and catering services operated by the institution and the institution’s primary dining services contractor.

C. Applicability

This credit applies to all institutions that have on-campus dining services operated by the institution or the institution’s primary on-site contractor.

D. Scoring

Each part is scored independently.

Part 1

An institution earns 0.125 points for each initiative outlined above up to the maximum of 1 point available for Part 1.

Part 2

An institution earns 0.125 points for each initiative outlined above up to the maximum of 1 point available for Part 2.

E. Reporting Fields

Required

- ☐ Do the institution’s dining services support sustainable food systems in the following ways? The institution or its primary dining services contractor:
 - Has a published sustainable dining policy that includes specific criteria to support the procurement of environmentally and socially preferable food and beverage products and/or

includes guidelines to reduce or minimize the adverse environmental and social impacts of dining operations.

- Sources food from a campus garden or farm.
- Hosts a farmers market, community supported agriculture (CSA) or fishery program, and/or urban agriculture project, or supports such a program in the local community.
- Has a vegan dining program that makes diverse, complete-protein vegan options available to every member of the campus community at every meal.
- Hosts low impact dining events (e.g., Meatless Mondays).
- Hosts sustainability-themed meals (e.g., local harvest dinners).
- Hosts a sustainability-themed food outlet on-site, either independently or in partnership with a contractor or retailer.
- Informs customers about low impact food choices and sustainability practices through labeling and signage in dining halls.
- Engages in outreach efforts to support learning and research about sustainable food systems.
- Other sustainability-related initiatives (e.g., health and wellness initiatives, making culturally diverse options available)?

For each positive response above, provide:

- A brief description of the program or initiative
- Do the institution's dining services minimize food and dining waste in the following ways? The institutions and/or its primary dining services contractor:
- Participates in a competition or commitment program (e.g., U.S. EPA Food Recovery Challenge) and/or uses a food waste prevention system (e.g., LeanPath) to track and improve its food management practices.
 - Has implemented trayless dining (in which trays are removed from or not available in dining halls) and/or modified menus/portions to reduce post-consumer food waste.
 - Donates food that would otherwise go to waste to feed people.
 - Diverts food materials from the landfill, incinerator or sewer for animal feed or industrial uses (e.g., converting cooking oil to fuel, on-site anaerobic digestion).
 - Has a pre-consumer composting program.
 - Has a post-consumer composting program.
 - Utilizes reusable service ware for "dine in" meals.
 - Provides reusable and/or third party certified compostable containers and service ware for "to-go" meals (in conjunction with an on-site composting program).
 - Offers discounts or other incentives to customers who use reusable containers (e.g., mugs) instead of disposable or compostable containers in "to-go" food service operations.
 - Other materials management initiatives to minimize waste not covered above (e.g., working with vendors and other entities to reduce waste from food packaging)?

For each positive response above, provide:

- A brief description of the program or initiative

Optional

- ☐ The website URL where information about the programs or initiatives is available
- ☐ Additional documentation to support the submission (upload)
- ☐ Data source(s) and notes about the submission
- ☐ Contact information for a responsible party (a staff member, faculty member, or administrator who can respond to questions regarding the data once it is submitted and available to the public)

F. Measurement

Timeframe

Report on current policies or programs at the time of submission.

Sampling and Data Standards

Not applicable

G. Standards and Terms

Complete-protein vegan options

Recognizing that variety is a critical component of a nutritionally sound vegan diet, a “complete protein” vegan option must include, at minimum, two or more of the following food types: soy, whole grains, nuts and seeds, legumes.

Waste

Waste is defined as any substance or object which the institution discards, intends to discard, or is required to discard. This includes materials that are recycled, composted, donated, re-sold, or disposed of as trash.

Grounds

This subcategory seeks to recognize institutions that plan and maintain their grounds with sustainability in mind. Beautiful and welcoming campus grounds can be planned, planted, and maintained in any region while minimizing the use of toxic chemicals, protecting wildlife habitat, and conserving resources.

Credits

Points available: 3-4

OP 9	Landscape Management*	2
OP 10	Biodiversity*	1-2

* credit does not apply to all institutions

Share your story

The My Submission section of the online Reporting Tool includes an optional reporting field for the institution to provide an overview of notable activities and accomplishments in this subcategory. This information is featured in the institution's public report.

- A brief summary of the institution's notable activities and accomplishments relevant to this subcategory

OP 9: Landscape Management

2 points available

A. Credit Rationale

This credit recognizes institutions that manage their grounds sustainably. Sustainable landscape management integrates economic, social, and ecological considerations to meet human needs and maintain healthy ecosystems.

B. Criteria

Institution's grounds include areas that are managed in accordance with:

- 1) An [Integrated Pest Management](#) (IPM) program; and/or
- 2) An [organic land care standard](#) or landscape management program that has eliminated the use of inorganic fertilizers and chemical pesticides, fungicides and herbicides in favor of [ecologically preferable materials](#).

To count, an IPM program must use a four-tiered approach as outlined in *G. Standards and Terms*. Management programs that employ some IPM principles or techniques but do not include a four-tiered approach should be counted as conventional programs.

C. Applicability

This credit applies to all institutions with managed grounds comprising one or more percent of the total area of the campus.

D. Scoring

Institutions earn the maximum of 2 points available for this credit when 100 percent of campus grounds are managed in accordance with a program that has eliminated the use of inorganic fertilizers and chemical pesticides, fungicides and herbicides in favor of ecologically preferable materials. Incremental points are available based on the percentage of grounds managed in accordance with an IPM program and/or an organic program. Scoring for this credit is based on the total area of managed grounds: the sum of areas managed under conventional, IPM and organic programs.

Points for this credit are calculated automatically in the STARS Reporting Tool as follows:

Management level	Factor	Multiply	Area managed at each level	Divide	Total area of managed grounds	Equals	Points earned
Conventional program	0	×	_____	÷	_____	=	
IPM program	1		_____				
Organic program	2		_____				
Total points earned ➡							Up to 2

E. Reporting Fields

Required

- Total campus area (i.e., the total amount of land within the institutional boundary) (acres/hectares)
- Figures required to calculate the total area of managed grounds:
 - Area managed in accordance with an Integrated Pest Management (IPM) program that uses a four-tiered approach: 1) set action thresholds, 2) monitor and identify pests, 3) prevent or remove conditions that attract pests, 4) control (acres/hectares)
 - Area managed in accordance with an organic land care standard or landscape management program that has eliminated the use of inorganic fertilizers and chemical pesticides, fungicides and herbicides in favor of ecologically preferable materials (acres/hectares)
 - Area managed using conventional landscape management practices (which may include some IPM principles or techniques) (acres/hectares)

If the total area of managed grounds is less than the total campus area, provide:

- A brief description of any land excluded from the area of managed grounds (e.g., the footprint of buildings and impervious surfaces, experimental agricultural land, areas that are not regularly managed or maintained)

If reporting an IPM program, provide:

- A copy or brief description of the IPM plan or program (text or upload)

If reporting an organic program, provide:

- A brief description of the organic land standard or landscape management program

Optional

- A brief description of the institution's approach to the following:
 - Plant stewardship (e.g., protecting and using existing vegetation, using native and ecologically appropriate plants, controlling and managing invasive species)
 - Soil stewardship (e.g., organic soils management practices that restore and/or maintain a natural nutrient cycle and limit the use of inorganic fertilizers and chemicals)
 - Hydrology and water use (e.g., restoring and/or maintaining the integrity of the natural hydrology of the campus by promoting water infiltration, minimizing or eliminating the use of potable water for irrigation, and/or protecting/restoring riparian, wetland, and shoreline habitats and lost streams)
 - Materials management and waste minimization (e.g., composting and/or mulching on-site waste)
 - Energy-efficient landscape design (e.g., the placement and selection of shade trees and wind breaks and the use of vegetation and reflective materials to reduce heat islands)
 - Other sustainable landscape management practices (e.g., use of environmentally preferable landscaping materials, initiatives to reduce the impacts of ice and snow removal, wildfire prevention)
- The website URL where information about the programs or initiatives is available

- ❑ Additional documentation to support the submission (upload)
- ❑ Data source(s) and notes about the submission
- ❑ Contact information for a responsible party (a staff member, faculty member, or administrator who can respond to questions regarding the data once it is submitted and available to the public)

F. Measurement

Timeframe

Report on current program(s) and practices at the time of submission.

Sampling and Data Standards

An institution may exclude the footprint of buildings and impervious surfaces, experimental agricultural land, and land that is not regularly managed or maintained from the area of managed grounds as long as such areas are excluded consistently.

To simplify reporting, an institution may elect to account for the footprint of a building or facility and associated impervious surfaces such as sidewalks and parking areas based on how the entire site is managed as long as the same methodology is used consistently for all managed areas. For example, if the Housing Department uses integrated pest management to maintain four acres that include residence halls and paved surfaces as well as associated grounds, all four acres may be counted toward the “area managed in accordance with an IPM program” as long as all managed areas are counted the same way.

G. Standards and Terms

Ecologically preferable materials

Ecologically preferable materials may include [OMRI Listed products](#) (Organic Materials Review Institute) and/or products listed/certified by an [IFOAM-endorsed standard](#).

Integrated pest management

Integrated pest management (IPM) uses a combination of biological, cultural, physical/mechanical and chemical management tools to solve pest problems while minimizing risks to people and the environment. Although every IPM program is different, successful programs use the same four-tiered approach: 1) set action thresholds, 2) monitor and identify pests, 3) prevent or remove conditions that attract pests, and 4) control. For more information, see the U.S. Environmental Protection Agency’s [IPM factsheet](#).

Organic land care standard

Organic land care standards include:

- An organic land care standard or participatory guarantee system endorsed by [IFOAM](#) (International Federation of Organic Agriculture Movements)
- The SOUL [Organic Land Care Standard](#)
- The Northeast Organic Farming Association’s [Standards for Organic Land Care](#)
- CCOF Tilth’s [Organic Land Care Policies & Standards](#)

Scoring Example: Landscape Management

The total campus area of Example University comprises 50 acres, all of which are regularly managed. The grounds are managed by three separate departments: Athletics, Housing, and Facilities Management. The Athletics department manages 5 acres of grounds using conventional landscape management techniques and does not follow an IPM program. The Housing department, which manages 20 acres of grounds, follows an IPM program. The Facilities Management department manages 24 acres following an IPM program. Facilities Management also oversees a 1 acre campus garden that is managed without the use of any inorganic fertilizers or chemicals.

Management level	Factor	Multiply	Area managed at each level	Divide	Total area of managed grounds	Equals	Points earned
Conventional program	0	×	<u>5</u>	÷	<u>50</u>	=	0
IPM program	1		<u>44</u>				0.88
Organic program	2		<u>1</u>				0.04
Total points earned ➡							0.92

OP 10: Biodiversity

1-2 points available

A. Credit Rationale

This credit recognizes institutions that have a biodiversity management strategy designed to identify vulnerable ecosystems and species on campus and prevent, manage, and/or remediate damage to natural habitats and sensitive areas. Identifying and protecting the integrity of natural ecosystems can enhance the surrounding environment and improve the quality of campus and community life.

B. Criteria

Institution conducts one or both of the following:

- An assessment to identify [endangered and vulnerable species](#) (including migratory species) with habitats on institution-owned or -managed land;

And/or

- An assessment to identify [environmentally sensitive areas](#) on institution-owned or -managed land.

The institution has plans or programs in place to protect or positively affect the species, habitats and/or environmentally sensitive areas identified.

Assessments conducted and programs adopted by other entities (e.g., government, university system, NGO) may count for this credit as long as the assessments and programs apply to and are followed by the institution.

C. Applicability

This credit applies to all institutions with managed grounds comprising one or more percent of the total area of the campus.

D. Scoring

This credit is weighted more heavily for institutions that own or manage land that includes or is adjacent to any of the following:

- Legally [protected areas](#) (e.g., IUCN Category I-VI)
- Internationally recognized areas (e.g., World Heritage, Ramsar, Natura 2000)
- Priority sites for biodiversity (e.g., Key Biodiversity Areas, Alliance for Zero Extinction sites)
- Regions of conservation importance (e.g., Endemic Bird Areas, Biodiversity Hotspots, High Biodiversity Wilderness Areas)

2 points are available for this credit if the institution owns or manages land that includes or is adjacent to any of the above. 1 point is available for this credit for all other institutions. Please note that users do not have to calculate the number of points available themselves; points available will be calculated automatically when the relevant information is reported in the online Reporting Tool.

An institution earns the available points for conducting an assessment or assessments to identify endangered and vulnerable species and/or environmentally sensitive areas and for having plans or programs in place to

protect or positively affect any species, habitats and/or environmentally sensitive areas identified. Partial points are not available for this credit.

E. Reporting Fields

Required

- ☐ Does the institution own or manage land that includes or is adjacent to legally protected areas, internationally recognized areas, priority sites for biodiversity, or regions of conservation importance (e.g., IUCN Category I-VI, World Heritage, Ramsar, Natura 2000, Key Biodiversity Areas, Alliance for Zero Extinction sites, Endemic Bird Areas, Biodiversity Hotspots, High Biodiversity Wilderness Areas)?

If yes, provide:

- ☐ A brief description of the legally protected areas, internationally recognized areas, priority sites for biodiversity, and/or regions of conservation importance
- ☐ Has the institution conducted an assessment or assessments to identify endangered and vulnerable species (including migratory species) with habitats on institution-owned or –managed land?
- ☐ Has the institution conducted an assessment or assessments to identify environmentally sensitive areas on institution-owned or –managed land?

If yes to either of the above, provide:

- ☐ The methodologies used to identify endangered and vulnerable species and/or environmentally sensitive areas (including most recent year assessed) and any ongoing assessment and monitoring mechanisms
 - ☐ A brief description of identified species, habitats and/or environmentally sensitive areas
 - ☐ A brief description of plans or programs in place to protect or positively affect identified species, habitats and/or environmentally sensitive areas

Optional

- ☐ The website URL where information about the programs or initiatives is available
- ☐ Additional documentation to support the submission (upload)
- ☐ Data source(s) and notes about the submission
- ☐ Contact information for a responsible party (a staff member, faculty member, or administrator who can respond to questions regarding the data once it is submitted and available to the public)

F. Measurement

Timeframe

Report on current programs and the most recent assessment(s) completed or updated within the three years prior to the anticipated date of submission.

Sampling and Data Standards

Institutions may identify legally protected areas, internationally recognized areas, priority sites for biodiversity, and regions of conservation importance using the [Integrated Biodiversity Assessment Tool \(IBAT\) for Research & Conservation Planning](#), the [U.S. Information, Planning, and Conservation \(IPaC\) decision support system](#), or an equivalent resource or study.

G. Standards and Terms

Endangered and vulnerable species

Endangered and vulnerable species include, at minimum, [International Union for Conservation of Nature and Natural Resources \(IUCN\) Red List](#) and national conservation list species at the following levels of extinction risk: Critically endangered, Endangered, Vulnerable, Near threatened, Least concern.

Environmentally sensitive areas

Consistent with the [U.S. Department of Agriculture](#), environmentally sensitive areas are defined as:

Those land or water areas containing ecosystems, possibly but not necessarily rare, that are sensitive to external stimuli which may disturb their balance, especially in an irreversible direction.

Environmentally sensitive areas include, but are not limited to:

- Legally protected areas (IUCN Category I-VI)
- Internationally recognized areas (World Heritage, Ramsar, Natura 2000)
- Priority sites for biodiversity (Key Biodiversity Areas, Alliance for Zero Extinction sites)
- Regions of conservation importance (Endemic Bird Areas, Biodiversity Hotspots, High Biodiversity Wilderness Areas)
- Other ecosystems and habitat types that have unique or significant value to plant and/or animal species; are at risk of disappearing or being degraded; and/or are of cultural significance.

Protected areas

Consistent with the [International Union for Conservation of Nature](#) (IUCN):

A protected area is a clearly defined geographical space, recognised, dedicated and managed, through legal or other effective means, to achieve the long term conservation of nature with associated ecosystem services and cultural values. (IUCN Definition 2008)

Protected areas include areas managed mainly for:

- I. Strict protection [Ia) Strict nature reserve and Ib) Wilderness area]
- II. Ecosystem conservation and protection (i.e., National park)
- III. Conservation of natural features (i.e., Natural monument)
- IV. Conservation through active management (i.e., Habitat/species management area)
- V. Landscape/seascape conservation and recreation (i.e., Protected landscape/seascape)
- VI. Sustainable use of natural resources (i.e., Managed resource protected area)

Purchasing

This subcategory seeks to recognize institutions that are using their purchasing power to help build a sustainable economy. Collectively, institutions spend many billions of dollars on goods and services annually. Each purchasing decision represents an opportunity for institutions to choose environmentally and socially preferable products and services and support companies with strong commitments to sustainability.

Credits

Points available: 6

OP 11	Sustainable Procurement	3
OP 12	Electronics Purchasing	1
OP 13	Cleaning and Janitorial Purchasing	1
OP 14	Office Paper Purchasing	1

Share your story

The My Submission section of the online Reporting Tool includes an optional reporting field for the institution to provide an overview of notable activities and accomplishments in this subcategory. This information is featured in the institution's public report.

- ☐ A brief summary of the institution's notable activities and accomplishments relevant to this subcategory

OP 11: Sustainable Procurement

3 points available

A. Credit Rationale

This credit recognizes institutions that apply sustainability criteria when making procurement decisions. Each purchasing decision an institution makes represents an opportunity to choose environmentally and socially preferable products and services, to support companies with strong commitments to sustainability, and to support just and resilient local economies.

B. Criteria

Part 1

Institution has written policies, guidelines or directives that seek to support sustainable purchasing across commodity categories institution-wide, for example:

- A stated preference for post-consumer recycled or bio-based content or to otherwise minimize the negative environmental impacts of products and services.
- A stated intent to support [disadvantaged businesses](#), [social enterprises](#) and/or local [small and medium-sized enterprises](#) (SMEs) or otherwise support positive social and economic impacts and minimize negative impacts.
- A vendor code of conduct or equivalent policy that sets expectations about the social and environmental responsibility of the institution's business partners (i.e., product and service providers).

Part 2

Institution employs [Life Cycle Cost Analysis](#) (LCCA) as a matter of policy and practice when evaluating energy- and water-using products, systems and building components (e.g., HVAC systems). Practices may include structuring RFPs so that vendors compete on the basis of lowest total cost of ownership (TCO) in addition to (or instead of) purchase price.

Please note that LCCA is a method for assessing the *total cost of ownership* over the life cycle of a product or system (i.e., purchase, installation, operation, maintenance, and disposal). Life Cycle Assessment (LCA), by contrast, is a method for assessing the *environmental impacts* of a product or service over its life cycle. While LCAs may inform the sustainability criteria recognized in Part 3 of this credit, Part 2 specifically recognizes institutions that employ LCCA.

Part 3

Institution has published sustainability criteria to be applied when evaluating products and services in one or more of the following categories. The criteria address the specific sustainability challenges and impacts associated with products and services in each category, e.g., by requiring or giving preference to multi-criteria sustainability standards, certifications and labels appropriate to the category.

Category	Examples
1) Chemically intensive products and services (e.g., building and facilities maintenance, cleaning and sanitizing, landscaping and grounds maintenance)	- Published measures to minimize the use of chemicals. - A stated preference for green cleaning services and third party certified products.
2) Construction and renovation (e.g., furnishings and building materials).	A stated preference for materials that meet LEED requirements.
3) Information technology (IT) (e.g., computers, imaging equipment, mobile phones, data centers and cloud services)	- Published measures to reduce the demand for equipment. - A stated preference for ENERGY STAR or EPEAT registered products.
4) Food services (i.e., franchises, vending services, concessions, convenience stores) (Note that dining halls and catering services operated by the institution or the institution's primary dining services contractor are covered in Food & Dining).	- Including sustainability objectives in contracts with on-site franchises. - Requiring that franchises pay a living wage to employees.
5) Garments and linens	Published labor and human rights standards that suppliers must meet.
6) Professional services (e.g., architectural, engineering, public relations, financial)	- A stated preference for disadvantaged or community-based service providers. - A stated preference for B Corporations.
7) Transportation and fuels (e.g., travel, vehicles, delivery services, long haul transport, generator fuels, steam plants)	- Published measures to minimize the size of the campus fleet or otherwise reduce the impacts of travel or transport. - A stated preference for clean and renewable technologies.
8) Wood and paper	- A stated preference for post-consumer recycled, agricultural residue or third party certified content. - A stated preference for FSC certified printing services.
9) Other commodity categories that the institution has determined to have significant sustainability impacts	Strategies designed to address the specific impacts of the commodities, e.g., a stated preference for relevant multi-criteria sustainability standards.

Policies and directives adopted by entities of which the institution is part (e.g., government or the university system) may count for this credit as long as the policies apply to and are followed by the institution.

C. Applicability

This credit applies to all institutions.

D. Scoring

Each part is scored independently.

Part 1

An institution earns 0.5 points for Part 1 of this credit for having written policies, guidelines or directives that seek to support sustainable purchasing across commodity categories, institution-wide. Partial points are not available for Part 1.

Part 2

An institution earns 1 point for Part 2 of this credit for employing Life Cycle Cost Analysis (LCCA) as a matter of policy and standard practice when evaluating all energy- and water-using products and systems. Partial points are available for institutions that employ LCCA less comprehensively. For example, an institution that employs LCCA for certain types of systems or projects and not others would earn 0.5 points (half of the points available for Part 2).

Part 3

Institution earns 0.25 for each category of products and services for which it has published sustainability criteria. A maximum of 1.5 points are available for Part 1.

E. Reporting Fields

Required

- ☐ Does the institution have written policies, guidelines or directives that seek to support sustainable purchasing across commodity categories institution-wide (e.g., a stated preference for post-consumer recycled or bio-based content; a stated intent to support disadvantaged businesses, social enterprises and/or local small and medium-sized enterprises (SMEs); or a vendor code of conduct?

If yes, provide:

- ☐ A copy of the policies, guidelines or directives (text or upload)
- ☐ Does the institution employ Life Cycle Cost Analysis (LCCA) when evaluating energy- and water-using products and systems?

If yes:

- ☐ Which of the following best describes the institution's use of LCCA?
 - ☐ Institution employs LCCA as a matter of policy and standard practice when evaluating all energy- and water-using products, systems and building components.
 - ☐ Institution employs LCCA less comprehensively, e.g., for certain types of systems or projects and not others
 - ☐ A brief description of the LCCA policy and/or practices

- Does the institution have published sustainability criteria to be applied when evaluating products and services in the following categories? (The criteria address the specific sustainability challenges and impacts associated with products and services in each category, e.g., by requiring or giving preference to multi-criteria sustainability standards, certifications and labels appropriate to the category.)
 - Chemically intensive products and services (e.g., building and facilities maintenance, cleaning and sanitizing, landscaping and grounds maintenance)
 - Construction and renovation (e.g., furnishings and building materials)
 - Information technology (IT) (e.g., computers, imaging equipment, mobile phones, data centers and cloud services)
 - Food services (i.e., franchises, vending services, concessions, convenience stores)
 - Garments and linens
 - Professional services (e.g., architectural, engineering, public relations, financial)
 - Transportation and fuels (e.g., travel, vehicles, delivery services, long haul transport, generator fuels, steam plants)
 - Wood and paper
 - Other commodity categories that the institution has determined to have significant sustainability impacts

For each positive response above, provide:

- A brief description of the published sustainability criteria relevant to the category

Optional

- The website URL where information about the programs or initiatives is available
- Additional documentation to support the submission (upload)
- Data source(s) and notes about the submission
- Contact information for a responsible party (a staff member, faculty member, or administrator who can respond to questions regarding the data once it is submitted and available to the public)

F. Measurement

Timeframe

Report on current policies and practices at the time of submission.

Sampling and Data Standards

Not applicable

G. Standards and Terms

Disadvantaged businesses

A disadvantaged business is a small or medium-sized enterprise (SME) that is:

- At least 51 percent owned, managed and controlled by members of socially and/or economically disadvantaged groups. Examples include minority-owned and women-owned businesses.

And/or

- Located in an economically distressed area and for which local residents comprise 30 percent or more of all employees.

ENERGY STAR

[ENERGY STAR](#) is a U.S. Environmental Protection Agency program that includes frameworks to certify energy efficient buildings and products, and Portfolio Manager, an online tool to benchmark the energy and water performance of buildings.

EPEAT

[EPEAT](#) is a certification for computers and other electronic products. The standard's evaluation criteria include: energy efficiency, reduction and elimination of environmentally sensitive materials, materials selection, design for end-of-life, product longevity and life cycle extension, end-of-life management, corporate performance, and packaging characteristics. EPEAT currently registers products in 41 countries and regions.

Forest Stewardship Council

The [Forest Stewardship Council \(FSC\)](#) is an independent, non-profit organization that protects forests for future generations. FSC Chain-of-Custody certification traces the path of products from forests through the supply chain, verifying that FSC-certified material is identified or kept separated from non-certified material throughout the chain. FSC Forest Management certification confirms that a specific area of forest is being managed in line with the [FSC Principles and Criteria](#).

LEED

[LEED](#) (Leadership in Energy and Environmental Design) is described by the U.S. Green Building Council as “a voluntary, consensus-based, market-driven program that provides third-party verification of green buildings”. LEED rating systems include Building Design + Construction (BD+C), Interior Design + Construction (ID+C), Building Operations + Maintenance (O+M), and Neighborhood Development (ND).

Life Cycle Cost Analysis

Total cost of ownership (TCO) estimates the total life cycle direct and indirect costs of an asset in a single monetary figure. Life Cycle Cost Analysis (LCCA) is the process used to estimate an asset's TCO. In addition to purchase price, LCCA incorporates future costs such as maintenance, replacement of parts, energy use and disposal, and evaluates them on the basis of Net Present Value. LCCA can also be used to incorporate environmental and social life cycle costs, such as the cost of purchasing pollution offsets or monitoring labor practices.

Small and medium-sized enterprises

Small and medium-sized enterprises (SMEs) are defined differently in various countries and regions. Examples include:

- U.S. and Canada: all enterprises with fewer than 500 employees.
- European Union: all enterprises with fewer than 250 employees and either an annual turnover not exceeding 50 million euro or an annual balance sheet total not exceeding 43 million euro.

In the absence of a local definition, institutions should use the World Bank definition as any enterprise that meets at least two of the following three criteria:

- Fewer than 300 employees.

- Less than \$15 million in annual sales.
- Less than \$15 million in assets.

Social enterprises

Consistent with [Social Enterprise Europe](#), social enterprises are defined as “businesses whose prime purpose is social, who operate ethically and are democratically owned and governed.” Social enterprises may include, but are not limited to, organizations that are nominally part of the social and solidarity economy, e.g., fair and ethical trade organizations, self-help organizations, and cooperatives.

OP 12: Electronics Purchasing

1 point available

A. Credit Rationale

This credit recognizes institutions that are supporting markets for environmentally preferable computers and other electronic products.

B. Criteria

Institution purchases [EPEAT](#) registered products for desktop and notebook/laptop computers, displays, thin clients, tablets/slates, televisions and imaging equipment (copiers, digital duplicators, facsimile machines, mailing machines, multifunction devices, printers and scanners).

This credit does not include servers, smartphones, or specialized equipment for which no EPEAT certified products are available.

C. Applicability

This credit applies to all institutions.

D. Scoring

Institutions earn the maximum of 1 point available for this credit for purchasing exclusively EPEAT Gold computers, tablets/slates, televisions and imaging equipment. Incremental points are awarded based on the percentage of purchased products that are EPEAT registered at each level. For example, an institution that purchased 50 percent EPEAT Gold and 50 percent non-certified products would earn 0.5 points (half of the points available).

Points for this credit are calculated automatically in the STARS Reporting Tool as follows:

EPEAT registration level	Factor	Multiply	Expenditures on EPEAT registered electronics	Divide	Total expenditures on electronics	Equals	Points earned
Bronze	0.33	×	_____	÷	_____	=	
Silver	0.67		_____				
Gold	1		_____				
Total points earned ➡							Up to 1

E. Reporting Fields

Required

- ☐ Total expenditures on desktop and laptop computers, displays, thin clients, tablets/slates, televisions, and imaging equipment (copiers, digital duplicators, facsimile machines, mailing machines, multifunction devices, printers and scanners) (US/Canadian dollars)
- ☐ Expenditures on EPEAT Gold registered products (US/Canadian dollars)
- ☐ Expenditures on EPEAT Silver registered products (US/Canadian dollars)
- ☐ Expenditures on EPEAT Bronze registered products (US/Canadian dollars)
- ☐ Do the figures reported above include leased equipment?
- ☐ A brief description of the time period from which the figures reported above are drawn (i.e., one-year time period or representative sample)

Optional

- ☐ The website URL where information about the programs or initiatives is available
- ☐ Additional documentation to support the submission (upload)
- ☐ Data source(s) and notes about the submission
- ☐ Contact information for a responsible party (a staff member, faculty member, or administrator who can respond to questions regarding the data once it is submitted and available to the public)

F. Measurement

Timeframe

Report the most recent data available from within the three years prior to the anticipated date of submission.

Sampling and Data Standards

Institutions may track purchases over a one-year time period or take a [representative sample](#) to determine the EPEAT level of electronic equipment purchases. When using a sample, institutions should strive to ensure that the sample recognizes seasonal and other variations that influence purchasing behavior.

G. Standards and Terms

EPEAT

[EPEAT](#) is a certification for computers and other electronic products. The standard's evaluation criteria include: energy efficiency, reduction and elimination of environmentally sensitive materials, materials selection, design for end-of-life, product longevity and life cycle extension, end-of-life management, corporate performance, and packaging characteristics. EPEAT currently registers products in 41 countries and regions.

Scoring Example: Electronics Purchasing

Example College spent **\$100,000** on computers, copiers and printers last year. Of that, **\$50,000** was spent on EPEAT Gold products, **\$25,000** was spent on EPEAT Silver products, and \$25,000 was spent on products that were not EPEAT registered.

EPEAT registration level	Factor	Multiply	Expenditures on EPEAT registered electronics	Divide	Total expenditures on electronics	Equals	Points earned
Bronze	0.33	×	<u>0</u>	÷	<u>100,000</u>	=	0
Silver	0.67		<u>25,000</u>				0.17
Gold	1		<u>50,000</u>				0.5
Total points earned ➡							0.67

OP 13: Cleaning and Janitorial Purchasing

1 point available

A. Credit Rationale

This credit recognizes institutions that purchase green cleaning and janitorial products. By switching to non-toxic cleaning products, institutions reduce exposure impacts for all building occupants and the environment, thereby promoting clean and healthy work, living, and learning spaces.

B. Criteria

Institution's main cleaning or housekeeping department(s) and/or contractor(s) purchase cleaning and janitorial paper products that meet one or more of the following criteria:

- [Forest Stewardship Council](#) (FSC) certified
- [Green Seal](#) certified
- [UL ECOLOGO](#) certified
- [U.S. EPA Safer Choice](#) labeled (formerly Design for the Environment)
- Local equivalents for institutions outside the U.S. and Canada

Cleaning products include general purpose bathroom, glass and carpet cleaners; degreasing agents; biologically-active cleaning products (enzymatic and microbial products); floor-care products (e.g., floor finish and floor finish strippers); hand soaps and hand sanitizers, disinfectants, and metal polish and other specialty cleaning products.

Janitorial paper products include toilet tissue, tissue paper, paper towels, hand towels, and napkins.

Other janitorial products and materials (e.g., cleaning devices that use only ionized water or electrolyzed water) should be excluded from both total expenditures and expenditures on environmentally preferable products to the extent feasible.

C. Applicability

This credit applies to all institutions.

D. Scoring

Institutions earn the maximum of 1 point available for this credit by purchasing exclusively green cleaning and janitorial paper products. Incremental points are awarded based on the percentage of expenditures on cleaning and janitorial products that meet the credit criteria. For example, if 50 percent of cleaning product expenditures were on Green Seal certified products and half were on conventional products, an institution would earn 0.5 points (half of the points available).

Points for this credit are calculated automatically in the STARS Reporting Tool as follows:

Factor	Multiply	Expenditures on certified green cleaning and janitorial paper products	Divide	Total expenditures on cleaning and janitorial paper products	Equals	Total points earned
1	×	_____	÷	_____	=	Up to 1

E. Reporting Fields

Required

- ☐ Total expenditures on cleaning products (US/Canadian dollars)
- ☐ Expenditures on cleaning products that are Green Seal or UL ECOLOGO certified and/or Safer Choice labeled (or local equivalents for institutions outside the U.S. and Canada) (US/Canadian dollars)
- ☐ Total expenditures on janitorial paper products (US/Canadian dollars)
- ☐ Expenditures on janitorial paper products that are FSC, Green Seal, and/or UL ECOLOGO certified (or local equivalents for institutions outside the U.S. and Canada) (US/Canadian dollars)
- ☐ A brief description of the time period from which the figures reported above are drawn (i.e., one-year time period or representative sample)

Optional

- ☐ The website URL where information about the programs or initiatives is available
- ☐ Additional documentation to support the submission (upload)
- ☐ Data source(s) and notes about the submission
- ☐ Contact information for a responsible party (a staff member, faculty member, or administrator who can respond to questions regarding the data once it is submitted and available to the public)

F. Measurement

Timeframe

Report the most recent data available from within the three years prior to the anticipated date of submission.

Sampling and Data Standards

Include purchases made by all major housekeeping or cleaning departments, including outsourced or contracted service providers.

Institutions may track purchases over a one-year time period or take a [representative sample](#) to determine the percentage of expenditures on green cleaning and janitorial products. When using a sample, institutions should strive to ensure that the sample recognizes seasonal and other variations that influence purchasing behavior.

G. Standards and Terms

Forest Stewardship Council

The [Forest Stewardship Council \(FSC\)](#) is an independent, non-profit organization that protects forests for future generations. FSC Chain-of-Custody certification traces the path of products from forests through the supply chain, verifying that FSC-certified material is identified or kept separated from non-certified material throughout the chain. FSC Forest Management certification confirms that a specific area of forest is being managed in line with the [FSC Principles and Criteria](#).

Green Seal

[Green Seal](#) is an independent non-profit organization “dedicated to safeguarding the environment and transforming the marketplace by promoting the manufacture, purchase, and use of environmentally responsible products and services”. Green Seal certification is based on multi-attribute environmental standards that meet the ISO 14024 standards for eco-labeling.

Safer Choice label

Formerly known as Design for the Environment (DfE), the [Safer Choice label](#) is the U.S. Environmental Protection Agency’s program to identify products with safer chemical ingredients.

UL ECOLOGO

The [UL Environment ECOLOGO](#) program certifies products, services and packaging for reduced environmental impact. ECOLOGO Certifications are voluntary, multi-attribute, lifecycle based environmental certifications that meet the ISO 14024 standards for eco-labeling.

Scoring Example: Cleaning and Janitorial Purchasing

Example Community College spent \$1,000 on cleaning and janitorial paper products last year. Of that, \$850 was spent on Green Seal certified products.

Factor	Multiply	Expenditures on green cleaning and janitorial paper products	Divide	Total expenditures on cleaning and janitorial paper products	Equals	Total points earned
1	×	<u>850</u>	÷	<u>1,000</u>	=	0.85

OP 14: Office Paper Purchasing

1 point available

A. Credit Rationale

This credit recognizes institutions that purchase recycled-content and third party certified office paper. By supporting markets for environmentally preferable paper, institutions contribute to conservation of water, energy, and virgin forest.

B. Criteria

Institution purchases [office paper](#) with post-consumer recycled, [agricultural residue](#), and/or [Forest Stewardship Council](#) (FSC) certified content.

C. Applicability

This credit applies to all institutions.

D. Scoring

Institutions earn the maximum of 1 point available for this credit by purchasing exclusively office paper that contains 90-100 percent post-consumer recycled and/or agricultural residue content and/or is FSC Recycled certified. Incremental points are awarded based on the percentage of office paper purchased with post-consumer recycled, agricultural residue, and/or FSC certified content. For example, if 50 percent of all office paper purchased by an institution was 90-100 percent post-consumer recycled content, the institution would earn 0.5 points (half of the points available).

Points for this credit are calculated automatically in the STARS Reporting Tool as follows:

Percentage of post-consumer recycled, agricultural residue, and/or FSC certified content	Factor	Multiply	Expenditures on specified level of post-consumer recycled, agricultural residue, and/or FSC certified content office paper	Divide	Total expenditures on office paper	Equals	Points earned
10-29	0.2	×	_____	÷	_____	=	
30-49	0.4		_____				
50-69	0.6		_____				
70-89 (or FSC Mix label)	0.8		_____				
90-100 (or FSC Recycled label)	1		_____				
Total points earned ➡							Up to 1

E. Reporting Fields

Required

- ☐ Total expenditures on office paper (US/Canadian dollars)
- ☐ Expenditures on 10-29 percent post-consumer recycled, agricultural residue, and/or FSC certified content office paper (US/Canadian dollars)
- ☐ Expenditures on 30-49 percent post-consumer recycled, agricultural residue, and/or FSC certified content office paper (US/Canadian dollars)
- ☐ Expenditures on 50-69 percent post-consumer recycled, agricultural residue, and/or FSC certified content office paper (US/Canadian dollars)
- ☐ Expenditures on 70-89 percent post-consumer recycled and/or agricultural residue content and/or FSC Mix label office paper (US/Canadian dollars)
- ☐ Expenditures on 90-100 percent post-consumer recycled and/or agricultural residue content and/or FSC Recycled label office paper (US/Canadian dollars)
- ☐ A brief description of the time period from which the figures reported above are drawn (i.e., one-year time period or representative sample)

Optional

- ☐ The website URL where information about the programs or initiatives is available
- ☐ Additional documentation to support the submission (upload)
- ☐ Data source(s) and notes about the submission
- ☐ Contact information for a responsible party (a staff member, faculty member, or administrator who can respond to questions regarding the data once it is submitted and available to the public)

F. Measurement

Timeframe

Report the most recent data available from within the three years prior to the anticipated date of submission.

Sampling and Data Standards

Institutions may track purchases over a one-year time period or take a [representative sample](#) to determine the recycled content of office paper purchased. When using a sample, institutions should strive to ensure that the sample recognizes seasonal and other variations that influence purchasing behavior.

G. Standards and Terms

Agricultural residue

Consistent with the [Environmental Paper Network](#), agricultural residues are defined as:

residues left over from food production or other processes... Fibers include: cereal straws like wheat straw, rice straw, seed flax straw, sorghum stalks, sugar cane bagasse, and rye seed grass straw... Agricultural residues are not from on purpose crops that replace forest stands or food crops.

Forest Stewardship Council

The [Forest Stewardship Council \(FSC\)](#) is an independent, non-profit organization that protects forests for future generations. FSC Chain-of-Custody certification traces the path of products from forests through the supply chain, verifying that FSC-certified material is identified or kept separated from non-certified material throughout the chain. FSC Forest Management certification confirms that a specific area of forest is being managed in line with the [FSC Principles and Criteria](#).

Office paper

Consistent with the U.S. Environmental Protection Agency (EPA), office paper is defined as "high grade papers such as copier paper, computer printout, and stationery".

Scoring Example: Office Paper Purchasing

Example College purchased \$10,000 worth of office paper last year. Of that, \$5,000 was spent on 100 percent post-consumer recycled-content paper, \$2,500 was spent on 35 percent post-consumer recycled-content paper, and \$2,500 was spent on non-recycled-content paper.

Percentage of post-consumer recycled, agricultural residue, and/or FSC certified content	Factor	Multiply	Expenditures on specified level of post-consumer recycled, agricultural residue, and/or FSC certified content office paper	Divide	Total expenditures on office paper	Equals	Points earned
10-29	0.2	×	<u>0</u>	÷	<u>10,000</u>	=	0
30-49	0.4		<u>2,500</u>				0.1
50-69	0.6		<u>0</u>				0
70-89 (or FSC Mix label)	0.8		<u>0</u>				0
90-100 (or FSC Recycled label)	1		<u>5,000</u>				0.5
Total points earned ➡							0.6

Transportation

This subcategory seeks to recognize institutions that are moving toward sustainable transportation systems. Transportation is a major source of greenhouse gas emissions and other pollutants that contribute to health problems such as heart and respiratory diseases and cancer. Due to disproportionate exposure, these health impacts are frequently more pronounced in low-income communities next to major transportation corridors. In addition, the extraction, production, and global distribution of fuels for transportation can damage environmentally and/or culturally significant ecosystems and may financially benefit hostile and/or oppressive governments.

At the same time, campuses can reap benefits from modeling sustainable transportation systems. Bicycling and walking provide human health benefits and mitigate the need for large areas of paved surface, which can help campuses to better manage stormwater. Institutions may realize cost savings and help support local economies by reducing their dependency on petroleum-based fuels for transportation.

Credits

Points available: 7

OP 15	Campus Fleet*	1
OP 16	Student Commute Modal Split*	2
OP 17	Employee Commute Modal Split	2
OP 18	Support for Sustainable Transportation	2

* credit does not apply to all institutions

Share your story

The My Submission section of the online Reporting Tool includes an optional reporting field for the institution to provide an overview of notable activities and accomplishments in this subcategory. This information is featured in the institution's public report.

- ☐ A brief summary of the institution's notable activities and accomplishments relevant to this subcategory

OP 15: Campus Fleet

1 point available

A. Credit Rationale

This credit recognizes institutions that use cleaner fuels and fuel-efficient vehicles. Institutions can help shape markets by creating demand for and enhancing the visibility of more efficient vehicles and cleaner fuels that reduce greenhouse gas emissions and improve local air quality. While other credits address the climate impacts of fuel usage and the replacement of motorized vehicles with non-motorized vehicles, this credit recognizes the purchase and use of fuel efficient and alternative fueled vehicles.

B. Criteria

Institution supports alternative fuel and power technology by including in its motorized vehicle fleet vehicles that are:

- A. Gasoline-electric hybrid
- B. Diesel-electric hybrid
- C. Plug-in hybrid
- D. 100 percent electric (including electric assist utility bicycles and tricycles)
- E. Fueled with Compressed Natural Gas (CNG)
- F. Hydrogen fueled
- G. Fueled with B20 or higher biofuel for more than 4 months of the year
And/or
- H. Fueled with locally produced, low-level (e.g., B5) biofuel for more than 4 months of the year (e.g., fuel contains cooking oil recovered and recycled on campus or in the local community)

For this credit, the institution's motorized fleet includes all cars, carts, trucks, tractors, buses, electric assist cycles, and similar vehicles used for transporting people and/or goods, including both leased vehicles and vehicles that are institution-owned and operated. Heavy construction equipment (e.g., excavators and pavers), maintenance equipment (e.g., lawn-mowers and leaf blowers), and demonstration/test vehicles used for educational purposes are not included in this credit.

Vehicles that meet multiple criteria (e.g., hybrid vehicles fueled with biofuel) should not be double-counted.

C. Applicability

This credit applies to all institutions that have a motorized vehicle fleet.

D. Scoring

Institutions earn the maximum of 1 point available for this credit when all vehicles in their fleets are alternatively fueled and/or powered. Incremental points are awarded for using alternative fuels in some vehicles and/or having some alternatively powered vehicles. For example, an institution for which gasoline-electric hybrid vehicles comprise 50 percent of the total fleet would earn 0.5 points (half of the points available for this credit).

Points for this credit are calculated automatically in the STARS Reporting Tool as follows:

Factor	Multiply	Number of vehicles that meet a criterion (A-H) for power or fuel type	Divide	Total number of vehicles in fleet	Equals	Total points earned
1	×	_____	÷	_____	=	Up to 1

E. Reporting Fields

Required

- ☐ Total number of vehicles (e.g., cars, carts, trucks, tractors, buses, electric assist cycles) in the institution's fleet
- ☐ Number of gasoline-electric, non-plug-in hybrid vehicles in the institution's fleet
- ☐ Number of diesel-electric, non-plug-in hybrid vehicles in the institution's fleet
- ☐ Number of plug-in hybrid vehicles in the institution's fleet
- ☐ Number of 100 percent electric vehicles in the institution's fleet (including electric assist utility bicycles and tricycles)
- ☐ Number of vehicles in the institution's fleet that are fueled with Compressed Natural Gas (CNG)
- ☐ Number of hydrogen fueled vehicles in the institution's fleet
- ☐ Number of vehicles in the institution's fleet that are fueled with B20 or higher biofuel for more than 4 months of the year
- ☐ Number of vehicles in the institution's fleet that are fueled with locally produced, low-level (e.g., B5) biofuel for more than 4 months of the year (e.g., fuel contains cooking oil recovered and recycled on campus or in the local community)
- ☐ Do the figures reported above include leased vehicles?

Optional

- ☐ A brief description of the institution's efforts to support alternative fuel and power technology in its motorized fleet
- ☐ The website URL where information about the programs or initiatives is available
- ☐ Additional documentation to support the submission (upload)
- ☐ Data source(s) and notes about the submission
- ☐ Contact information for a responsible party (a staff member, faculty member, or administrator who can respond to questions regarding the data once it is submitted and available to the public)

F. Measurement

Timeframe

Report the most recent data available from within the three years prior to the anticipated date of submission.

Sampling and Data Standards

Include all vehicles that are part of the institution's fleet. Reporting on a sample of vehicles is not allowed for this credit.

G. Standards and Terms

Not applicable

Scoring Example: Campus Fleet

Example Community College has a motorized fleet of 100 vehicles. Of those vehicles:

- 10 are gasoline-electric hybrids (A)
- 5 are 100 percent electric (D)
- 30 are fueled with B20 biofuel year-round (G)

Number of vehicles that meet a criterion (A through I) = $10 + 5 + 30 = 45$

Factor	Multiply	Number of vehicles that meet a criterion (A-H) for power or fuel type	Divide	Total number of vehicles in fleet	Equals	Total points earned
1	×	<u>45</u>	÷	<u>100</u>	=	0.45

OP 16: Student Commute Modal Split

2 points available

A. Credit Rationale

This credit recognizes institutions where students use preferable modes of transportation to travel to and from the institution. Commute modal split is a common measure used to evaluate the sustainability performance of a transportation system. Using alternative modes of transportation helps reduce local air pollution and GHG emissions. Walking and biking offer health benefits as well.

B. Criteria

Institution's students commute to and from campus using [more sustainable commuting options](#) such as walking, bicycling, vanpooling or carpooling, taking public transportation, riding motorcycles or scooters, riding a campus shuttle, or a combination of these options.

Students who live on campus should be included in the calculation based on how they get to and from their classes.

C. Applicability

This credit applies to all institutions where students attend the physical campus.

D. Scoring

Institutions earn the maximum of 2 points available for this credit by having all students use more sustainable modes of transportation for getting to and from campus. Incremental points are awarded based on the percentage of students that use more sustainable modes as their primary means of transportation. For example, an institution for which 50 percent of students use more sustainable modes and the other 50 percent drive alone would earn 1 point (half of the available points for this credit).

Points for this credit are calculated automatically in the STARS Reporting Tool as follows:

Factor	Multiply	Total percentage of students using more sustainable commuting options (0-100)	Equals	Total points earned
0.02	×	_____	=	Up to 2

E. Reporting Fields

Required

- ☐ Total percentage of students (graduate and undergraduate) that use more sustainable commuting options as their primary means of transportation (walking, bicycling, vanpooling or carpooling, taking public transportation, riding motorcycles or scooters, riding a campus shuttle) (0-100)
- ☐ A brief description of the method(s) used to gather data about student commuting, including the timeframe for when the analysis was conducted and how a representative sample was reached, if applicable

Optional

- Percentage of the institution's students that:
 - Commute with only the driver in the vehicle (excluding motorcycles and scooters) as their primary method of transportation (0-100)
 - Walk, bicycle, or use other non-motorized means as their primary method of transportation (please note that this may include on-campus residents) (0-100)
 - Vanpool or carpool as their primary method of transportation (0-100)
 - Take a campus shuttle or public transportation as their primary method of transportation (0-100)
 - Use a motorcycle, scooter or moped as their primary method of transportation (0-100)
- The website URL where information about the programs or initiatives is available
- Additional documentation to support the submission (upload)
- Data source(s) and notes about the submission
- Contact information for a responsible party (a staff member, faculty member, or administrator who can respond to questions regarding the data once it is submitted and available to the public)

F. Measurement

Timeframe

Report the most recent data available from within the three years prior to the anticipated date of submission.

Sampling and Data Standards

Institutions may use a [representative sample](#) to gather data about student commuting behavior. For information about how to measure commuting behavior, see the guidance provided by the [Massachusetts Rideshare Program](#) and the [South Coast Air Quality Management District](#).

This credit is scored based on the percentage of students (graduate and undergraduate) using alternatives to single-occupancy vehicle commuting (i.e., more sustainable commuting options). Students who do not regularly attend the physical campus (i.e., distance education students) may be excluded.

G. Standards and Terms

More sustainable commuting options

More sustainable commuting options include transportation modes that do not involve single-occupancy vehicles (i.e., cars with only the driver in the vehicle). Thus, the following commuting options are classified as more sustainable for purposes of STARS reporting: walking, bicycling, vanpooling or carpooling, taking public transportation, riding motorcycles or scooters, riding a campus shuttle, telecommuting or any combination of these options.

Representative sample

A representative sample is a subset of a statistical population that accurately reflects the members of the entire population. A representative sample should be an unbiased indication of what the entire population is like. For example, in a student population of 1000 students in which 25 percent of the students are enrolled in a business school, 50 percent are enrolled in humanities programs, and 25 percent are enrolled in science programs, a

representative sample might include 200 students: 50 business students, 100 humanities students, and 50 science students. Likewise, a representative sample of purchases should accurately reflect the institution's total purchases, accounting for seasonal and other variations in product availability and purchasing.

Scoring Example: Student Commute Modal Split

Example University students have the following commuting composition:

- 30 percent live on campus (and, therefore, do not drive alone to commute)
- 15 percent walk, bike, or use non-motorized transportation
- 20 percent take campus shuttles or public transportation
- 5 percent carpool

Total percentage using alternatives to single-occupancy vehicle commuting = $30 + 15 + 20 + 5 = 70$

Factor	Multiply	Total percentage of students using more sustainable commuting options (0-100)	Equals	Total points earned
0.02	×	<u>70</u>	=	1.4

OP 17: Employee Commute Modal Split

2 points available

A. Credit Rationale

This credit recognizes institutions where employees use preferable modes of transportation to travel to and from the institution. Commute modal split is a common measure used to evaluate the sustainability performance of a transportation system. Using alternative modes of transportation reduces local air pollution and GHG emissions. Walking and biking offer health benefits as well.

B. Criteria

Institution's employees (faculty, staff, and administrators) get to and from campus using [more sustainable commuting options](#) such as walking, bicycling, vanpooling or carpooling, taking public transportation, riding motorcycles or scooters, riding a campus shuttle, telecommuting, or a combination of these options.

Employees who live on campus should be included in the calculation based on how they get to and from their workplace.

C. Applicability

This credit applies to all institutions.

D. Scoring

Institutions earn the maximum of 2 points for this credit by having all employees use more sustainable modes of transportation for getting to and from campus. Incremental points are awarded based on the percentage of employees that use more sustainable modes as their primary method of transportation. For example, an institution for which 50 percent of employees use more sustainable modes and the other 50 percent drive alone would earn 1 point (half of the available points for this credit).

Points for this credit are calculated automatically in the STARS Reporting Tool as follows:

Factor	Multiply	Total percentage of the institution's employees using more sustainable commuting options (0-100)	Equals	Total points earned
0.02	×	_____	=	Up to 2

E. Reporting Fields

Required

- ☐ Total percentage of the institution's employees that use more sustainable commuting options as their primary method of transportation (walking, bicycling, vanpooling or carpooling, taking public transportation, riding motorcycles or scooters, riding a campus shuttle, telecommuting) (0-100)
- ☐ A brief description of the method(s) used to gather data about employee commuting, including the timeframe for when the analysis was conducted and how a representative sample was reached, if applicable

Optional

- ❑ Percentage of the institution's employees that:
 - Commute with only the driver in the vehicle (excluding motorcycles and scooters) as their primary method of transportation (0-100)
 - Walk, bicycle, or use other non-motorized means as their primary method of transportation (please note that this may include on-campus residents) (0-100)
 - Vanpool or carpool as their primary method of transportation (0-100)
 - Take a campus shuttle or public transportation as their primary method of transportation (0-100)
 - Use a motorcycle, scooter or moped as their primary method of transportation (0-100)
 - Telecommute for 50 percent or more of their regular work hours (0-100)
- ❑ The website URL where information about the programs or initiatives is available
- ❑ Additional documentation to support the submission (upload)
- ❑ Data source(s) and notes about the submission
- ❑ Contact information for a responsible party (a staff member, faculty member, or administrator who can respond to questions regarding the data once it is submitted and available to the public)

F. Measurement

Timeframe

Report the most recent data available from within the three years prior to the anticipated date of submission.

Sampling and Data Standards

Institutions may use a [representative sample](#) to gather data about employee commuting behavior. For information about how to measure commuting behavior, see the guidance provided by the [Massachusetts Rideshare Program](#) and the [South Coast Air Quality Management District](#).

This credit is scored based on the percentage of employees using alternatives to single-occupancy vehicle commuting (i.e., more sustainable commuting options).

G. Standards and Terms

More sustainable commuting options

More sustainable commuting options include transportation modes that do not involve single-occupancy vehicles (i.e., cars with only the driver in the vehicle). Thus, the following commuting options are classified as more sustainable for purposes of STARS reporting: walking, bicycling, vanpooling or carpooling, taking public transportation, riding motorcycles or scooters, riding a campus shuttle, telecommuting or any combination of these options.

Representative sample

A representative sample is a subset of a statistical population that accurately reflects the members of the entire population. A representative sample should be an unbiased indication of what the entire population is like. For example, in a student population of 1000 students in which 25 percent of the students are enrolled in a business school, 50 percent are enrolled in humanities programs, and 25 percent are enrolled in science programs, a representative sample might include 200 students: 50 business students, 100 humanities students, and 50 science students. Likewise, a representative sample of purchases should accurately reflect the institution's total purchases, accounting for seasonal and other variations in product availability and purchasing.

Scoring Example: Employee Commute Modal Split

Example University employees have the following commuting composition:

- 10 percent walk, bike, or use non-motorized transportation
- 30 percent take campus shuttles or public transportation
- 15 percent carpool

Total percentage using alternatives to single-occupancy vehicle commuting = $10 + 30 + 15 = \underline{55}$

Factor	Multiply	Total percentage of the institution's employees using more sustainable commuting options (0-100)	Equals	Total points earned
0.02	×	<u>55</u>	=	1.1

OP 18: Support for Sustainable Transportation

2 points available

A. Credit Rationale

This credit recognizes institutions that support active transportation and commuting alternatives for its students and employees. Encouraging more sustainable modes of transportation and offering programs to reduce commuting helps decrease local air pollution and greenhouse gas emissions.

B. Criteria

Institution has implemented one or more of the following strategies to encourage more sustainable modes of transportation and reduce the impact of student and employee commuting. The institution:

- Provides secure bicycle storage (not including office space), shower facilities, and lockers for bicycle commuters. The storage, shower facilities and lockers are co-located in at least one building/location that is accessible to all commuters.
- Provides short-term bicycle parking (e.g., racks) for all occupied buildings and makes long-term bicycle storage available for students who live on-site (if applicable). Long-term bicycle storage may include bicycle depots/hubs/stations, indoor bicycle rooms, and/or bicycle cages/secure bicycle parking areas. Standard public bicycle racks are not sufficient for long-term storage.
- Has a bicycle and pedestrian plan or policy (or adheres to a local community plan/policy) that sets standards and practices for campus streets to enable safe access for all users (e.g., a [“complete streets” or bicycle accommodation policy](#))
- Has a bicycle-sharing program or participates in a local bicycle-sharing program.
- Offers free or reduced price transit passes and/or operates a free campus shuttle for commuters. The transit passes may be offered by the institution itself, through the larger university system of which the institution is a part, or through a regional program provided by a government agency.
- Offers a [guaranteed return trip \(GRT\) program](#) to regular users of alternative modes of transportation
- Participates in a car/vanpool or ride sharing program and/or offers reduced parking fees or preferential parking for car/vanpoolers
- Participates in a car sharing program, such as a commercial car-sharing program, one administered by the institution, or one administered by a regional organization
- Has one or more Level 2 or Level 3 [electric vehicle recharging stations](#) that are accessible to student and employee commuters
- Offers a telecommuting program for employees, either as a matter of policy or as standard practice
- Offers a condensed work week option that reduces employee commuting, (as a matter of policy or as standard practice)
- Has incentives or programs to encourage employees to live close to campus

- Other strategies to reduce the impact of commuting (e.g., preferred parking for fuel-efficient vehicles, cash-out of parking programs)

C. Applicability

This credit applies to all institutions.

D. Scoring

Institutions earn 0.2 points for each initiative described above. Institutions with ten or more of the initiatives listed earn the maximum of 2 points available for this credit.

E. Reporting Fields

Required

- Has the institution implemented the following strategies to encourage more sustainable modes of transportation and reduce the impact of student and employee commuting?
 - Provides secure bicycle storage (not including office space), shower facilities, and lockers for bicycle commuters (the storage, shower facilities and lockers are co-located in at least one building/location that is accessible to all commuters)
 - Provides short-term bicycle parking for all occupied buildings and makes long-term bicycle storage available for students who live on-site (if applicable)
 - Has a bicycle and pedestrian plan or policy (or adheres to a local community plan/policy) that sets standards and practices for campus streets to enable safe access for all users (e.g., a “complete streets” or bicycle accommodation policy)
 - Has a bicycle-sharing program or participates in a local bicycle-sharing program
 - Offers free or reduced price transit passes and/or operates a free campus shuttle for commuters
 - Offers a guaranteed return trip program to regular users of alternative modes of transportation
 - Participates in a car/vanpool or ride sharing program and/or offers reduced parking fees or preferential parking for car/vanpoolers
 - Participates in a car sharing program, such as a commercial car-sharing program, one administered by the institution, or one administered by a regional organization
 - Has one or more Level 2 or Level 3 electric vehicle recharging stations that are accessible to student and employee commuters
 - Offers a telecommuting program for employees as a matter of policy or standard practice
 - Offers a condensed work week option that reduces employee commuting (as a matter of policy or standard practice)
 - Has incentives or programs to encourage employees to live close to campus
 - Other strategies to reduce the impact of commuting (e.g., preferred parking for fuel-efficient vehicles, cash-out of parking programs)

For each strategy the institution has implemented, provide:

- A brief description of the program or initiative

Optional

- The website URL where information about the programs or initiatives is available
- Additional documentation to support the submission (upload)
- Data source(s) and notes about the submission
- Contact information for a responsible party (a staff member, faculty member, or administrator who can respond to questions regarding the data once it is submitted and available to the public)

F. Measurement

Timeframe

Report on current programs, practices and plans at the time of submission.

Sampling and Data Standards

Not applicable

G. Standards and Terms

Complete streets or bicycle accommodation policy

A complete streets policy sets standards and practices for campus streets to enable safe access for all users, i.e., such that pedestrians, bicyclists, motorists and transit riders of all ages and abilities are able to safely move along and across a complete street. A bicycle accommodation policy is similar, but addresses safe street access for bicyclists only.

Electric vehicle recharging stations

Level 2 electric vehicle recharging stations are 208 – 240 volt AC chargers. Level 3 chargers include very high voltages (e.g., 300 - 600 volts DC) and currents, and may also include AC “fast charging” stations (“Level 3 AC”).

Guaranteed return trip program

Guaranteed return trip (GRT) programs support users of alternative modes of transportation by providing transportation in cases of emergencies, for example illnesses, family emergencies or the absence of a carpool and vanpool vehicle.

Waste

This subcategory seeks to recognize institutions that are moving toward zero waste by reducing, reusing, recycling, and composting. These actions mitigate the need to extract virgin materials from the earth, such as trees and metals. It generally takes less energy and water to make a product with recycled material than with virgin resources. Reducing the generation of waste also reduces the flow of waste to incinerators and landfills, which produce greenhouse gas emissions, can contaminate air and groundwater supplies, and tend to have disproportionate negative impacts on low-income communities. Source reduction and waste diversion also save institutions costly landfill and hauling service fees. In addition, waste reduction campaigns can engage the entire campus community in contributing to a tangible sustainability goal.

Credits

Points available: 10

OP 19	Waste Minimization and Diversion	8
OP 20	Construction and Demolition Waste Diversion*	1
OP 21	Hazardous Waste Management	1

* credit does not apply to all institutions

Share your story

The My Submission section of the online Reporting Tool includes an optional reporting field for the institution to provide an overview of notable activities and accomplishments in this subcategory. This information is featured in the institution's public report.

- ☐ A brief summary of the institution's notable activities and accomplishments relevant to this subcategory

OP 19: Waste Minimization and Diversion

8 points available

A. Credit Rationale

This credit recognizes institutions that are minimizing their production of waste, diverting materials from landfills and incinerators, and conserving resources by recycling and composting.

B. Criteria

Part 1

Institution has implemented source reduction strategies to reduce the total amount of waste generated (materials diverted + materials disposed) per weighted campus user compared to a baseline.

Part 2

Institution's total annual waste generation (materials diverted and disposed) is less than the minimum performance threshold of 0.50 tons (0.45 tonnes) per weighted campus user.

Part 3

Institution diverts materials from the landfill or incinerator by recycling, composting, donating or re-selling.

For scoring purposes, up to 10 percent of total waste generated may also be disposed through post-recycling residual conversion. To count, residual conversion must include an integrated materials recovery facility (MRF) or equivalent sorting system to recover recyclables and compostable material prior to conversion.

This credit includes on-campus dining services operated by the institution or the institution's primary on-site contractor.

Waste includes all materials that the institution discards, intends to discard or is required to discard (i.e., all materials that are recycled, composted, donated, re-sold, or disposed of as trash) except construction, demolition, electronic, hazardous, special (e.g., coal ash), universal and non-regulated chemical waste, which are covered in the *Construction and Demolition Waste Diversion* and *Hazardous Waste Management* credits.

Consistent with the U.S Environmental Protection Agency's Waste Reduction Model (WARM), the on-site reuse of materials is treated as a form of source reduction for scoring purposes. All materials that are reused on campus are automatically recognized in scoring for Part 1 and Part 2 of this credit. To avoid double counting, reuse therefore does not also contribute to scoring for Part 3 as waste diversion.

C. Applicability

This credit applies to all institutions.

D. Scoring

Each part is scored independently. Points earned are calculated according to the formulas below. Please note that users do not have to calculate the number of points earned themselves; points earned will be calculated automatically when the data listed under *E. Reporting Fields* is entered in the online Reporting Tool.

Part 1

Institutions earn maximum points of 2.5 points available for Part 1 by reducing their total waste generation by 50 percent or more compared to a baseline. Incremental points are awarded based on the percentage reduction achieved. For example, an institution that reduced the total amount of waste generated by 25 percent would earn 1.25 points (half of the points available for Part 1).

STARS only awards positive points; points will not be deducted if the total amount of waste generated increases rather than decreases during the time period.

$$\text{Points earned} = 5 \times \{ [(A/B) - (C/D)] / (A/B) \}$$

- A = Total waste generated (diverted + disposed), baseline year (short tons/tonnes)
- B = Weighted campus users, baseline year
- C = Total waste generated (diverted + disposed), performance year (short tons/tonnes)
- D = Weighted campus users, performance year

Part 2

An institution earns the maximum of 2.5 points available for Part 2 of this credit when its total annual waste generation per weighted campus user is 90 percent less than the minimum performance threshold of 0.50 short tons (0.46 tonnes). Incremental points are awarded based on the institution's performance between the threshold and the 90 percent target. For example, an institution that generates 0.275 tons of waste per weighted campus user (45 percent less than the threshold) would earn 1.25 points (half of the points available for Part 2).

$$\text{Points earned} = 2.78 \times \{ [C - (A/B)] / C \}$$

- A = Total waste generated (diverted + disposed), performance year (short tons/tonnes)
- B = Weighted campus users, performance year
- C = Minimum performance threshold (0.50 short tons or 0.46 tonnes)

Part 3

Institutions earn the maximum of 3 points available for Part 3 of this credit by diverting 100 percent of waste from the landfill or incinerator through recycling, composting, donating or re-selling or by diverting at least 90 percent of waste from the landfill or incinerator and disposing of the remaining residual materials through post-recycling conversion. Incremental points are awarded based on the percentage of waste that is diverted and the percentage of waste that is disposed through post-recycling conversion, as follows:

$$\text{Points earned} = 3 \times \{ [(A + B + C) + (F \text{ if } D \geq F, \text{ else } D)] / (A + B + C + D + E) \}$$

- A = Materials recycled, performance year (short tons/tonnes)
- B = Materials composted, performance year (short tons/tonnes)
- C = Materials donated or re-sold, performance year (short tons/tonnes)
- D = Materials disposed through post-recycling residual conversion, performance year (short tons/tonnes)
- E = Materials disposed in a solid waste landfill or incinerator, performance year (short tons/tonnes)
- F = Maximum allowable residual conversion $[0.1 \times (A + B + C + D + E)]$

For example, an institution that diverts 40 percent of its waste through recycling, composting, donating or re-selling and disposes of the remaining 60 percent through post-recycling conversion would earn 1.5 points (half of the points available for Part 3 of this credit).

E. Reporting Fields

Required

- Figures needed to determine total waste generated and diverted during the performance year:
 - Materials recycled, performance year (short tons/tonnes)
 - Materials composted, performance year (short tons/tonnes)
 - Materials donated or re-sold, performance year (short tons/tonnes)
 - Materials disposed through post-recycling residual conversion, performance year (short tons/tonnes)
 - Materials disposed in a solid waste landfill or incinerator, performance year (short tons/tonnes)
- Figures needed to determine total waste generated and diverted during the baseline year:
 - Materials recycled, baseline year (short tons/tonnes)
 - Materials composted, baseline year (short tons/tonnes)
 - Materials donated or re-sold, baseline year (short tons/tonnes)
 - Materials disposed through post-recycling residual conversion, baseline year (short tons/tonnes)
 - Materials disposed in a solid waste landfill or incinerator, baseline year (short tons/tonnes)

If reporting post-recycling residual conversion, provide:

- A brief description of the residual conversion facility, including affirmation that materials are sorted prior to conversion to recover recyclables and compostable materials
- Start date, performance year or 3-year period
- End date, performance year or 3-year period
- Start date, baseline year or 3-year period
- End date, baseline year or 3-year period

If end date of the baseline year/period is 2004 or earlier, provide:

- A brief description of when and why the waste generation baseline was adopted (e.g., in sustainability plans and policies or in the context of other reporting obligations)
- Figures needed to determine “weighted campus users” during the performance year:
 - Number of students resident on-site, performance year
 - Number of employees resident on-site, performance year
 - Number of other individuals resident on-site and/or staffed hospital beds (if applicable), performance year
 - Total full-time equivalent student enrollment, performance year
 - Full-time equivalent of employees (staff + faculty), performance year

- Full-time equivalent of students enrolled in exclusively in distance education, performance year
- Figures needed to determine “weighted campus users” during the baseline year:
 - Number of students resident on-site, baseline year
 - Number of employees resident on-site, baseline year
 - Number of other individuals resident on-site and/or staffed hospital beds (if applicable), baseline year
 - Total full-time equivalent student enrollment, baseline year
 - Full-time equivalent of employees (staff + faculty), baseline year
 - Full-time equivalent of students enrolled exclusively in distance education, baseline year
- In the waste figures reported above, has the institution recycled, composted, donated and/or re-sold the following materials?

○ Paper, plastics, glass, metals, and other recyclable containers ○ Food ○ Cooking oil ○ Plant materials ○ Animal bedding ○ White goods (i.e., appliances) ○ Laboratory equipment	○ Furniture ○ Residence hall move-in/move-out waste ○ Scrap metal ○ Pallets ○ Tires ○ Other (please specify)
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Optional

- Materials intended for disposal but subsequently recovered and reused on campus, performance year (e.g., materials that are actively diverted from the landfill or incinerator and refurbished/repurposed) (short tons/tonnes)
- Which of the following methods does the institution use to collect standard recyclables (i.e., paper, plastic, glass, metals) in common areas? (select all that apply)
 - Single stream (a single container for commingled recyclables)
 - Dual stream (two separate containers for recyclables, e.g., one for paper and another for plastic, glass, and metals)
 - Multi-stream (multiple containers that further separate different types of materials)
- Average contamination rate for the institution’s recycling program (percentage, 0-100)
- A brief description of any recycling quality control mechanisms employed, e.g., efforts to minimize contamination and/or monitor the discard rates of the materials recovery facilities and mills to which materials are diverted
- A brief description of any of the following waste minimization strategies employed by the institution:
 - Behavior change, e.g., initiatives to shift individual attitudes and practices such as signage and competitions

- Waste audits and other initiatives to assess its materials management efforts and identify areas for improvement
- Institutional procurement policies designed to prevent waste (e.g., by minimizing packaging and purchasing in bulk)
- A surplus department or formal office supplies exchange program that facilitates reuse of materials
- Platforms to encourage peer-to-peer exchange and reuse (e.g., of electronics, furnishings, books and other goods)
- Limits on paper and ink consumption (e.g., restricting free printing and/or mandating doubled-sided printing in libraries and computer labs)
- Making materials (e.g., course catalogs, course schedules, and directories) available online by default rather than printing them
- Program to reduce residence hall move-in/move-out waste
- Programs or initiatives to recover and reuse other materials intended for disposal
- The website URL where information about the programs or initiatives is available
- Additional documentation to support the submission (upload)
- Data source(s) and notes about the submission
- Contact information for a responsible party (a staff member, faculty member, or administrator who can respond to questions regarding the data once it is submitted and available to the public)

F. Measurement

Timeframe

Performance Year

Report the most recent data available from within the three years prior to the anticipated date of submission. Institutions may use the most recent single year for which data is available or an average from throughout the period. Institutions may choose the annual start and end dates that work best with the data they have (e.g., fiscal or calendar year), as long as data are reported from a consecutive 12-month (or 3-year) period.

Report population figures from the same time period as that from which waste generation data are drawn (e.g., the consecutive 12-month or 3-year period that most closely overlaps with the waste generation performance period).

Baseline Year

Report data from the baseline year, which may be:

- Any year from 2005 to the present
- A baseline year, 1990 to 2004, that the institution has adopted as part of its sustainability plans or policies or in the context of other reporting obligations

Recommended best practices for defining a baseline include:

- Using the average of three consecutive years to reduce the impact of outliers.

- Using the same baseline year for multiple credits to reduce reporting requirements. For example, institutions using 2005 for all STARS credits that are baseline-based would only have to calculate baseline weighted campus user data once.
- Ensuring that baseline and performance year data are valid and reliable (e.g., that the data were gathered in the same manner)

Institutions without valid and reliable historical data should use performance year data for both the baseline and performance year. Following this approach, an institution would not be able to claim points for reductions during its first STARS submission, but would be able to use its newly established baseline for subsequent submissions.

Institutions may choose the start and end dates that work best with the data they have (e.g., fiscal or calendar year), as long as data are reported from a consecutive 12-month (or 3-year) period. Report population figures from the same period as that from which waste generation data are drawn (e.g., the consecutive 12-month or 3-year period that most closely overlaps with the waste generation baseline period).

Sampling and Data Standards

Waste figures measured in volume may be converted to weight using the conversion factors provided by the [U.S. Environmental Protection Agency](#) and the College and University Recycling Council (used for the U.S. [RecycleMania competition](#)) or the conversion factors provided by the [United Nations Environment Programme](#) (UNEP).

To the extent possible, include all waste (diverted + disposed) that was generated by the institution and the institution's primary on-site dining services contractor (if applicable) when reporting for this credit. Construction, demolition, electronic, hazardous, special (e.g., coal ash), universal and non-regulated chemical waste, which are covered in the *Construction and Demolition Waste Diversion* and *Hazardous Waste Management* credits, are excluded. Agricultural waste may be excluded, provided it is excluded from both the volume of materials diverted and the volume of materials disposed.

If data for the entire campus and/or entire year are not available, institutions may use a [representative sample](#). When taking a sample, strive for consistency between the baseline and performance year.

G. Standards and Terms

Materials disposed

Materials disposed include any solid waste that was sent for disposal in a municipal waste landfill or incinerator.

Materials diverted

Materials diverted include any solid waste that was destined for disposal in a municipal waste landfill or incinerator but was diverted by recycling, composting, donating, or re-selling.

Minimum performance threshold

Minimum performance thresholds are benchmarks against which campus performance may be assessed for scoring purposes. The thresholds used in this version of STARS were calculated at the first decile for institutions reporting under STARS 2.0 as of July 31, 2015 and rounded to the nearest hundredth. In other words, 90 percent of institutions rated under STARS 2.0 before July 31, 2015 performed better than the minimum threshold. Extreme outliers were excluded from the calculations.

Residual conversion

Consistent with CalRecycle and the [Southern California Conversion Technology Project](#), residual conversion includes:

...thermal, chemical, mechanical, and/or biological processes capable of converting post-recycled residual solid waste into useful products and chemicals, green fuels like ethanol and biodiesel, and clean, renewable energy.

Examples include the transformation of post-recycled residual materials into usable heat or electricity through gasification, pyrolysis, distillation, or biological conversion other than composting. To count as residual conversion, the process must include an integrated materials recovery facility (MRF) or equivalent sorting system to recover recyclables and compostable material prior to conversion.

Materials that are otherwise landfilled or incinerated, including biomass conversion operations that exclusively incinerate organic materials, landfill-gas-to-energy (LFGTE) facilities, and other facilities that do not employ integrated materials recovery or equivalent sorting and recovery systems may not be considered to be converted residual waste.

Waste

Waste is defined as any substance or object which the institution discards, intends to discard, or is required to discard. This includes materials that are recycled, composted, donated, re-sold, or disposed of as trash.

Weighted campus user

“Weighted campus user” is a measurement of an institution’s population that is adjusted to accommodate how intensively certain community members use the campus. This figure is used to normalize resource consumption and environmental impact figures in order to accommodate the varied impacts of different population groups. For example, an institution where a high percentage of students live on campus would witness higher greenhouse gas emissions, waste generation, and water consumption figures than otherwise comparable non-residential institution since students’ residential impacts and consumption would be included in the institution’s totals.

STARS calculates the figure according to the following formula. Please note that users will not have to calculate this figure themselves; the result will be calculated automatically when the data are entered into the online Reporting Tool.

$$\text{Weighted campus users} = (A + B + C) + 0.75 [(D - A) + (E - B) - F]$$

- A= Number of students resident on-site
- B= Number of employees resident on-site
- C= Number of other individuals resident on-site and/or staffed hospital beds
- D= Total full-time equivalent student enrollment
- E= Full-time equivalent of employees (staff + faculty)
- F= Full-time equivalent of students enrolled exclusively in distance education

Scoring Example: Waste Minimization and Diversion

The following data describe Example University:

A. Waste generation, baseline year:

- Tons of materials recycled = 1,000
- Tons of materials composted = 350
- Tons of materials donated or re-sold = 0
- Tons of materials disposed through post-recycling residual conversion = 0
- Tons of materials disposed in a solid waste landfill or incinerator = 650

Total waste generation = $1,000 + 350 + 650 = \mathbf{2,000}$ tons

B. Weighted campus users, baseline year:

- A. Number of students resident on-site = 2,000
- B. Number of employees resident on-site = 0
- C. Number of other individuals resident on-site and/or staffed hospital beds = 0
- D. Total full-time equivalent student enrollment = 2,500
- E. Full-time equivalent of employees = 750
- F. Full-time equivalent of students enrolled exclusively in distance education = 0

Baseline year weighted campus users = $(A + B + C) + 0.75 [(D - A) + (E - B) - F]$
 $= (2,000 + 0 + 0) + 0.75 [(2,500 - 2,000) + (750 - 0) - (0)]$
 $= 2,000 + 0.75 (500 + 750 - 0)$
 $= 2,000 + 0.75 (1,250)$
 $= \mathbf{2,937.5}$

C. Waste generation, performance year:

- Tons of materials recycled = 790
- Tons of materials composted = 350
- Tons of materials donated or re-sold = 10
- Tons of materials disposed through post-recycling residual conversion = 0
- Tons of materials disposed in a solid waste landfill or incinerator = 400

Total waste generation = $790 + 350 + 10 + 400 = \mathbf{1,550}$ tons

D. Weighted campus users, performance year:

- A. Number of students resident on-site = 2,500
- B. Number of employees resident on-site = 50
- C. Number of other individuals resident on-site and/or staffed hospital beds = 0
- D. Total full-time equivalent student enrollment = 3,000
- E. Full-time equivalent of employees = 800
- F. Full-time equivalent of students enrolled exclusively in distance education = 0

Performance year weighted campus users = $(A + B + C) + 0.75 [(D - A) + (E - B) - F]$

$$\begin{aligned} &= (2,500 + 50 + 0) + 0.75 [(3,000 - 2,500) + (800 - 50) - (0)] \\ &= 2,550 + 0.75 (500 + 750 - 0) \\ &= 2,550 + 0.75 (1,250) \\ &= \mathbf{3,487.5} \end{aligned}$$

Calculating points earned for Part 1

$$\begin{aligned} \text{Points earned} &= 5 \times \{ [(A/B) - (C/D)] / (A/B) \} \\ &= 5 \times \{ [(2,000/2,937.5) - (1,550/3,487.5)] / (2,000/2,937.5) \} \\ &= 5 \times \{ [0.681 - 0.444] / 0.681 \} \\ &= 5 \times \{ 0.2366 / 0.6809 \} \\ &= 5 \times 0.347 \\ &= \mathbf{1.74 \text{ points}} \end{aligned}$$

Calculating points earned for Part 2

$$\begin{aligned} \text{Points earned} &= 2.78 \times \{ [0.50 - (C/D)] / 0.50 \} \\ &= 2.78 \times \{ [0.50 - (1,550/3,487.5)] / 0.50 \} \\ &= 2.78 \times \{ [0.50 - 0.4444] / 0.50 \} \\ &= 2.78 \times \{ 0.0556 / 0.50 \} \\ &= 2.78 \times 0.1112 \\ &= \mathbf{0.31 \text{ points}} \end{aligned}$$

Calculating points earned for Part 3

Waste generation, performance year:

A = Tons of materials recycled, performance year = 790

B = Tons of materials composted, performance year = 350

C = Tons of materials donated or re-sold, performance year = 10

D = Tons of materials disposed through post-recycling residual conversion, performance year = 0

E = Tons of materials disposed in a solid waste landfill or incinerator, performance year = 400

F = Maximum allowable residual conversion $[0.1 \times (A + B + C + D + E)]$

$$\begin{aligned} \text{Points earned} &= 3 \times \{ [(A + B + C) + (F \text{ if } D \geq F, \text{ else } D)] / (A + B + C + D + E) \} \\ &= 3 \times \{ [(1,150) + (0)] / (1,550) \} \\ &= 3 \times 0.742 \\ &= \mathbf{2.226 \text{ points}} \end{aligned}$$

OP 20: Construction and Demolition Waste Diversion

1 point available

A. Credit Rationale

This credit recognizes institutions that have diverted construction and demolition (C&D) wastes. Construction and demolition is a significant source of waste that falls outside of an institution's standard waste stream and may be handled by a separate contractor or waste hauler.

B. Criteria

Institution diverts non-hazardous [construction and demolition waste](#) from the landfill and/or incinerator.

Soil and organic debris from excavating or clearing the site do not count for this credit.

C. Applicability

This credit applies to all institutions that have conducted a major construction, renovation and/or demolition project in the three years prior to the anticipated date of submission.

D. Scoring

Institutions earn the maximum of 1 point available for this credit by diverting all of their non-hazardous construction and demolition waste from the landfill or incinerator in a one-year period. Incremental points are awarded based on the percentage of waste that is recovered. For example, an institution that diverts 50 percent of its construction and demolition waste would earn 0.5 points (half of the points available for this credit).

Points for this credit are calculated automatically in the STARS Reporting Tool as follows:

C&D waste recycled, donated or otherwise recovered	Add	C&D waste landfilled or incinerated	Equals	Total amount of C&D waste generated (recovered + disposed)
_____	+	_____	=	_____

Factor	Multiply	C&D waste recycled, donated or otherwise recovered	Divide	Total amount of C&D waste generated (recovered + disposed)	Equals	Points earned
1	×	_____	÷	_____	=	Up to 1

E. Reporting Fields

Required

- ☐ Construction and demolition materials recycled, donated, or otherwise recovered during the most recent year for which data is available within the previous three years (short tons/tonnes)
- ☐ Construction and demolition materials landfilled or incinerated during the most recent year for which

data is available within the previous three years (short tons/tonnes)

Optional

- ☐ A brief description of programs, policies, infrastructure investments, outreach efforts, and/or other factors that contributed to the diversion rate for construction and demolition waste
- ☐ The website URL where information about the programs or initiatives is available
- ☐ Additional documentation to support the submission (upload)
- ☐ Data source(s) and notes about the submission
- ☐ Contact information for a responsible party (a staff member, faculty member, or administrator who can respond to questions regarding the data once it is submitted and available to the public)

F. Measurement

Timeframe

Report on the most recent data available for a one-year period from within the three years prior to the anticipated date of submission.

Sampling and Data Standards

Waste figures measured in volume may be converted to weight using the conversion factors for construction debris provided by [CalRecycle](#), other state or provincial authorities, or the guidance provided by the [United Nations Environment Programme](#) (UNEP).

G. Standards and Terms

Construction and demolition waste

Consistent with the U.S. Environmental Protection Agency (EPA), construction and demolition (C&D) materials consist of “the debris generated during the construction, renovation, and demolition of buildings, roads, and bridges. C&D materials often contain bulky, heavy materials, such as concrete, wood, metals, glass, and salvaged building components.”

Waste

Waste is defined as any substance or object which the institution discards, intends to discard, or is required to discard. This includes materials that are recycled, composted, donated, re-sold, or disposed of as trash.

Scoring Example: Construction and Demolition Waste Diversion

Example University had two major construction projects during the past year. These projects generated the following C&D materials:

- 50 tons of C&D materials that were recycled
- 10 tons of C&D materials that were donated
- 40 tons of C&D materials that were landfilled

Materials recycled, donated or otherwise recovered = $50 + 10 = 60$

Total amount of C&D waste generated = 100

C&D waste recycled, donated or otherwise recovered	Add	C&D waste landfilled or incinerated	Equals	Total amount of C&D waste generated (recovered + disposed)
<u>60</u>	+	<u>40</u>	=	<u>100</u>

Factor	Multiply	C&D waste recycled, donated or otherwise recovered	Divide	Total amount of C&D waste generated (recovered + disposed)	Equals	Points earned
1	×	<u>60</u>	÷	<u>100</u>	=	<u>0.60</u>

OP 21: Hazardous Waste Management

1 point available

A. Credit Rationale

This credit recognizes institutions that seek to minimize and safely dispose of all hazardous, universal, and non-regulated chemical waste and that have electronic waste (“e-waste”) recycling and/or reuse programs. Hazardous waste typically contains toxic components such as lead and mercury that can contaminate soil and groundwater and have detrimental human health impacts if handled improperly. At the same time, e-waste contains components that can be recycled. Likewise, computers, cellular phones, and other electronic materials can be donated or re-sold at reduced cost to non-profit organizations and community groups. Given the environmental and workplace health hazards that arise from hazardous waste disposal and e-waste recycling, this credit is reserved for programs that take steps to ensure that workers’ basic safety is protected and environmental standards are met.

B. Criteria

Part 1

Institution has strategies in place to safely dispose of all hazardous, special (e.g., coal ash), universal, and non-regulated chemical waste and seeks to minimize the presence of these materials on campus.

Part 2

Institution has a program in place to recycle, reuse, and/or refurbish electronic waste generated by the institution and/or its students. Institution ensures that the electronic waste is recycled responsibly by using a recycler certified under the [e-Stewards®](#) and/or Responsible Recycling ([R2](#)) standards.

C. Applicability

This credit applies to all institutions.

D. Scoring

Each part of the credit is scored separately.

Part 1

Institutions earn 0.5 points for meeting the criteria outlined above. Partial points are not available for Part 1.

Part 2

Institutions earn the maximum of 0.5 points available for Part 2 for having or participating in a program to responsibly recycle, reuse, and/or refurbish electronic waste generated by both the institution and its students. Partial points are available. For example, an institution whose program includes recycling, reusing, and/or refurbishing electronic waste generated by the institution or its students, but not by both, would earn 0.25 points (half of the points available for Part 2).

E. Reporting Fields

Required

- ☐ Does the institution have strategies in place to safely dispose of all hazardous, special (e.g., coal ash), universal, and non-regulated chemical waste and seek to minimize the presence of these materials on campus?

If yes, provide the following:

- ☐ A brief description of steps taken to reduce hazardous, special (e.g., coal ash), universal, and non-regulated chemical waste
 - ☐ A brief description of how the institution safely disposes of hazardous, universal, and non-regulated chemical waste
 - ☐ A brief description of any significant hazardous material release incidents during the previous three years, including volume, impact and response/remediation
 - ☐ A brief description of any inventory system employed by the institution to facilitate the reuse or redistribution of laboratory chemicals
- ☐ Does the institution have or participate in a program to responsibly recycle, reuse, and/or refurbish electronic waste generated by the institution?
- ☐ Does the institution have or participate in a program to responsibly recycle, reuse, and/or refurbish electronic waste generated by students?

If yes to either of the above, provide:

- ☐ A brief description of the electronic waste recycling program(s), including information about how electronic waste generated by the institution and/or students is recycled
 - ☐ Is the institution's electronic waste recycler certified under the e-Stewards and/or Responsible Recycling (R2) standards?

Optional

- ☐ Electronic waste recycled or otherwise diverted from the landfill or incinerator during the most recent year for which data is available during the previous three years (short tons/tonnes)
- ☐ The website URL where information about the programs or initiatives is available
- ☐ Additional documentation to support the submission (upload)
- ☐ Data source(s) and notes about the submission
- ☐ Contact information for a responsible party (a staff member, faculty member, or administrator who can respond to questions regarding the data once it is submitted and available to the public)

F. Measurement

Timeframe

Report on current programs at the time of submission.

Sampling and Data Standards

Not applicable

G. Standards and Terms

e-Stewards

The [e-Stewards](#) certification program for electronics recyclers is designed to enable individuals and organizations who dispose of their old electronic equipment to easily identify recyclers that adhere to the highest standard of environmental responsibility and worker protection. e-Stewards Certification is open to electronics recyclers, refurbishers and processors in all developed countries.

Responsible Recycling

The Responsible Recycling ([R2](#) [Standard](#)) sets forth requirements relating to environmental, health, safety, and security aspects of electronics recycling. R2 also requires e-recyclers to assure that more toxic material streams are managed safely and responsibly by downstream vendors-all the way to final disposition. It also prohibits e-recyclers and their downstream vendors from exporting these more toxic materials to countries that have enacted laws making their import illegal.

Waste

Waste is defined as any substance or object which the institution discards, intends to discard, or is required to discard. This includes materials that are recycled, composted, donated, re-sold, or disposed of as trash.

Water

This subcategory seeks to recognize institutions that are conserving water, making efforts to protect water quality and treating water as a resource rather than a waste product. Pumping, delivering, and treating water is a major driver of energy consumption, so institutions can help reduce energy use and the greenhouse gas emissions associated with energy generation by conserving water. Likewise, conservation, water recycling and reuse, and effective rainwater management practices are important in maintaining and protecting finite groundwater supplies. Water conservation and effective rainwater management also reduce the need for effluent discharge into local surface water supplies, which helps improve the health of local water ecosystems.

Credits

Points available: 6-8

OP 22	Water Use	4-6
OP 23	Rainwater Management	2

Share your story

The My Submission section of the online Reporting Tool includes an optional reporting field for the institution to provide an overview of notable activities and accomplishments in this subcategory. This information is featured in the institution's public report.

- ☐ A brief summary of the institution's notable activities and accomplishments relevant to this subcategory

OP 22: Water Use

4-6 points available

A. Credit Rationale

This credit recognizes institutions that have reduced water use. By reducing campus water withdrawals, institutions can reduce pressures on local aquifers, streams, rivers, lakes, and aquatic wildlife.

B. Criteria

Part 1

Institution has reduced its [potable water](#) use per [weighted campus user](#) compared to a baseline.

Part 2

Institution has reduced its potable water use per gross square foot/metre of floor area compared to a baseline.

Part 3

Institution has reduced its total water use (potable + non-potable) per acre/hectare of [vegetated grounds](#) compared to a baseline.

C. Applicability

This credit applies to all institutions.

D. Scoring

Each part is scored independently.

This credit is weighted more heavily for institutions located in areas of water stress and scarcity and less heavily for institutions in areas with relative water abundance. The points available for each part of this credit are determined by the level of "Physical Risk QUANTITY" for the institution's main campus, as indicated by the World Resources Institute's [Aqueduct Water Risk Atlas](#). The number of points available is automatically calculated in the online Reporting Tool as detailed in the following table:

Physical Risk QUANTITY	Points available for each part	Total available points for this credit
Low and Low to Medium Risk	1⅓	4
Medium to High Risk	1⅔	5
High and Extremely High Risk	2	6

Points earned are calculated according to the formulas below. Please note that users do not have to calculate the number of points available and the number of points earned themselves; points will be calculated automatically when the data listed under *E. Reporting Fields* is entered in the online Reporting Tool.

STARS awards only positive points; points will not be deducted if normalized water use increased rather than decreased during the time period.

Part 1

Institutions earn the maximum points available for Part 1 of this credit by achieving a 30 percent or larger reduction in potable water use per weighted campus user compared to a baseline. Incremental points are awarded for smaller reductions. For example, an institution that reduced its potable water use by 15 percent would earn half of the points available for Part 1.

$$\text{Points earned} = [E / 0.3] \times \{ [(A/B) - (C/D)] / (A/B) \}$$

- A = Potable water use, baseline year (US gallons/cubic metres)
- B = Weighted campus users, baseline year
- C = Potable water use, performance year (US gallons/cubic metres)
- D = Weighted campus users, performance year
- E = Points available for Part 1

Part 2

Institutions earn the maximum points available for Part 2 of this credit by achieving a 30 percent or larger reduction in potable water use per gross square foot/metre of floor area compared to a baseline. Incremental points are awarded for smaller reductions. For example, an institution that reduced its potable water use by 15 percent would earn half of the points available for Part 2.

$$\text{Points earned} = [E / 0.3] \times \{ [(A/B) - (C/D)] / (A/B) \}$$

- A = Potable water use, baseline year (US gallons/cubic metres)
- B = Gross floor area of building space, baseline year (gross square feet/metres)
- C = Potable water use, performance year (US gallons/cubic metres)
- D = Gross floor area of building space, performance year (gross square feet/metres)
- E = Points available for Part 2

Part 3

Institutions earn the maximum points available for Part 3 of this credit by achieving a 30 percent or larger reduction in total water use per acre/hectare of vegetated grounds compared to a baseline. Incremental points are awarded for smaller reductions. For example, an institution that reduced its total water use by 15 percent would earn half of the points available for Part 3.

$$\text{Points earned} = [E / 0.3] \times \{ [(A/B) - (C/D)] / (A/B) \}$$

- A = Total water use, baseline year (US gallons/cubic metres)
- B = Area of vegetated grounds, baseline year (acres/hectares)
- C = Total water use, performance year (US gallons/cubic metres)
- D = Area of vegetated grounds, performance year (acres/hectares)
- E = Points available for Part 3

E. Reporting Fields

Required

- ☐ Level of "Physical Risk QUANTITY" for the institution's main campus as indicated by the World Resources Institute's [Aqueduct Water Risk Atlas](#) (Low, Low to Medium, Medium to High, High, or Extremely High)
- ☐ Total water use (potable and non-potable combined), performance year (US gallons/cubic metres)
- ☐ Potable water use, performance year (US gallons/cubic metres)
- ☐ Total water use (potable and non-potable combined), baseline year (US gallons/cubic metres)
- ☐ Potable water use, baseline year (US gallons/cubic metres)
- ☐ Start date, performance year or 3-year period
- ☐ End date, performance year or 3-year period
- ☐ Start date, baseline year or 3-year period
- ☐ End date, baseline year or 3-year period

If end date of the baseline year/period is 2004 or earlier, provide:

- ☐ A brief description of when and why the water use baseline was adopted (e.g., in sustainability plans and policies or in the context of other reporting obligations)
- ☐ Figures needed to determine "weighted campus users" during the performance year:
 - ☐ Number of students resident on-site, performance year
 - ☐ Number of employees resident on-site, performance year
 - ☐ Number of other individuals resident on-site and/or staffed hospital beds (if applicable), performance year
 - ☐ Total full-time equivalent student enrollment, performance year
 - ☐ Full-time equivalent of employees (staff + faculty), performance year
 - ☐ Full-time equivalent of students enrolled exclusively in distance education, performance year
- ☐ Figures needed to determine "weighted campus users" during the baseline year:
 - ☐ Number of students resident on-site, baseline year
 - ☐ Number of employees resident on-site, baseline year
 - ☐ Number of other individuals resident on-site and/or staffed hospital beds (if applicable), baseline year
 - ☐ Total full-time equivalent student enrollment, baseline year
 - ☐ Full-time equivalent of employees (staff + faculty), baseline year
 - ☐ Full-time equivalent of students enrolled exclusively in distance education, baseline year
- ☐ [Gross floor area of building space](#), performance year (square feet/metres)
- ☐ Gross floor area of building space, baseline year (square feet/metres)
- ☐ Does the institution wish to pursue Part 3 of this credit? (reductions in total water use per acre/hectare of vegetated grounds)

If yes, provide:

- Area of vegetated grounds, performance year (acres/hectares) (Athletic fields and land dedicated to food production may be excluded)
- Area of vegetated grounds, baseline year (acres/hectares) (Athletic fields and land dedicated to food production may be excluded)

Optional

- A brief description of any of the following water conservation and efficiency initiatives employed by the institution:
 - Behavior change, e.g., initiatives to shift individual attitudes and practices such as signage and competitions
 - Water recovery and reuse
 - Initiatives to replace plumbing fixtures, fittings, appliances, equipment, and systems with water-efficient alternatives (e.g., building retrofits)
- The website URL where information about the programs or initiatives is available
- Additional documentation to support the submission (upload)
- Data source(s) and notes about the submission
- Contact information for a responsible party (a staff member, faculty member, or administrator who can respond to questions regarding the data once it is submitted and available to the public)

F. Measurement

Timeframe

Performance Year

Report the most recent data available from within the three years prior to the anticipated date of submission. Institutions may use the most recent single year for which data is available or an average from throughout the period. Institutions may choose the annual start and end dates that work best with the data they have (e.g., fiscal or calendar year), as long as data are reported from a consecutive 12-month (or 3-year) period.

Report building space, campus area, and population figures from the same time period as that from which water use data are drawn (e.g., the consecutive 12-month or 3-year period that most closely overlaps with the water use performance period). Institutions may report building space and campus area using an average from throughout the period or a snapshot at a single representative point during the period.

Baseline Year

Report data from the baseline year, which may be:

- Any year from 2005 to the present
- A baseline year, 1990 to 2004, that the institution has adopted as part of its sustainability plans or policies or in the context of other reporting obligations

Recommended best practices for defining a baseline include:

- Using the average of three consecutive years to reduce the impact of outliers.

- Using the same baseline year for multiple credits to reduce reporting requirements. For example, institutions using 2005 for all STARS credits that are baseline-based would only have to calculate baseline weighted campus user data once.
- Ensuring that baseline and performance year data are valid and reliable (e.g., that the data were gathered in the same manner)

Institutions without valid and reliable historical data should use performance year data for both the baseline and performance year. Following this approach, an institution would not be able to claim points for reductions during its first STARS submission, but would be able to use its newly established baseline for subsequent submissions.

Institutions may choose the start and end dates that work best with the data they have (e.g., fiscal or calendar year), as long as data are reported from a consecutive 12-month (or 3-year) period.

Report building space, campus area, and population figures from the same period as that from which water use data are drawn (e.g., the consecutive 12-month or 3-year period that most closely overlaps with the water use baseline period). Institutions may report building space and campus area using an average from throughout the period or a snapshot at a single representative point during the period.

Sampling and Data Standards

To the extent possible, include all water that was used by the institution when reporting for this credit; reporting on a sample or subset of water use is not allowed. Total water use is the total volume of water, potable and non-potable, withdrawn by the institution regardless of source, i.e., surface water, ground water, rainwater harvested directly and stored by the institution for use, reclaimed wastewater from off-campus sources, and water from municipal water supplies and water utilities. If data on water use values are not available, institutions may work with their facilities department and water utility to estimate usage figures based on billing totals.

Water that is [recycled/reused](#) on campus should only be counted toward water use once (at initial withdrawal from its source) and excluded at subsequent uses.

Athletic fields and land dedicated to food production may be excluded from the area of vegetated grounds as long as they are excluded from both baseline year and performance year data. The footprint of buildings and other structures with green roofs may be included in the area of vegetated grounds.

G. Standards and Terms

Gross floor area of building space

Gross floor area of building space refers to the total amount of building space that is included within the institutional boundary. Any standard definition of building space may be used (e.g., ASHRAE, ANSI/BOMA, IECC) as long as it is used consistently. Parking structures are included. For guidance on calculating gross square footage of a building, you may also consult [3.2.1 Gross Area](#) of the U.S. Department of Education's *Postsecondary Education Facilities Inventory and Classification Manual*.

Buildings within the overall STARS boundary that the institution leases entirely (i.e., the institution is the only tenant) should be included.

Buildings that are not owned by the institution and in which the institution is one of multiple tenants may be excluded. If the institution chooses to include such buildings, it must include all multi-tenant buildings that are

included in the institution's overall STARS boundary and in which the institution is a tenant; institutions cannot choose to include some leased spaces and omit others. If an institution chooses to include leased spaces, the institution should count only the square footage of building space it occupies and not the entire building.

Potable water

Potable water (or “finished” water) is water that meets local and/or national standards governing drinking water. By contrast, non-potable water is water that does not, or may not, meet drinking water quality standards.

Recycled/reused water

Recycled/reused water includes water reused in closed loop systems, graywater that is recovered and reused, and blackwater that is reclaimed and reused. Reuse applications may include, but are not limited to, agricultural and landscape irrigation, industrial and cooling processes, and toilet flushing. Recycled/reused water includes water that is treated prior to reuse and water that is not treated prior to reuse.

Total campus area

The total amount of land within the institutional boundary, including the footprint of the institution's buildings.

Vegetated grounds

The area of vegetated grounds equals total campus area minus the footprint of buildings and non-vegetated surfaces (e.g., permeable or impermeable pavement). The footprint of buildings with green roofs may be included as vegetated grounds.

Weighted campus user

“Weighted campus user” is a measurement of an institution's population that is adjusted to accommodate how intensively certain community members use the campus. This figure is used to normalize resource consumption and environmental impact figures in order to accommodate the varied impacts of different population groups. For example, an institution where a high percentage of students live on campus would witness higher greenhouse gas emissions, waste generation, and water consumption figures than otherwise comparable non-residential institution since students' residential impacts and consumption would be included in the institution's totals.

STARS calculates the figure according to the following formula. Please note that users will not have to calculate this figure themselves; the result will be calculated automatically when the data are entered into the online Reporting Tool.

$$\text{Weighted campus users} = (A + B + C) + 0.75 [(D - A) + (E - B) - F]$$

A= Number of students resident on-site

B= Number of employees resident on-site

C= Number of other individuals resident on-site and/or staffed hospital beds

D= Total full-time equivalent student enrollment

E= Full-time equivalent of employees (staff + faculty)

F= Full-time equivalent of students enrolled exclusively in distance education

Scoring Example: Water Use

Example College's "Physical Risk QUANTITY" for water is *High* according to the World Resources Institute's [Aqueduct Water Risk Atlas](#), making **2** points available for each part of the credit.

Part 1

- Used 1,000,000 gallons of potable water in 2005 (A)
- Had 2,000 weighted campus users in 2005 (B)
- Used 900,000 gallons of potable water in 2013 (C)
- Had 2,000 weighted campus users in 2013 (D)

$$\begin{aligned}\text{Points earned} &= (2 / 0.3) \times \{ [(A/B) - (C/D)] / (A/B) \} \\ &= 6.67 \times \{ [(1,000,000/2,000) - (900,000/2,000)] / (1,000,000/2,000) \} \\ &= 6.67 \times \{ [500 - 450] / 500 \} \\ &= 6.67 \times 50 / 500 \\ &= 6.67 \times 0.10 \\ &= \mathbf{0.67 \text{ points earned for Part 1}}\end{aligned}$$

Part 2

- Used 1,000,000 gallons of potable water in 2005 (A)
- Had 2,000,000 gross square feet of floor area in 2005 (B)
- Used 900,000 gallons of potable water in 2013 (C)
- Had 2,500,000 gross square feet of floor area in 2013 (D)

$$\begin{aligned}\text{Points earned} &= (2 / 0.3) \times \{ [(A/B) - (C/D)] / (A/B) \} \\ &= 6.67 \times \{ [(1,000,000/2,000,000) - (900,000/2,500,000)] / (1,000,000/2,000,000) \} \\ &= 6.67 \times \{ [0.5 - 0.36] / 0.5 \} \\ &= 6.67 \times 0.14 / 0.5 \\ &= 6.67 \times 0.28 \\ &= \mathbf{1.87 \text{ points earned for Part 2}}\end{aligned}$$

Part 3

- Used 1,000,000 gallons of potable and non-potable water in 2005 (A)
- Had 100 acres of vegetated grounds in 2005 (B)
- Used 900,000 gallons of potable and non-potable water in 2013 (C)
- Had 120 acres of vegetated grounds in 2013 (D)

$$\begin{aligned}\text{Points earned} &= (2 / 0.3) \times \{ [(A/B) - (C/D)] / (A/B) \} \\ &= 6.67 \times \{ [(1,000,000/100) - (900,000/120)] / (1,000,000/100) \} \\ &= 6.67 \times \{ [10,000 - 7,500] / 10,000 \} \\ &= 6.67 \times 2,666.67 / 11,000 \\ &= 6.67 \times 0.25 \\ &= \mathbf{1.67 \text{ points earned for Part 3}}\end{aligned}$$

OP 23: Rainwater Management

2 points available

A. Credit Rationale

This credit recognizes institutions that implement policies and programs to reduce stormwater runoff and resultant water pollution, and treat rainwater as a resource rather than as a waste product. By using low impact development practices and green infrastructure to manage rainwater, institutions can help replenish natural aquifers, reduce erosion impacts, decrease pressures on public infrastructure and minimize local water contamination.

B. Criteria

Institution uses [green infrastructure](#) and [low impact development](#) (LID) practices to help mitigate [stormwater run-off](#) impacts and treat rainwater as a resource rather than as a waste product.

Policies adopted by entities of which the institution is part (e.g., state/provincial government or the university system) may count for this credit as long as the policies apply to and are followed by the institution.

C. Applicability

This credit applies to all institutions.

D. Scoring

Institutions earn the maximum of 2 points available for this credit by having comprehensive rainwater management policies, plans or guidelines that incorporate green infrastructure, cover the entire campus, and mandate the use of LID practices for all new construction, major renovation, and development projects. Partial points are available as follows:

Which of the following best describes the institution's approach to rainwater management?	Points earned
Institution has comprehensive rainwater management policies, plans or guidelines that incorporate green infrastructure, cover the entire campus, and mandate the use of LID practices for all new construction, major renovation, and development projects.	2
Institution has rainwater management policies, plans or guidelines that incorporate green infrastructure, but are less comprehensive (e.g., do not cover the entire campus, cover buildings and not other types of projects, or require consideration of rather than mandate LID practices).	1
Institution uses green infrastructure to manage rainwater and employs LID practices on a case-by-case basis or for demonstration projects (i.e., in the absence of formal policies, plans or guidelines).	0.5

E. Reporting Fields

Required

- ☐ Which of the following best describes the institution's approach to rainwater management?
 - ☐ Institution has comprehensive rainwater management policies, plans or guidelines that incorporate green infrastructure, cover the entire campus, and mandate the use of LID practices for all new construction, major renovation, and development projects.
 - ☐ Institution has rainwater management policies, plans or guidelines that incorporate green infrastructure, but are less comprehensive (e.g., do not cover the entire campus, cover buildings and not other types of projects, or require consideration of rather than mandate LID practices).
 - ☐ Institution uses green infrastructure to manage rainwater and employs LID practices on a case-by-case basis or for demonstration projects (i.e., in the absence of formal policies, plans or guidelines).
 - ☐ None of the above; institution does not use green infrastructure or LID practices.

If institution uses green infrastructure and LID practices, provide:

- ☐ A brief description of the institution's green infrastructure and LID practices

If reporting policies, plans or guidelines, provide:

- ☐ A copy or brief description of the institution's rainwater management policy, plan, and/or guidelines to support the responses above (text or upload)

Optional

- ☐ The website URL where information about the programs or initiatives is available
- ☐ Additional documentation to support the submission (upload)
- ☐ Data source(s) and notes about the submission
- ☐ Contact information for a responsible party (a staff member, faculty member, or administrator who can respond to questions regarding the data once it is submitted and available to the public)

F. Measurement

Timeframe

Report on current policies, plans, and/or strategies at the time of submission.

Sampling and Data Standards

Report on policies, plans, and/or strategies employed throughout the campus.

G. Standards and Terms

Green infrastructure

Consistent with the [U.S. Environmental Protection Agency \(EPA\)](#), the term “green infrastructure” refers to:

...systems and practices that use or mimic natural processes to infiltrate, evapotranspire (the return of water to the atmosphere either through evaporation or by plants), or reuse stormwater or runoff on the site where it is generated.

Examples include rainwater harvesting, downspout disconnection, rain gardens, bioswales, permeable pavements, green streets and alleys, green roofs, and urban tree canopy.

Low impact development

Consistent with [U.S. Environmental Protection Agency \(EPA\)](#), low impact development (LID) is defined as:

...an approach to land development (or re-development) that works with nature to manage stormwater as close to its source as possible. LID employs principles such as preserving and recreating natural landscape features, minimizing effective imperviousness to create functional and appealing site drainage that treat stormwater as a resource rather than a waste product. There are many practices that have been used to adhere to these principles such as bioretention facilities, rain gardens, vegetated rooftops, rain barrels, and permeable pavements. By implementing LID principles and practices, water can be managed in a way that reduces the impact of built areas and promotes the natural movement of water within an ecosystem or watershed. Applied on a broad scale, LID can maintain or restore a watershed's hydrologic and ecological functions. LID has been characterized as a sustainable stormwater practice by the Water Environment Research Foundation and others.

LID can be applied to new development, redevelopment, or as retrofits to existing development. LID has been adapted to a range of land uses from high density ultra-urban settings to low density development.

Stormwater run-off

Stormwater run-off refers to water from precipitation that flows over land or impervious surfaces into bodies of water or sewer systems.

Planning & Administration (PA)

Coordination & Planning

This subcategory seeks to recognize colleges and universities that are institutionalizing sustainability by dedicating resources to sustainability coordination, developing plans to move toward sustainability, and engaging students, staff, faculty, and community stakeholders in governance. Staff and other resources help an institution organize, implement, and publicize sustainability initiatives. These resources provide the infrastructure that fosters sustainability within an institution. Sustainability planning affords an institution the opportunity to clarify its vision of a sustainable future, establish priorities and help guide budgeting and decision making. Strategic planning and stakeholder engagement in governance are important steps in making sustainability a campus priority and may help advocates implement changes to achieve sustainability goals.

Credits

Points available: 8

PA 1	Sustainability Coordination	1
PA 2	Sustainability Planning	4
PA 3	Participatory Governance	3

Share your story

The My Submission section of the online Reporting Tool includes an optional reporting field for the institution to provide an overview of notable activities and accomplishments in this subcategory. This information is featured in the institution's public report.

- ☐ A brief summary of the institution's notable activities and accomplishments relevant to this subcategory

PA 1: Sustainability Coordination

1 point available

A. Credit Rationale

This credit recognizes institutions with active committees, offices, or officers charged by the administration or board of trustees to coordinate sustainability work on campus. Institution-wide coordination helps institutions organize, implement, and publicize sustainability initiatives.

B. Criteria

Institution has at least one sustainability committee, office, and/or [officer](#) tasked by the administration or [governing body](#) to advise on and implement policies and programs related to sustainability on campus. The committee, office, and/or officer focuses on sustainability broadly (i.e., not just one sustainability issue, such as climate change) and covers the entire institution.

An institution that has multiple committees, offices and/or staff with responsibility for subsets of the institution (e.g., schools or departments) may earn points for this credit if it has a mechanism for broad sustainability coordination for the entire campus (e.g., a coordinating committee or the equivalent). A committee, office, and/or officer that focuses on one aspect of sustainability (e.g., an energy efficiency committee) or has jurisdiction over only a part of the institution (e.g., “Academic Affairs Sustainability Taskforce”) does not count toward scoring in the absence of institution-wide coordination.

C. Applicability

This credit applies to all institutions.

D. Scoring

Institutions earn 1 point for having at least one committee, office, and/or officer that meets the criteria outlined above. Partial points are not available for this credit.

E. Reporting Fields

Required

- ☐ Does the institution have at least one sustainability committee?
If yes, provide:
 - ☐ The charter or mission statement of the committee(s) or a brief description of each committee's purview and activities
 - ☐ Members of each committee, including affiliations and role (e.g., staff, student, or faculty)
- ☐ Does the institution have at least one sustainability office that includes more than 1 [full-time equivalent](#) (FTE) employee?
If yes, provide:
 - ☐ A brief description of each sustainability office
 - ☐ Full-time equivalent (FTE) of people employed in the sustainability office(s)

- ☐ Does the institution have at least one sustainability officer?

If yes, provide:

- ☐ Name and title of each sustainability officer
- ☐ Does the institution have a mechanism for broad sustainability coordination for the entire institution (e.g., a campus-wide committee or an officer/office responsible for the entire campus)?

If yes, provide:

- ☐ A brief description of the activities and substantive accomplishments of the institution-wide coordinating body or officer during the previous three years

Optional

- ☐ For up to three sustainability officer positions, provide:
 - ☐ Job title of the sustainability officer position
 - ☐ Job description for the sustainability officer position (text or upload)
- ☐ The website URL where information about the programs or initiatives is available
- ☐ Additional documentation to support the submission (upload)
- ☐ Data source(s) and notes about the submission
- ☐ Contact information for a responsible party (a staff member, faculty member, or administrator who can respond to questions regarding the data once it is submitted and available to the public)

F. Measurement

Timeframe

Report on current sustainability committee composition and practices, office status, and/or officer position status at the time of submission.

Sampling and Data Standards

Not applicable

G. Standards and Terms

Full-time equivalent

Consistent with [Eurostat](#), full-time equivalent (FTE) is defined as follows:

A full-time equivalent, sometimes abbreviated as FTE, is a unit to measure employed persons or students in a way that makes them comparable although they may work or study a different number of hours per week.

An institution should report its best estimates for FTE figures, annualized as feasible and calculated according to relevant national, regional or international standards. IPEDS, for example, calculates the number of FTE staff by summing the total number of full-time staff and adding one-third of the total number of part-time staff.

Governing body

Governing body is defined as the highest governing body with ultimate authority at the site defined by the institutional boundary. This body might be called the board of trustees, board of governors, board of overseers,

board of visitors or some other nomenclature. Institutions that are part of larger systems may have several boards that are involved in the institution's operation. The term governing body is intended to describe the board with the most direct involvement in campus governance and with the highest authority at that particular location.

Officer

“Officer” is inclusive of coordinators, managers, directors, and the equivalent.

PA 2: Sustainability Planning

4 points available

A. Credit Rationale

This credit recognizes institutions that have developed comprehensive plans to move toward sustainability. Sustainability planning affords an institution the opportunity to clarify its vision of a sustainable future and provides a road map to help guide decision-making. Establishing measurable goals and objectives allows an institution to track its future progress, identify and document its successes, and manage the levels of resources devoted to (and required for) the attainment of its sustainability goals. Including sustainability at a high level in the institution's strategic plan and other guiding documents also signals an institution's commitment to sustainability and may help infuse an ethic of environmental, fiscal and social responsibility throughout the campus community.

B. Criteria

Institution has published one or more written plans that include [measurable sustainability objectives](#) addressing one or more of the following areas:

- Curriculum
- Research
- Campus Engagement
- Public Engagement
- Air & Climate
- Buildings
- Energy
- Food & Dining
- Grounds
- Purchasing
- Transportation
- Waste
- Water
- Diversity & Affordability
- Investment & Finance
- Wellbeing & Work
- Other (e.g., arts and culture or technology)

The criteria may be met by any combination of published plans, for example:

- [Strategic plan](#) or equivalent guiding document
- Campus master plan or physical campus plan
- Sustainability plan
- [Climate action plan](#)
- Human resources strategic plan
- Diversity plan

For institutions that are a part of a larger system, plans developed at the system level are eligible for this credit.

C. Applicability

This credit applies to all institutions.

D. Scoring

Institutions earn 0.25 points for each of the areas listed for which they have published plans that include at least one measurable sustainability objective. Note that points are awarded based on the breadth of topics covered by one or more plans, not the number of plans the institution has published. A maximum of 4 points is available for this credit.

E. Reporting Fields

Required

- ☐ Does the institution have a published strategic plan or equivalent guiding document that includes sustainability at a high level?

If yes, provide:

- ☐ A brief description of how the institution's strategic plan or equivalent guiding document addresses sustainability
- ☐ A copy of the strategic plan (upload) or the website URL where the plan is publicly available

- ☐ Does the institution have a published sustainability plan (apart from what is reported above)?

If yes, provide:

- ☐ A copy of the sustainability plan (upload) or the website URL where the plan is publicly available

- ☐ Does the institution have a published climate action plan (apart from what is reported above)?

If yes, provide:

- ☐ A copy of the climate action plan (upload) or the website URL where the plan is publicly available

- ☐ Does the institution have other published plans that address sustainability or include measurable sustainability objectives (e.g., campus master plan, physical campus plan, diversity plan, human resources plan)?

If yes, provide:

- ☐ A list of other published plans that address sustainability, including public website URLs (if available)

- ☐ Taken together, do the plan(s) reported above include measurable sustainability objectives that address the following?

- | | |
|---|--|
| ☐ Curriculum | ☐ Purchasing |
| ☐ Research | ☐ Transportation |
| ☐ Campus Engagement | ☐ Waste |
| ☐ Public Engagement | ☐ Water |
| ☐ Air & Climate | ☐ Diversity & Affordability |
| ☐ Buildings | ☐ Investment |
| ☐ Energy | ☐ Wellbeing & Work |
| ☐ Food & Dining | ☐ Other (e.g., arts and culture or technology) |
| ☐ Grounds | |

For each topic selected above, provide:

- ☐ A list or sample of the measurable sustainability objectives that address the topic and the published plans in which each objective is included

Optional

- ☐ Does the institution have a formal statement in support of sustainability endorsed by its governing body (e.g., a mission statement that specifically includes sustainability and is endorsed by the Board of Trustees)?

If yes, provide:

- ☐ The formal statement in support of sustainability
- ☐ The institution's definition of sustainability (e.g., as included in a published statement or plan)
- ☐ Is the institution an endorser or signatory of the following?
 - ☐ The Earth Charter
 - ☐ The Higher Education Sustainability Initiative (HESI)
 - ☐ ISCN-GULF Sustainable Campus Charter
 - ☐ Pan-Canadian Protocol for Sustainability
 - ☐ Second Nature's Carbon Commitment (formerly known as the American College and University Presidents' Climate Commitment), Resilience Commitment, and/or integrated Climate Commitment
 - ☐ The Talloires Declaration (TD)
 - ☐ UN Global Compact
 - ☐ Other multi-dimensional sustainability commitments (please specify)

If yes to any of the above, provide:

- ☐ A brief description of the institution's formal sustainability commitments, including the specific initiatives selected above
- ☐ The website URL where information about the programs or initiatives is available
- ☐ Additional documentation to support the submission (upload)
- ☐ Data source(s) and notes about the submission
- ☐ Contact information for a responsible party (a staff member, faculty member, or administrator who can respond to questions regarding the data once it is submitted and available to the public)

F. Measurement

Timeframe

Report on the institution's published plan(s) at the time of submission. Draft documents are not eligible for this credit.

Sampling and Data Standards

Not applicable

G. Standards and Terms

Climate action plan

A climate action plan outlines targets and strategies to reduce an institution's greenhouse gas emissions and improve campus resiliency in the face of global climate change.

Governing body

Governing body is defined as the highest governing body with ultimate authority at the site defined by the institutional boundary. This body might be called the board of trustees, board of governors, board of overseers, board of visitors or some other nomenclature. Institutions that are part of larger systems may have several boards that are involved in the institution's operation. The term governing body is intended to describe the board with the most direct involvement in campus governance and with the highest authority at that particular location.

Measurable sustainability objectives

Measurable sustainability objectives are concrete criteria used to assess progress toward the attainment of a sustainability goal or target (e.g., emissions reductions, reductions in resource use or waste, the establishment of new sustainability programs or initiatives, increases in the number of people impacted by sustainability programs and initiatives, and financial savings attributable to sustainability initiatives). In addition to being measurable, such objectives should be specific, achievable, relevant and time-bound (see [SMART criteria](#)). Examples include:

- “The institution will reduce its greenhouse gas emissions 30 percent by 2025.”
- “100 percent of graduates will be able to demonstrate sustainability literacy by 2020 as measured by a standard sustainability literacy survey.”
- “By 2020, all students and staff will be required to participate in cultural competence training” or “By 2020, the diversity and inclusion grant program will double the percentage of graduate students from underrepresented groups.”
- “In 2018, the institution will roll out a student eco-reps program in all residence halls” or “By 2018, the sustainability committee will adopt a green office certification program.”
- “The institution will save in excess of \$1 million over the next 10 years due to energy efficiency improvements.”

Strategic plan

A strategic plan is the highest guiding document for an institution. Strategic planning is the process of defining a strategy or direction and making decisions on allocating resources to pursue the strategy. A strategic plan thus serves as a statement of where the institution wants to go and how it plans to get there. Strategic plans often establish goals, objectives, strategies, and/or performance measures. An equivalent guiding document may be known under a different name.

PA 3: Participatory Governance

3 points available

A. Credit Rationale

This credit recognizes institutions that engage students, staff, faculty and local community members in the ongoing governance of the college or university. Governance includes a variety of organizational functions and decision-making processes, from financial oversight and personnel management to goal-setting and strategic planning. Sustainability requires participatory processes and structures that empower stakeholder groups to come together and work collaboratively to address sustainability challenges through access to and involvement in institutional governance. Without transformed governance structures, many sustainability gains cannot be realized.

B. Criteria

Part 1

Institution has adopted a framework for engaging internal [stakeholders](#) (i.e., students, staff, faculty) in governance. The framework includes:

- Representative bodies through which students, staff and/or faculty can each participate in governance (e.g., student council, staff council, faculty senate);

And/or

- Elected student, staff and/or faculty representatives on the institution's highest [governing body](#). To count, representatives must be elected by their peers or appointed by a representative student, staff or faculty body or organization.

Part 2

Institution has adopted a framework for engaging external stakeholders (i.e., local community members) in the institution's governance, strategy and operations. The framework includes:

- Written policies and procedures to identify and engage local residents in land use planning, capital investment projects, and other institutional decisions that affect the broader community (e.g., development projects that impact adjacent neighborhoods);

And/or

- Formal participatory or shared governance bodies (e.g., seats on the institution's governing body and/or a formally recognized board, council or committee) through which community members representing the interests of the following stakeholder groups can regularly participate in institutional governance:

- Local government and/or educational organizations;
- Private sector organizations; and/or
- Civil society (e.g., non-governmental organizations and nonprofit organizations).

The bodies and mechanisms reported for this credit may be managed by the institution (e.g., formal boards, committees, and councils), by stakeholder groups (e.g., independent committees and organizations that are formally recognized by the institution), or jointly (e.g., union/management structures). Structures or

mechanisms adopted by entities of which the institution is part (e.g., government or university system) may count for this credit as long as they apply and are adhered to by the institution.

C. Applicability

This credit applies to all institutions.

D. Scoring

Each part is scored independently.

Part 1

Institutions earn the maximum of 1.5 points available for Part 1 by meeting both of the criteria outlined above for students, staff, and faculty. Partial points are available based on the number of criteria met for each group as follows:

For each stakeholder group (students, staff and faculty):	Points available for each group	Points earned toward Part 1
There is a representative body through which the stakeholder group can participate in governance.	0.25	
There is an elected representative of the stakeholder group on the institution's highest governing body.	0.25	
Total points earned →		Up to 0.5 for each group (1.5 total)

Part 2

Institutions earn the maximum of 1.5 points available for Part 2 by meeting all of the criteria outlined above. Partial points are available based on the number of criteria met as follows:

Institution has:	Points available	Points earned for Part 2
Written policies and procedures to identify and engage local residents in land use planning, capital investment projects, and other institutional decisions that affect the community.	0.75	
Formal participatory or shared governance bodies through which community members representing the interests of local government and/or educational organizations can regularly participate in institutional governance.	0.25	
Formal participatory or shared governance bodies through which community members representing the interests of private sector organizations can regularly participate in institutional governance.	0.25	
Formal participatory or shared governance bodies through which community members representing the interests of civil society (e.g., non-governmental organizations and nonprofit organizations) can regularly participate in institutional governance.	0.25	
Total points earned →		Up to 1.5

E. Reporting Fields

Required

Part 1

- ☐ Do the institution's students have a representative body through which they can participate in governance (e.g., a student council)?
- ☐ Do the institution's students have an elected representative on the institution's highest governing body?

If yes to either of the above, provide:

- ☐ A brief description of the bodies and mechanisms through which students are engaged in governance, including information to support each affirmative response above
- ☐ Do the institution's staff members have a representative body through which they can participate in governance (e.g., a staff council)?
- ☐ Do the institution's non-supervisory staff members have an elected representative on the institution's highest governing body?

If yes to either of the above, provide:

- ☐ A brief description of the bodies and mechanisms through which staff are engaged in governance, including information to support each affirmative response above
- ☐ Do the institution's teaching and research faculty have a representative body through which they can participate in governance (e.g., a faculty senate)?
- ☐ Do the institution's teaching and research faculty have an elected representative on the institution's highest governing body?

If yes to either of the above, provide:

- ☐ A brief description of the bodies and mechanisms through which teaching and research faculty are engaged in governance, including information to support each affirmative response above

Part 2

- ☐ Does the institution have written policies and procedures to identify and engage external stakeholders (i.e., local residents) in land use planning, capital investment projects, and other institutional decisions that affect the community (e.g., development projects that impact adjacent neighborhoods)?

If yes, provide:

- ☐ A copy of the written policies procedures (text or upload)
- ☐ Does the institution have formal participatory or shared governance bodies (e.g., seats on the institution's governing body or a formally recognized board, council or committee) through which community members representing the interests of the following stakeholder groups can regularly participate in institutional governance?
 - ☐ Local government and/or educational organizations
 - ☐ Private sector organizations
 - ☐ Civil society (e.g., NGOs, NPOs)

If yes to one or more of the above, provide:

- A brief description of the bodies and mechanisms through which external stakeholders are engaged in institutional governance (including information about each stakeholder group selected above)

Optional

- ☐ The website URL where information about the programs or initiatives is available
- ☐ Additional documentation to support the submission (upload)
- ☐ Data source(s) and notes about the submission
- ☐ Contact information for a responsible party (a staff member, faculty member, or administrator who can respond to questions regarding the data once it is submitted and available to the public)

F. Measurement

Timeframe

Report on current policies and procedures at the time of submission.

Sampling and Data Standards

Not applicable

G. Standards and Terms

Governing body

Governing body is defined as the highest governing body with ultimate authority at the site defined by the institutional boundary. This body might be called the board of trustees, board of governors, board of overseers, board of visitors or some other nomenclature. Institutions that are part of larger systems may have several boards that are involved in the institution's operation. The term governing body is intended to describe the board with the most direct involvement in campus governance and with the highest authority at that particular location.

Stakeholders

Consistent with the [AccountAbility Stakeholder Engagement Standard](#) (AA1000SES), stakeholders are defined as follows:

Stakeholders are those groups who affect and/or could be affected by an organisation's activities, products or services and associated performance. This does not include all those who may have knowledge of or views about the organisation. Organisations will have many stakeholders, each with distinct types and levels of involvement, and often with diverse and sometimes conflicting interests and concerns.

Diversity & Affordability

This subcategory seeks to recognize institutions that are working to advance diversity and affordability on campus. In order to build a sustainable society, diverse groups will need to be able to come together and work collaboratively to address sustainability challenges. Members of racial and ethnic minority groups and immigrant, indigenous and low-income communities tend to suffer disproportionate exposure to environmental problems. This environmental injustice happens as a result of unequal and segregated or isolated communities. To achieve environmental and social justice, society must work to address discrimination and promote equality. The historical legacy and persistence of discrimination based on racial, gender, religious, and other differences makes a proactive approach to promoting a culture of inclusiveness an important component of creating an equitable society. Higher education opens doors to opportunities that can help create a more equitable world, and those doors must be open through affordable programs accessible to all regardless of race, gender, religion, socio-economic status and other differences. In addition, a diverse student body, faculty, and staff provide rich resources for learning and collaboration.

Credits

Points available: 10

PA 4	Diversity and Equity Coordination	2
PA 5	Assessing Diversity and Equity	1
PA 6	Support for Underrepresented Groups	3
PA 7	Affordability and Access	4

Share your story

The My Submission section of the online Reporting Tool includes an optional reporting field for the institution to provide an overview of notable activities and accomplishments in this subcategory. This information is featured in the institution's public report.

- ☐ A brief summary of the institution's notable activities and accomplishments relevant to this subcategory

PA 4: Diversity and Equity Coordination

2 points available

A. Credit Rationale

This credit recognizes institutions with active committees, offices, or officers charged by the administration or governing body to coordinate diversity, equity, inclusion and human rights work on campus. Diversity and equity coordination increases the ability of an institution to more effectively address these issues.

B. Criteria

Part 1

Institution has a [diversity and equity](#) committee, office and/or [officer](#) (or the equivalent) tasked by the administration or governing body to advise on and implement policies, programs, and trainings related to diversity, equity, inclusion and human rights on campus. The committee, office and/or officer may focus on students and/or employees.

Part 2

Institution makes [cultural competence](#) trainings and activities available to students, staff, and/or faculty.

The trainings and activities help participants build the awareness, knowledge, and skills necessary to work effectively in cross-cultural situations. Trainings and activities that focus exclusively on awareness, knowledge, or skills do not count.

C. Applicability

This credit applies to all institutions.

D. Scoring

Each part is scored independently.

Part 1

Institutions earn 1 point for having a committee, office or officer that meets the criteria outlined above and focuses on both students and employees diversity. Partial points are available if the committee, office and/or officer focuses on students or employees, but not both. For example, an institution with a diversity and equity office that focuses solely on student diversity would earn 0.5 points (half of the points available for Part 1 of this credit).

Part 2

Institutions earn the maximum of 1 point available for Part 2 when all students, staff, and faculty have participated in cultural competence trainings and activities. Partial points are available based on the extent to which students, staff, and faculty participate in such trainings, as follows:

Group	Estimated proportion of each group that has participated in cultural competence trainings and activities (points available)	Points earned
Students	All (0.33) Most (0.22) Some (0.11)	
Staff	All (0.33) Most (0.22) Some (0.11)	
Faculty	All (0.33) Most (0.22) Some (0.11)	
Total points earned →		Up to 1

E. Reporting Fields

Required

- ☐ Does the institution have a diversity and equity committee, office, and/or officer (or the equivalent) tasked by the administration or governing body to advise on and implement policies, programs, and trainings related to diversity, equity, inclusion and human rights on campus?

If yes:

- ☐ Does the committee, office and/or officer focus on students, employees, or both?
 - ☐ A brief description of the diversity and equity committee, office and/or officer, including purview and activities
- ☐ Estimated proportion of each of the following groups that has participated in cultural competence trainings and activities (All, Most, Some, or None)
 - ☐ Students
 - ☐ Staff (including administrators)
 - ☐ Faculty

If trainings are made available, provide:

- ☐ A brief description of the institution's cultural competence trainings and activities for each of the groups identified above

Optional

- ☐ The website URL where information about the programs or initiatives is available
- ☐ Additional documentation to support the submission (upload)
- ☐ Data source(s) and notes about the submission
- ☐ Contact information for a responsible party (a staff member, faculty member, or administrator who can respond to questions regarding the data once it is submitted and available to the public)

F. Measurement

Timeframe

Part 1

Report on current diversity and equity committee composition and practices, office status, and/or officer position status at the time of submission.

Part 2

Report on participation status at the time of submission.

Sampling and Data Standards

Not applicable

G. Standards and Terms

Cultural competence

Consistent with the [International Organization for Migration](#) (IOM) and the [U.S. Department of Health and Human Services](#), cultural competence is defined in the following way:

Cultural and linguistic competence is a set of congruent behaviors, attitudes, and policies that come together in a system, agency, or among professionals that enables effective work in cross-cultural situations. 'Culture' refers to integrated patterns of human behavior that include the language, thoughts, communications, actions, customs, beliefs, values, and institutions of racial, ethnic, religious, or social groups. 'Competence' implies having the capacity to function effectively as an individual and an organization within the context of the cultural beliefs, behaviors, and needs presented by consumers and their communities.

Cultural competence is a developmental process that evolves over an extended period. Both individuals and organizations are at various levels of awareness, knowledge and skills along the cultural competence continuum. Cultural competence training helps participants build the awareness, knowledge and skills necessary to work effectively in cross-cultural situations.

Diversity and equity

Consistent with the [University of California, Berkeley](#), diversity “includes all the ways in which people differ, and it encompasses all the different characteristics that make one individual or group different from another.” More specifically, diversity is:

...all-inclusive and recognizes everyone and every group as part of the diversity that should be valued. A broad definition includes not only race, ethnicity, and gender — the groups that most often come to mind when the term "diversity" is used — but also age, national origin, religion, disability, sexual orientation, socioeconomic status, education, marital status, language, and physical appearance. It also involves different ideas, perspectives, and values.

Equity is defined as:

...the guarantee of fair treatment, access, opportunity, and advancement for all students, faculty, and staff, while at the same time striving to identify and eliminate barriers that have prevented the full participation of some groups. The principle of equity acknowledges that there are historically

underserved and underrepresented populations and that fairness regarding these unbalanced conditions is needed to assist equality in the provision of effective opportunities to all groups.

Officer

“Officer” is inclusive of coordinators, managers, directors, and the equivalent.

PA 5: Assessing Diversity and Equity

1 point available

A. Credit Rationale

This credit recognizes institutions that systemically assess diversity and equity on campus. Fostering an inclusive and welcoming campus culture is important to ensuring the academic and social success of all campus community members. In order to foster such a culture, it is helpful to engage in a structured assessment process to identify strengths and areas for improvement in terms of campus climate, student diversity and equity, and employee diversity and equity.

B. Criteria

Institution has engaged in a structured assessment process during the previous three years to improve diversity, equity, and inclusion on campus. The [structured diversity and equity assessment](#) process addresses:

- 1) [Campus climate](#) by engaging stakeholders to assess the attitudes perceptions and behaviors of faculty, staff, administrators and students, including the experiences of [underrepresented groups](#);
- 2) Student outcomes related to diversity, equity, and success (e.g., graduation/success and retention rates for underrepresented groups); and/or
- 3) Employee outcomes related to [diversity and equity](#) (e.g., pay and retention rates for underrepresented groups).

The results of the assessment may be shared with the campus community and/or made publicly available.

An employee satisfaction or engagement survey is not sufficient to meet the campus climate or employee outcome criteria outlined above, but may contribute to the overall structured assessment. Employee satisfaction and engagement surveys are recognized in the *Assessing Employee Satisfaction* credit.

C. Applicability

This credit applies to all institutions.

D. Scoring

Institutions earn the maximum of 1 point available for this credit by engaging in a structured assessment process that addresses campus climate, student outcomes, and employee outcomes, and by publicly posting the results of the assessment. Partial points are available based on whether the assessment addresses campus climate, student outcomes, and/or employee outcomes, and whether the results are shared with the entire campus community and/or made publicly available, as outlined in the following table:

Assessment Attribute	Points earned
Addresses campus climate by engaging stakeholders to assess the attitudes, perceptions and behaviors of faculty, staff, administrators and students, including the experiences of underrepresented groups	0.25
Addresses student outcomes related to diversity, equity and success	0.25
Addresses employee outcomes related to diversity and equity	0.25
Results are shared with the campus community	0.125
Results (or a summary of the results) are publicly posted	0.125
Total points earned →	

E. Reporting Fields

Required

- ☐ Has the institution engaged in a structured assessment process during the previous three years to improve diversity, equity and inclusion on campus?

If yes, provide:

- A brief description of the assessment process and the framework, scorecard(s) and/or tool(s) used
- Does the assessment process address campus climate by engaging stakeholders to assess the attitudes, perceptions and behaviors of faculty, staff, administrators and students, including the experiences of underrepresented groups?
- Does the assessment process address student outcomes related to diversity, equity and success (e.g., graduation/success and retention rates for underrepresented groups)?
- Does the assessment process address employee outcomes related to diversity and equity (e.g., pay and retention rates for underrepresented groups)?
- A brief description of the most recent assessment findings and how the results are used in shaping policy, programs and initiatives
- Are the results of the most recent structured diversity and equity assessment shared with the campus community?

If yes, provide:

- A brief description of how the assessment results are shared with the campus community

- Are the results (or a summary of the results) of the most recent structured diversity and equity assessment publicly posted?

If yes, provide:

- The diversity and equity assessment report or summary and/or the website URL where the report or summary is publicly posted (upload or URL)

Optional

- ☐ The website URL where information about the programs or initiatives is available
- ☐ Additional documentation to support the submission (upload)
- ☐ Data source(s) and notes about the submission
- ☐ Contact information for a responsible party (a staff member, faculty member, or administrator who can respond to questions regarding the data once it is submitted and available to the public)

F. Measurement

Timeframe

Report on the most recent assessment(s) conducted or updated within the three years prior to the anticipated date of submission.

Sampling and Data Standards

Diversity and equity may be assessed using representative samples.

G. Standards and Terms

Campus climate

Consistent with the [University of California, Berkeley](#), campus climate is defined as "the current attitudes, behaviors and standards of faculty, staff, administrators and students concerning the level of respect for individual needs, abilities and potential."

Diversity and equity

Consistent with the [University of California, Berkeley](#), diversity "includes all the ways in which people differ, and it encompasses all the different characteristics that make one individual or group different from another." More specifically, diversity is:

...all-inclusive and recognizes everyone and every group as part of the diversity that should be valued. A broad definition includes not only race, ethnicity, and gender — the groups that most often come to mind when the term "diversity" is used — but also age, national origin, religion, disability, sexual orientation, socioeconomic status, education, marital status, language, and physical appearance. It also involves different ideas, perspectives, and values.

Equity is defined as:

...the guarantee of fair treatment, access, opportunity, and advancement for all students, faculty, and staff, while at the same time striving to identify and eliminate barriers that have prevented the full participation of some groups. The principle of equity acknowledges that there are historically underserved and underrepresented populations and that fairness regarding these unbalanced conditions is needed to assist equality in the provision of effective opportunities to all groups.

Structured diversity and equity assessment

Examples of structured diversity and equity assessment frameworks, scorecards and tools include:

- [Committing to Equity and Inclusive Excellence: A Campus Guide for Self-Study and Planning](#) (Association of American Colleges and Universities)
- [Diverse Learning Environments \(DLE\) Survey](#) (Higher Education Research Institute)
- [Diversity and Equity Assessment Planning \(DEAP\) Tool](#) (Queen's University)
- [The Equity Scorecard](#) (Center for Urban Education)
- [The Self-Assessment Rubric For the Institutionalization of Diversity, Equity, and Inclusion in Higher Education](#) (NERCHE)

Underrepresented groups

Consistent with the [University of California, Berkeley](#), underrepresented groups are groups who have been denied access and/or suffered past institutional discrimination and/or have been marginalized and are currently underrepresented. These groups may include, but are not limited to, racial, ethnic and immigrant populations; people with disabilities; lesbian, gay, bisexual, and transgender individuals; adult learners; veterans; and individuals from different religious groups and economic backgrounds.

Underrepresentation may be revealed by an imbalance in the representation of different groups in common pursuits such as education, jobs, housing, etc., resulting in marginalization for some groups and individuals and not for others, relative to the number of individuals who are members of the population involved.

PA 6: Support for Underrepresented Groups

3 points available

A. Credit Rationale

This credit recognizes institutions that have programs in place to support underrepresented groups and foster a more diverse and inclusive campus community. Certain challenges accompany being a minority on campus. Schools can help create and maintain a diverse student body and help build diversity within academic disciplines and across higher education broadly by offering support programs to help individuals in underrepresented groups thrive academically and socially.

B. Criteria

Institution has one or more of the following policies, programs or initiatives to support [underrepresented groups](#) and foster a more diverse and inclusive campus community:

- 1) A publicly posted non-discrimination statement.
- 2) A [discrimination response](#) protocol or committee (sometimes called a bias response team) to respond to and support those who have experienced or witnessed a bias incident, act of discrimination or hate crime.
- 3) Programs specifically designed to recruit students, staff and/or faculty from underrepresented groups.
- 4) Mentoring, counseling, peer support, academic support, or other programs to support students, staff and/or faculty from underrepresented groups.
- 5) Programs that specifically aim to support and prepare students from underrepresented groups for careers as faculty members (sometimes known as [pipeline programs](#)). Such programs could take any of the following forms:
 - Teaching fellowships or other programs to support [terminal degree](#) students from underrepresented groups in gaining teaching experience. (The terminal degree students may be enrolled at another institution.)
 - Financial and/or other support programs to prepare and encourage undergraduate or other non-terminal degree students from underrepresented groups to pursue further education and careers as faculty members.
 - Financial, and/or other support programs for doctoral and postdoctoral students from underrepresented groups.

C. Applicability

This credit applies to all institutions.

D. Scoring

Institutions earn the maximum of 3 points available for this credit for having all of the policies, programs and/or initiatives outlined above. Partial points are available as follows:

Criteria	Points available	Points earned
1) A publicly posted non-discrimination statement.	0.25	
2) A discrimination response protocol or committee.	0.75	
3) Programs specifically designed to recruit students, staff and/or faculty from underrepresented groups.	Students: 0.083 points Staff: 0.083 points Faculty: 0.083 points	
4) Mentoring, counseling, peer support, academic support, or other programs to support students, staff and/or faculty from underrepresented groups.	Students: 0.25 points Staff: 0.25 points Faculty: 0.25 points	
5) Programs that specifically aim to support and prepare students from underrepresented groups for careers as faculty members.	1	
Total points earned →		

E. Reporting Fields

Required

- ☐ Does the institution have a publicly posted non-discrimination statement?

If yes, provide:

- ☐ The non-discrimination statement, including the website URL where the statement is publicly accessible
- ☐ Does the institution have a discrimination response protocol or committee (sometimes called a bias response team) to respond to and support those who have experienced or witnessed a bias incident, act of discrimination or hate crime?

If yes, provide:

- ☐ A brief description of the institution's discrimination response protocol or team (including examples of actions taken during the previous three years)
- ☐ Does the institution have programs specifically designed to recruit students from underrepresented groups?
- ☐ Does the institution have programs specifically designed to recruit staff from underrepresented groups?
- ☐ Does the institution have programs specifically designed to recruit faculty from underrepresented groups?

If yes to any of the above, provide:

- ☐ A brief description of the institution's programs to recruit students, staff and/or faculty from underrepresented groups

- ☐ Does the institution have mentoring, counseling, peer support, academic support, or other programs to support students from underrepresented groups on campus?
- ☐ Does the institution have mentoring, counseling, peer support or other programs to support staff from underrepresented groups on campus?
- ☐ Does the institution have mentoring, counseling, peer support or other programs to support faculty from underrepresented groups on campus?

If yes to any of the above, provide:

- ☐ A brief description of the institution's programs to support students, staff and/or faculty from underrepresented groups
- ☐ Does the institution have training and development programs, teaching fellowships and/or other programs that specifically aim to support and prepare students from underrepresented groups for careers as faculty members (sometimes known as pipeline programs)?

If yes, provide:

- ☐ A brief description of the institution's programs to support and prepare students from underrepresented groups for careers as faculty members

Optional

- ☐ Does the institution produce a publicly accessible inventory of gender-neutral bathrooms on campus?
- ☐ Does the institution offer housing options to accommodate the special needs of transgender and transitioning students?
- ☐ The website URL where information about the programs or initiatives is available
- ☐ Additional documentation to support the submission (upload)
- ☐ Data source(s) and notes about the submission
- ☐ Contact information for a responsible party (a staff member, faculty member, or administrator who can respond to questions regarding the data once it is submitted and available to the public)

F. Measurement

Timeframe

Report on current program offerings and status at the time of submission.

Sampling and Data Standards

Not applicable

G. Standards and Terms

Discrimination response

Discrimination response (sometimes called bias response or anti-discrimination response) is the coordinated response to incidents and crimes that are motivated by discrimination or bias. The primary goals of anti-discrimination response are to (1) document the occurrence of discriminatory acts or bias incidents, (2) provide support those who have experienced or witnessed an act of discrimination or bias, and (3) develop programs to help to prevent or eliminate discrimination and bias activity.

Bias incidents are defined as incidents of verbal or nonverbal conduct or behavior that are threatening, harassing, intimidating, discriminatory, or hostile and are motivated, in whole or in part, by bias (including, but not limited to, bias based on race, religion, sexual orientation, ethnicity, national origin, ancestry, gender, gender identity, age, language, socioeconomic status or disability). Acts of discrimination are adverse actions that are motivated by bias and taken against protected individuals or groups or in retaliation for protected activity. Hate crimes are criminal offenses that are motivated, in whole or in part, by bias. Thus, all acts of discrimination and hate crimes are bias incidents, but not all bias incidents are acts of discrimination or hate crimes.

Pipeline programs

Pipeline programs are programs that specifically aim to support and prepare students from underrepresented groups for academic careers. Examples in a North American context include:

- [Consortium for Faculty Diversity at Liberal Arts Colleges](#)
- [The PhD project](#)
- [The CUNY Pipeline Program](#)
- [Mellon Mays Undergraduate Fellowship program](#)
- [Ronald E. McNair Post-baccalaureate Achievement Program](#)

Terminal degree

A terminal degree is the highest academic degree in a given field of study, which in many cases is an earned academic or research doctorate.

Underrepresented groups

Consistent with the [University of California, Berkeley](#), underrepresented groups are groups who have been denied access and/or suffered past institutional discrimination and/or have been marginalized and are currently underrepresented. These groups may include, but are not limited to, racial, ethnic and immigrant populations; people with disabilities; lesbian, gay, bisexual, and transgender individuals; adult learners; veterans; and individuals from different religious groups and economic backgrounds.

Underrepresentation may be revealed by an imbalance in the representation of different groups in common pursuits such as education, jobs, housing, etc., resulting in marginalization for some groups and individuals and not for others, relative to the number of individuals who are members of the population involved.

PA 7: Affordability and Access

4 points available

A. Credit Rationale

This credit recognizes institutions that are implementing strategies to improve their accessibility and affordability. Achieving a college degree is a valuable tool in addressing inequity, but in order for higher education to help society move toward greater equity, schools must be accessible to low-income populations and non-traditional students.

B. Criteria

Part 1

Institution has policies and programs in place to make it accessible and affordable to [low-income students](#) and/or to support [non-traditional students](#). Such policies and programs may include, but are not limited to, the following:

- Policies and programs to minimize the cost of attendance for low-income students
- Programs to equip the institution's faculty and staff to better serve students from low-income backgrounds
- Programs to guide and prepare students and families from low-income backgrounds for higher education (e.g., U.S. federal TRIO programs)
- Scholarships provided specifically for low-income students
- Targeted outreach to recruit students from low-income backgrounds
- Scholarships provided specifically for part-time students
- An on-site child care facility, a partnership with a local facility, and/or subsidies or financial support to help meet the child care needs of students

Part 2

Institution documents its accessibility and affordability to low-income students as demonstrated by one or more of the following indicators:

- A. The percentage of entering students that are low-income (e.g., the percentage of students receiving Pell Grant funds as reported in the U.S. IPEDS Student Financial Aid component or the percentage of students receiving the Canada Student Grant for Students from Low-Income Families)
- B. The [graduation/success rate](#) for low-income students
- C. On average, the percentage of need met for students who were awarded any need-based aid (e.g., as reported to the U.S. [Common Data Set](#) initiative, item H2)
- D. The percentage of students graduating without interest-bearing student loan debt or for whom no out-of-pocket tuition is required (i.e., the percentage of graduates who have not taken out interest-bearing loans)

C. Applicability

This credit applies to all institutions.

D. Scoring

Each part is scored independently.

Part 1

An institution earns the maximum of 1 point available for Part 1 of this credit by having policies and programs in place to make it accessible and affordable to low-income students and to support non-traditional students. Partial points are available. For example, an institution that has policies and programs in place to support non-traditional students but not low-income students, would earn 0.5 points (half of the points available for Part 1).

Part 2

Institutions earn up to the maximum of 3 points available for Part 2 of this credit based on performance measured by one or more of the indicators listed. For example, an institution that reports 100 percent for three of the four indicators would earn 3 points for this credit. Likewise, an institution that reports 75 percent or more for all four indicators would earn 3 points. Incremental points are available; for example, an institution that reports 50 percent for 3 of the four indicators would earn 1.5 points (half of the points available for Part 2 of this credit). Points are earned according to the following table:

Accessibility/affordability indicator	Percentage (0-100)	Multiply	Factor	Equals	Points earned
A. The percentage of entering students that are low-income	_____	×	0.01	=	
B. The graduation/success rate for low-income students	_____				
C. On average, the percentage of need met for students who were awarded any need-based aid	_____				
D. The percentage of students graduating with no interest-bearing student loan debt or for whom no out-of-pocket tuition is required	_____				
Total points earned ➔					Up to 3

E. Reporting Fields

Required

- ☐ Does the institution have policies and programs to make it accessible and affordable to low-income students?

If yes, provide at least one of the following:

- ☐ A brief description of the institution's policies and programs to minimize the cost of attendance for low-income students
- ☐ A brief description of the institution's programs to equip the institution's faculty and staff to better serve students from low-income backgrounds

- A brief description of the institution's programs to guide and prepare students and families from low-income backgrounds for higher education
- A brief description of the institution's scholarships for low-income students
- A brief description of the institution's targeted outreach to recruit students from low-income backgrounds
- A brief description of the institution's other policies or programs to make the institution accessible and affordable to low-income students
- Does the institution have policies and programs to support non-traditional students?

If yes, provide a brief description of at least one of the following:

 - A brief description of the institution's scholarships provided specifically for part-time students
 - A brief description of the institution's onsite child care facility, partnership with a local facility, and/or subsidies or financial support to help meet the child care needs of students
 - A brief description of the institution's other policies and programs to support non-traditional students
- Does the institution wish to pursue Part 2 of this credit (tracking accessibility and affordability)?

If yes, provide at least one of the following:

 - The percentage of entering students that are low-income (e.g., the percentage of students receiving Pell Grant funds as reported in the U.S. IPEDS Student Financial Aid component or the percentage of students receiving the Canada Student Grant for Students from Low-Income Families) (0-100)
 - The graduation/success rate for low-income students (0-100)
 - On average, the percentage of need that was met for students who were awarded any need-based aid (e.g., as reported to the U.S. Common Data Set initiative, item H2) (0-100)
 - The percentage of students graduating with no interest-bearing student loan debt or for whom no out-of-pocket tuition is required (i.e., the percentage of graduates who have not taken out interest-bearing loans) (0-100)

Optional

- Estimated percentage of students that participate in or directly benefit from the institution's policies and programs to support low-income and non-traditional students (0-100)
- The website URL where information about the programs or initiatives is available
- Additional documentation to support the submission (upload)
- Data source(s) and notes about the submission
- Contact information for a responsible party (a staff member, faculty member, or administrator who can respond to questions regarding the data once it is submitted and available to the public)

F. Measurement

Timeframe

Part 1

Report on current programs, policies, and practices at the time of submission.

Part 2

Report the most recent data available from within the three years prior to the anticipated date of submission.

Sampling and Data Standards

Part 1

In addition to institution-wide policies or programs, report on policies and programs pertaining to the institution's largest admissions group or student cohort (e.g., undergraduate students). Institutions may choose to include or omit programs and policies offered by smaller schools or departments within the institution.

Part 2

Report on the institution's largest admissions group or student cohort (e.g., undergraduate students). Institutions may choose to include or omit smaller schools or departments within the institution.

For guidance in identifying low-income students, see *Standards and Terms*. Institutions may report graduation rates, success rates and/or combined graduation/success rates as appropriate to their particular context and types of programs offered.

Institutions may meet student financial need in a variety of ways, for example:

- Scholarships and grants
- Self-help (e.g., work study, employment)
- Tuition waivers or not requiring tuition
- Subsidized or no-interest loans
- Athletic awards

Exclude non-need-based aid, any aid awarded in excess of need, and unsubsidized or interest-bearing loans. Institutions that do not assess student need as a matter of standard practice may report the percentage of cost met, on average, for low-income students.

G. Standards and Terms

Common Data Set

The [Common Data Set \(CDS\) initiative](#) is a collaborative effort among data providers in the U.S. higher education community and publishers as represented by the College Board, Peterson's, and U.S. News & World Report.

Graduation/success rate

Graduation rate is defined as the percentage of first-time, first-year students who complete their program within 150 percent of the published time for the program. For example, for a 4-year Baccalaureate degree program, entering students who successfully complete the program within 6 years are counted as graduates.

Success rate (i.e., completion/graduation/transfer rate) is defined as the percentage of students who successfully complete their program or transfer to another institution within 150 percent of the published or expected time for the program. For example, for a two-year Associate degree or certificate program, students that successfully complete the program or transfer to another institution within 3 years are counted as successes.

Institutions may report graduation rates, success rates and/or combined graduation/success rates as appropriate to their particular context and the types of programs offered.

Integrated Postsecondary Education Data System

The [Integrated Postsecondary Education Data System](#) (IPEDS) is a system of interrelated surveys conducted annually by the U.S. Department's National Center for Education Statistics (NCES). IPEDS gathers information from every college, university, and technical and vocational institution that participates in the federal student financial aid programs.

Low-income students

In the U.S., low-income students are defined as those students who are receiving [Pell Grant funds](#) (as reported in the IPEDS Student Financial Aid component) and/or meet Pell Grant eligibility criteria, i.e., students whose estimated family contribution (EFC) does not exceed the maximum allowed for Pell Grant eligibility.

In Canada, low-income students are defined as those students who are receiving the [Canada Student Grant for Students from Low-Income Families](#) and/or meet the Canada Student Grant for Students from Low-Income Families eligibility criteria.

Institutions outside the U.S. and Canada may use equivalent student grant eligibility criteria and/or family income thresholds to identify low-income students.

Non-traditional students

Consistent with the [National Center for Educational Statistics](#) (U.S.), non-traditional students include students who "have family and work responsibilities as well as other life circumstances that can interfere with successful completion of educational objectives." The definition of non-traditional students may vary according to institution type and context, however examples may include:

- Students who attend part-time
- Student with dependents other than a spouse or partner
- Single parents
- Student who work full-time while enrolled
- Students who are financially independent from parents
- Students who did not receive a standard secondary school diploma but who earned some type of certificate of completion

Scoring Example: Affordability and Access (Part 2)

The following data describe Example University:

- The percentage of entering students that are low-income = 15
- The graduation/success rate for low-income students = 72
- The percentage of student financial need met, on average = 80
- The percentage of students graduating with no interest-bearing student loan debt = 12

Accessibility/Affordability indicator	Percentage (0-100)	Multiply	Factor	Equals	Points earned
A. The percentage of entering students that are low-income	<u>15</u>	×	0.01	=	0.15
B. The graduation/success rate for low-income students	<u>72</u>				0.72
C. On average, the percentage of need met for students who were awarded any need-based aid	<u>80</u>				0.8
D. The percentage of students graduating with no interest-bearing student loan debt (or for whom no out-of-pocket tuition was required)	<u>12</u>				0.12
Total points earned ➔					1.79

Investment & Finance

This subcategory seeks to recognize institutions that make investment decisions that promote sustainability. Collectively, colleges and universities invest hundreds of billions of dollars. Like other decisions that institutions make, these investments have impacts that are both local and global in scope. Institutions with transparent and democratic investment processes promote accountability and engagement by the campus and community. By using the tools of sustainable investing, institutions can improve the long-term health of their endowments, encourage better corporate behavior, support innovation in sustainable products and services, support sustainability in their community, and help build a more just and sustainable financial system.

Throughout this subcategory, the term “sustainable investment” is inclusive of socially responsible, environmentally responsible, ethical, impact, and mission-related investment.

Credits

Points available: 7

PA 8	Committee on Investor Responsibility*	2
PA 9	Sustainable Investment*	4
PA 10	Investment Disclosure*	1

* credit does not apply to all institutions

Share your story

The My Submission section of the online Reporting Tool includes an optional reporting field for the institution to provide an overview of notable activities and accomplishments in this subcategory. This information is featured in the institution’s public report.

- A brief summary of the institution’s notable activities and accomplishments relevant to this subcategory

PA 8: Committee on Investor Responsibility

2 points available

A. Credit Rationale

This credit recognizes institutions with an established and active committee on investor responsibility (CIR) with multi-stakeholder representation. Establishing a CIR provides a structure for fostering dialogue on investment decisions, and can help campuses make responsible investment decisions that promote sustainability. Drawing CIR membership from multiple sectors of the campus community provides educational experiences for involved students, faculty, alumni, and staff. In addition, a multi-stakeholder CIR is consistent with the sustainability principle of shared governance.

B. Criteria

Institution has a formally established and active [committee on investor responsibility](#) (CIR) or equivalent body that makes recommendations to fund decision-makers on socially and environmentally responsible investment opportunities across asset classes, including proxy voting (if the institution engages in proxy voting). The body has multi-stakeholder representation, which means its membership includes faculty, staff, and/or students (and may also include alumni, trustees, and/or other parties).

Institutions for which investments are handled by the university system and/or a separate foundation of the institution should report on the investment policies and activities of those entities.

A general committee that oversees the institution's investments does not count for this credit unless social and environmental responsibility is an explicit part of its mission and/or a regular part of its agenda.

This credit recognizes committees that regularly make recommendations to fund decision-makers on the institution's external investments. Committees that only have within their purview green revolving loan funds or similar initiatives to fund campus infrastructure improvements and sustainability committees that occasionally make recommendations to fund decision-makers do not count. Student-managed sustainable investment funds, green fees and revolving funds, and sustainable microfinance initiatives are covered in the *Student Life* credit in Campus Engagement.

C. Applicability

This credit applies to institutions with [endowments](#) of US \$1 million or larger. Institutions with endowments totaling less than US \$1 million may choose to omit this credit.

D. Scoring

Institutions earn the maximum of 2 points available for this credit for having a CIR or equivalent body that has multi-stakeholder representation (including staff, faculty and students) and otherwise meets the criteria outlined above. Partial points are available for institutions that have a CIR that otherwise meets the criteria, but does not include all stakeholders, as follows:

Institution has a formally established and active CIR that includes representatives of the following stakeholder groups:	Points available	Points earned
Staff	0.5	
Faculty	0.5	
Students	1	
Total points earned →		Up to 2

E. Reporting Fields

Required

- ☐ Does the institution have a formally established and active committee on investor responsibility (CIR) that makes recommendations to fund decision-makers on socially and environmentally responsible investment opportunities across asset classes?

If yes, provide:

- ☐ The charter or mission statement of the CIR or other body which reflects social and environmental concerns or a brief description of how the CIR is tasked to address social and environmental concerns
- ☐ Does the CIR include staff representation?
- ☐ Does the CIR include faculty representation?
- ☐ Does the CIR include student representation?
- ☐ Members of the CIR, including affiliations and role (e.g., student, faculty, staff, alumni)
- ☐ Examples of CIR actions during the previous three years

Optional

- ☐ The website URL where information about the programs or initiatives is available
- ☐ Additional documentation to support the submission (upload)
- ☐ Data source(s) and notes about the submission
- ☐ Contact information for a responsible party (a staff member, faculty member, or administrator who can respond to questions regarding the data once it is submitted and available to the public)

F. Measurement

Timeframe

Report on current committee composition and practices at the time of submission.

Sampling and Data Standards

Not applicable

G. Standards and Terms

Committee on investor responsibility

Consistent with the [Responsible Endowments Coalition](#), a Committee on Investor Responsibility (CIR) is defined in its most basic form as “a committee created by an institution or other investor to ensure that the social and environmental aspects of the institution’s investments are aligned with its mission and goals—both financial and otherwise”.

Endowment

Consistent with the U.S. Department of Education, endowment funds are defined as “funds whose principal is nonexpendable (true endowment) and that are intended to be invested to provide earnings for institutional use. Also includes term endowments and funds functioning as endowment.”

PA 9: Sustainable Investment

4 points available

A. Credit Rationale

This credit recognizes institutions that use their investment power to promote sustainability. There are a variety of approaches an institution can take toward sustainable investment, including making positive investments that promote sustainability and engaging with companies in which they already hold investments. Positive investing supports socially and environmentally responsible practices and the development of sustainable products and services. Active investor engagement can help align an institution's investments with its values, protect the institution from the financial consequences of fines, lawsuits, customer boycotts and damages to a company's reputation that may result from unsustainable corporate behavior, and improve the sustainability performance of the businesses it invests in. Both types of activities contribute toward a more just and sustainable financial system.

B. Criteria

There are two possible approaches to this credit; institutions may pursue one or both. Institutions for which investments are handled by the university system, a separate foundation of the institution and/or a management company contracted by the institution should report on the combined activities of those entities.

Option 1: Positive Sustainability Investment

Institution invests in one or more of the following:

- Sustainable industries (e.g., renewable energy or sustainable forestry). This may include any investment directly in an entire industry sector as well as holdings of companies whose entire business is sustainable (e.g., a manufacturer of wind turbines).
- Businesses *selected for* exemplary sustainability performance (e.g., using criteria specified in a sustainable investment policy). This includes investments made, at least in part, because of a company's social or environmental performance. Existing stock in a company that happens to have socially or environmentally responsible practices should not be included unless the investment decision was based, at least in part, on the company's sustainability performance.
- Sustainability investment funds (e.g., a renewable energy or impact investment fund). This may include any fund with a mission of investing in a sustainable sector or industry (or multiple sectors), as well as any fund that is focused on purchasing bonds with sustainable goals.
- [Community development financial institutions](#) (CDFI) or the equivalent (including funds that invest primarily in CDFIs or the equivalent).
- Socially responsible mutual funds with [positive screens](#) (or the equivalent). Investment in a socially responsible fund with only negative screens (i.e., one that excludes egregious offenders or certain industries, such as tobacco or weapons manufacturing) does not count for Option 1.
- Green revolving loan funds that are funded from the endowment

Option 2: Investor Engagement

Institution has policies and/or practices that meet one or more of the following criteria:

- Has a publicly available sustainable investment policy (e.g., to consider the social and/or environmental impacts of investment decisions in addition to financial considerations)
- Uses its sustainable investment policy to select and guide investment managers
- Has engaged in [proxy voting](#) to promote sustainability, either by its CIR or other committee or through the use of guidelines, during the previous three years
- Has filed or co-filed one or more [shareholder resolutions](#) that address sustainability or submitted one or more letters about social or environmental responsibility to a company in which it holds investments, during the previous three years
- Has a publicly available investment policy with [negative screens](#), for example to prohibit investment in an industry (e.g., tobacco or weapons manufacturing) or participate in a divestment effort (e.g., targeting fossil fuel production or human rights violations)
- Engages in policy advocacy by participating in investor networks (e.g., Principles for Responsible Investment, Investor Network on Climate Risk, Interfaith Center on Corporate Responsibility) and/or engages in inter-organizational collaborations to share best practices

C. Applicability

This credit applies to institutions with [endowments](#) of US \$1 million or larger. Institutions with endowments less than US \$1 million may choose to omit this credit.

D. Scoring

An institution earns the maximum of 4 points available for this credit by investing 30 percent of its investment pool sustainably and meeting all of the investor engagement criteria listed in Option 2 (above) or by investing 60 percent of its investment pool in one or more of ways listed in Option 1. Incremental points are available for Option 1 and partial points are available for Option 2. Each option is scored as follows:

Option 1. Positive Sustainability Investment

An institution earns the maximum of 4 points available in Option 1 by investing 60 percent of its investment pool in one or more of the ways listed above. Incremental points are awarded based on the percentage of the institution's investment pool that is invested sustainably. For example, an institution that invested 30 percent of its investment pool sustainably would earn 2 points (half of the points available in Option 1).

Points for Option 1 of this credit are calculated automatically in the STARS Reporting Tool as follows:

Factor	Multiply	Value of positive sustainability investments	Divide	Total value of the investment pool	Equals	Points earned under Option 1
6 ⅔	×	_____	÷	_____	=	Up to 4

Option 2. Investor Engagement

1/3 point is awarded for each of the policies or practices listed. An institution with all of the policies and practices listed earns the maximum of 2 points available for Part 2.

Total points for this credit are calculated automatically in the STARS Reporting Tool as follows:

Points earned under Option 1: Positive sustainability investment	Add	Points earned under Option 2: Investor engagement	Equals	Total points earned
Up to 4	+	Up to 2	=	Up to 4

E. Reporting Fields

Required

- ☐ Does the institution wish to pursue Option 1 (positive sustainability investments)?

If yes, provide the following:

- ☐ Total value of the [investment pool](#) (US/Canadian dollars)
- ☐ Value of holdings in each of the following categories:
 - Sustainable industries (e.g., renewable energy or sustainable forestry) (US/Canadian dollars)
 - Businesses *selected for* exemplary sustainability performance (e.g., using criteria specified in a sustainable investment policy) (US/Canadian dollars)
 - Sustainability investment funds (e.g., a renewable energy or impact investment fund) (US/Canadian dollars)
 - Community development financial institutions (CDFI) or the equivalent (including funds that invest primarily in CDFIs or the equivalent) (US/Canadian dollars)
 - Socially responsible mutual funds with positive screens or the equivalent (US/Canadian dollars)
 - Green revolving funds funded from the endowment (US/Canadian dollars)

If any of the above is greater than zero, provide:

- ☐ A brief description of the companies, funds, and/or institutions referenced above. Specific disclosure of holdings (e.g., fund or company names) is not required; general information about the industries or fund types represented by the holdings is sufficient.
- ☐ Does the institution wish to pursue Option 2 (investor engagement)?

If yes, provide the following:

- ☐ Does the institution have a publicly available sustainable investment policy?
 - If yes, provide:*
 - A copy of the sustainable investment policy (text or PDF upload)

- Does the institution use its sustainable investment policy to select and guide investment managers?

If yes, provide:

- A brief description of how the sustainable investment policy is applied, including recent examples
- Has the institution engaged in proxy voting, either by its CIR or other committee or through the use of guidelines, to promote sustainability during the previous three years?

If yes, provide:

- A copy of the proxy voting guidelines or proxy record or a brief description of how managers are adhering to policy (text or PDF upload)
- Has the institution filed or co-filed one or more shareholder resolutions that address sustainability or submitted one or more letters about social or environmental responsibility to a company in which it holds investments during the previous three years?

If yes, provide:

- Examples of how the institution has engaged with corporations in its portfolio about sustainability issues during the previous three years
- Does the institution have a publicly available investment policy with negative screens?

If yes, provide:

- A brief description of the negative screens and how they have been implemented
 - Approximate percentage of endowment that the negative screens apply to (0-100)
- Does the institution engage in policy advocacy by participating in investor networks and/or engage in inter-organizational collaborations to share best practices?

If yes, provide:

- A brief description of the investor networks and/or collaborations

Optional

- ☐ The website URL where information about the programs or initiatives is available
- ☐ Additional documentation to support the submission (upload)
- ☐ Data source(s) and notes about the submission
- ☐ Contact information for a responsible party (a staff member, faculty member, or administrator who can respond to questions regarding the data once it is submitted and available to the public)

F. Measurement

Timeframe

Report on current policies and actions taken within the three years prior to the anticipated date of submission.

Sampling and Data Standards

Option 1

Report on a snapshot of the entire investment portfolio. Reporting on a sample of the endowment or a special fund of the endowment is not allowed for this credit. Institutions should strive to report on a representative snapshot. Institutions for which investments are handled by the university system, a separate foundation of the institution and/or a management company contracted by the institution should report on the combined activities of those entities to the extent possible and document any anomalies under “Notes about the submission”.

Option 2

Institutions for which investments are handled by the university system, a separate foundation of the institution and/or a management company contracted by the institution should report on the combined activities of those entities.

G. Standards and Terms

Community development financial institution

Consistent with the [Responsible Endowments Coalition](#), a Community Development Financial Institution (CDFI) is defined as:

A financial institution established to provide credit, financial services, and other services to underserved markets or populations.

Investing in CDFIs promotes sustainability by helping provide credit to individuals and communities who are underserved by conventional lending institutions. In addition, CDFIs provide an opportunity for institutions to invest in their local communities.

Endowment

Consistent with the U.S. Department of Education, endowment funds are defined as “funds whose principal is nonexpendable (true endowment) and that are intended to be invested to provide earnings for institutional use. Also includes term endowments and funds functioning as endowment.”

Investment pool

Consistent with the [National Association of College and University Business Officers \(NACUBO\)](#), “investment pool” is defined as:

The predominant asset pool or grouping of assets that is organized primarily to support the institution and reflect its investment policies.

Negative screens

Consistent with the [Responsible Endowments Coalition](#) negative screens are defined as follows:

Sometimes investors exclude certain companies or industries from their portfolios by negatively screening their funds. For example, an investor may decide to screen out:

- Tobacco companies
- Alcohol companies
- Gambling companies
- Weapons manufacturers
- Nuclear power companies
- Resource extractors (coal, oil and gas)
- Companies with especially poor human rights or environmental records

... Divestment is the act of selling all of one's shares of a given company or type of asset for an explicit political or social reason. Divestment is perhaps the most extreme action an investor can take to reprimand irresponsible corporations.

Positive screens

A positively screened fund is one in which managers proactively select businesses based on exemplary social and/or environmental performance.

Proxy voting

Consistent with the [Responsible Endowments Coalition](#), proxy voting is defined as follows:

Shareholders vote on resolutions before or during the annual meeting. Roughly one month before the meeting, each company sends out an Annual Proxy Statement containing the year's resolutions to all shareholders for them to vote on, (in person, online, by mail or by phone). They can also vote in person at the meeting.

Shareholder resolution

Consistent with the [Responsible Endowments Coalition](#), shareholder resolutions are defined as:

Formal statements that are sent annually to every single shareholder of a publicly traded company on a "proxy ballot." Shareholder resolutions are also known as shareholder proposals or proxy resolutions. These resolutions usually work like a nonbinding referendum on a specific issue within a firm.

Scoring Example: Sustainable Investment

Model College's investment pool totals **\$100 million**. The college invests **\$20 million** in sustainable industries and community development financial institutions. The college also engages as an investor in **3 ways**, by: (1) having a sustainable investment policy; (2) using its policy to select and engage its investment managers; and (3) participating in the Investor Network on Climate Risk.

Option 1. Positive Sustainability Investment

Factor	Multiply	Value of positive sustainability investments	Divide	Total value of the investment pool	Equals	Points earned in Option 1
6 $\frac{2}{3}$	×	<u>\$20 million</u>	÷	<u>\$100 million</u>	=	1.33

Option 2. Investor Engagement

$\frac{1}{3}$ point is awarded for each of the policies or practices listed for a total of **1** point.

Total points earned for this credit are calculated according to the following table:

Points earned in Option 1: Positive sustainability investment	Add	Points earned in Option 2: Investor engagement	Equals	Total points earned
1.33	+	1	=	2.33

PA 10: Investment Disclosure

1 point available

A. Credit Rationale

This credit recognizes institutions that regularly make their investment holdings publicly available. The transparency ensured by public disclosure acts as an important accountability mechanism and as a learning tool for students and other stakeholders.

B. Criteria

Institution makes a snapshot of its investment holdings available to the public, including the amount invested in each fund and/or company and [proxy voting](#) records. The snapshot of holdings is updated at least once per year.

Institutions for which investments are handled by the university system, a separate foundation of the institution and/or a management company contracted by the institution should report on the combined activities of those entities.

C. Applicability

This credit applies to all institutions that have an [investment pool](#).

D. Scoring

Institutions earn the maximum of 1 point available for this credit by making a snapshot of its entire investment holdings publicly available. Incremental points are available based on the percentage of the investment pool included in the snapshot and the level of detail disclosed. For example, an institution that made a snapshot of 50 percent of its total investment pool publicly available, including the amount invested in each fund or company, would earn 0.5 points (half of the points available for this credit).

Points earned for this credit are calculated automatically in the STARS Reporting Tool as follows:

Level of detail disclosed	Factor	Multiply	Percentage of the total investment pool included in the public snapshot at each level of detail (0-100)	Equals	Points earned
Specific funds/companies and proxy voting record (if applicable)	0.01	×	_____	=	
Specific funds/companies, but not proxy voting record	0.0075	×	_____	=	
Investment managers and/or basic portfolio composition (i.e., asset classes), but not specific funds or companies	0	×	_____	=	
Total points earned →					Up to 1

E. Reporting Fields

Required

- ☐ Does the institution make a snapshot of its investment holdings available to the public?
If yes, provide:
 - ☐ A copy of the investment holdings snapshot (upload) or the website URL where the holdings snapshot is publicly available
- ☐ Percentage of the total investment pool included in the snapshot of investment holdings at each of the following levels of detail: (0-100)
 - ☐ Specific funds and/or companies
 - ☐ Investment managers and/or basic portfolio composition (i.e., asset classes), but not specific funds or companies
- ☐ Does the institution engage in proxy voting?
If yes:
 - ☐ Are proxy voting records included in the snapshot of investment holdings?

Optional

- ☐ The website URL where information about the programs or initiatives is available
- ☐ Additional documentation to support the submission (upload)
- ☐ Data source(s) and notes about the submission
- ☐ Contact information for a responsible party (a staff member, faculty member, or administrator who can respond to questions regarding the data once it is submitted and available to the public)

F. Measurement

Timeframe

Report on the current holdings, i.e., most recent snapshot available from within the three years prior to the anticipated date of submission.

Sampling and Data Standards

Institutions should strive to report on a representative snapshot. Institutions for which investments are handled by the university system, a separate foundation of the institution and/or a management company contracted by the institution should report on the combined activities of those entities. Document any anomalies under “Notes about the submission”.

G. Standards and Terms

Investment pool

Consistent with the [National Association of College and University Business Officers \(NACUBO\)](#), “investment pool” is defined as:

The predominant asset pool or grouping of assets that is organized primarily to support the institution and reflect its investment policies.

Proxy voting

Consistent with the [Responsible Endowments Coalition](#), proxy voting is defined as follows:

Shareholders vote on resolutions before or during the annual meeting. Roughly one month before the meeting, each company sends out an Annual Proxy Statement containing the year’s resolutions to all shareholders for them to vote on, (in person, online, by mail or by phone). They can also vote in person at the meeting.

Scoring Example: Investment Disclosure

Example University’s investment pool totals \$500 million. \$375 million (75 percent) is managed by the university and \$125 million (25 percent) by a separate foundation. The institution publicly discloses the investment funds managed by the university and the investment managers used by the foundation. The University engages in proxy voting, but does not disclose its proxy voting records.

Level of detail disclosed	Factor	Multiply	Percentage of the total investment pool included in the public snapshot at each level of detail (0-100)	Equals	Points earned
Specific funds/companies and proxy voting record (if applicable)	0.01	×	<u>0</u>	=	0
Specific funds/companies, but not proxy voting record	0.0075	×	<u>75</u>	=	0.5625
Investment managers and/or basic portfolio composition (i.e., asset classes), but not specific funds or companies	0	×	<u>25</u>	=	0
Total points earned →					0.56

Wellbeing & Work

This subcategory seeks to recognize institutions that have incorporated sustainability into their human resources programs and policies. An institution's people define its character and capacity to perform; and so, an institution's achievements can only be as strong as its community. An institution can bolster the strength of its community by offering benefits, wages, and other assistance that serve to respectfully and ethically compensate workers and by acting to protect and positively affect the health, safety and wellbeing of the campus community.

Credits

Points available: 7

PA 11	Employee Compensation	3
PA 12	Assessing Employee Satisfaction	1
PA 13	Wellness Program	1
PA 14	Workplace Health and Safety	2

Share your story

The My Submission section of the online Reporting Tool includes an optional reporting field for the institution to provide an overview of notable activities and accomplishments in this subcategory. This information is featured in the institution's public report.

- ☐ A brief summary of the institution's notable activities and accomplishments relevant to this subcategory

PA 11: Employee Compensation

3 points available

A. Credit Rationale

This credit recognizes institutions that ensure that their lowest paid workers earn a living wage. Poverty, or the inability of current generations to meet their needs, is a sustainability challenge even in highly developed countries. By providing employees wages and benefits that meet basic needs, a university or college can enfranchise its entire workforce so that each individual can contribute positively and productively to the community.

B. Criteria

Part 1

More than 75 percent of the institution's employees receive a [living wage](#) (benefits excluded).

Include all regular full-time, regular part-time, and temporary (or non-regular) employees (staff and faculty). Institutions may choose to include or omit student workers.

Part 2

Institution is able to verify that more than 75 percent of the employees of contractors that work on-site as part of regular and ongoing campus operations receive a living wage (benefits excluded).

Part 2 is only applicable to institutions that have one or more significant on-site contractors, which may include (but are not limited to) regular providers of dining/catering, cleaning/janitorial, maintenance, groundskeeping, transportation, and retail services (e.g., book and supply stores).

Part 3

[Total compensation](#) provided to the institution's lowest paid regular (i.e., permanent) employee or pay grade meets or exceeds the local living wage.

Include regular part-time and full-time workers. Newly hired, entry-level employees may be excluded from Part 3 during the first six months of employment. Institutions may choose to include or omit student workers.

To determine the local living wage:

- U.S. institutions must use the [Living Wage Calculator](#) hosted by the Massachusetts Institute of Technology to look up the living wage for "2 [working] Adults, 2 Children" for the community in which the main campus is located.
- Canadian institutions must use [Living Wage Canada](#)'s standards (if a living wage has been calculated for the community in which the main campus is located) or else the appropriate after tax [Low Income Cut-Off](#) (LICO) for a family of four (expressed as an hourly wage).
- Institutions located outside the U.S. and Canada must use local equivalents of the above standards if available or else the local poverty indicator for a family of four (expressed as an hourly wage).

For further guidance, see *F. Measurement*.

C. Applicability

This credit applies to all institutions.

D. Scoring

Each part is scored independently. The number of points available for each part of this credit varies based on whether or not the institution has employees of contractors that work on-site as part of regular and ongoing campus operations, as follows:

Part of the credit	Points available for institutions without regular on-site contractors	Points available for institutions with regular on-site contractors
Part 1	1.5	0.75
Part 2	0	0.75
Part 3	1.5	1.5
Total points available	3	3

Part 1

An institution earns the maximum points available for Part 1 of this credit when 100 percent of its employees receive a living wage. Incremental points are available based on the percentage of all employees that receive a living wage (between 75 and 100 percent). For example, an institution that provides 87.5 percent of all employees with a living wage would earn half of the points available for Part 1.

Points earned for Part 1 are calculated according to the formula below. Please note that users do not have to calculate the number of points earned themselves; points earned will be calculated automatically when the data listed under *E. Reporting Fields* is entered in the online Reporting Tool.

$$\text{Points Earned} = A \times [(B - 75) / 25]$$

A = Points available for Part 1 (1 or 0.75; see above)

B = Percentage of all employees that earn a living wage (0-100)

Part 2

An institution that has significant contractors on-site as part of regular and ongoing campus operations earns the maximum of 0.75 points available for Part 2 of this credit when it is able to verify that 100 percent of the employees of those contractors receive a living wage. Incremental points are available based on the percentage of employees of contractors that receive a living wage (between 75 and 100 percent). For example, an institution for which 87.5 percent of employees of contractors are provided with a living wage would earn 0.375 points (half of the points available for Part 2).

Points earned for Part 2 are calculated according to the formula below. Please note that users do not have to calculate the number of points earned themselves; points earned will be calculated automatically when the data listed under *E. Reporting Fields* is entered in the online Reporting Tool.

$$\text{Points Earned} = 0.75 \times [(A - 75) / 25]$$

A = Percentage of employees of contractors that work on-site as part of regular and ongoing campus operations that receive a living wage (0-100)

Part 3

An institution earns the maximum of 1.5 points available for Part 3 of this credit when the total compensation provided to its lowest paid regular employee or pay grade meets or exceeds 200 percent of the living wage. Partial points are available as follows:

The total compensation provided to the institution's lowest paid regular employee or pay grade meets or exceeds:	Points earned
The local living wage	0.3
125 percent of the living wage	0.6
150 percent of the living wage	0.9
175 percent of the living wage	1.2
200 percent of the living wage	1.5

E. Reporting Fields

Required

- ☐ The local living wage (based on a family of four and expressed as an hourly wage) (US/Canadian dollars)
- ☐ Percentage of all employees (regular full-time, regular part-time, and temporary workers) that receive a living wage (benefits excluded) (0-100)
- ☐ Does the institution have employees of contractors that work on-site as part of regular and ongoing campus operations?

If yes:

- ☐ Percentage of employees of contractors that work on-site as part of regular and ongoing campus operations that the institution has verified as receiving a living wage (benefits excluded) (0-100; enter '0' if unknown)
- ☐ The total compensation provided to the institution's lowest paid regular (i.e., permanent) employee or pay grade meets or exceeds what percentage of the living wage?
 - ☐ 200 percent
 - ☐ 175 percent
 - ☐ 150 percent
 - ☐ 125 percent
 - ☐ 100 percent
 - ☐ None of the above (i.e., the lowest paid regular employee or pay grade earns less than the living wage)
- ☐ A brief description of the minimum total compensation provided to the institution's lowest paid employee or pay grade, including any in-kind benefits included as part of the total compensation figure

Optional

- ☐ Has the institution made a formal commitment to pay a living wage?

If yes, provide:

- A copy or brief description of the institution's written policy stating its commitment to a living wage
- Has the institution made a formal commitment to provide a living wage to its student employees and/or graduate teaching/research assistants (e.g., by adopting a student bill-of-rights)?

If yes, provide:

- A brief description of the institution's commitment to a student living wage
- The website URL where information about the programs or initiatives is available
- Additional documentation to support the submission (upload)
- Data source(s) and notes about the submission
- Contact information for a responsible party (a staff member, faculty member, or administrator who can respond to questions regarding the data once it is submitted and available to the public)

F. Measurement

Timeframe

Report on current compensation status and offerings from within the three years prior to the anticipated date of submission, for example at a single representative point during the performance year that aligns with other institutional commitments. When using a representative point, institutions should strive to ensure that it recognizes seasonal and other variations that influence employment.

Sampling and Data Standards

For this credit, employee compensation should be converted into an hourly figure. Hourly compensation for adjunct faculty and other employees working on a contract basis must include all hours that are necessary to perform the employee's duties, such as class preparation and grading time. Consistent with U.S. Internal Revenue Service guidelines, adjunct faculty members should be credited a minimum of 2.25 hours of service per week for each hour of teaching or classroom time in that week.

Institutions with satellite campuses should use the main campus location to determine the local living wage, if available, or else a state/provincial/regional living wage.

Institutions located outside the U.S. and Canada should use a living wage calculator or standard that is appropriate for the institution's locality. This might be a public ordinance, a standard adopted by a campaign or NGO, or a standard that has been created using a methodology consistent with that adopted by the [ISEAL Alliance Living Wage Working Group](#) (see, for example, the UK [Living Wage Foundation](#), [Living Wage Ireland](#), and the benchmark reports published by the [Global Living Wage Coalition](#)).

In the absence of an appropriate calculator or existing standard, an institution may define the local living wage as the local [poverty indicator](#) for a family of four (expressed as an hourly wage).

G. Standards and Terms

Living wage

Consistent with the [ISEAL Alliance Living Wage Working Group](#), a living wage is defined as:

...the remuneration received for a standard work week by a worker in a particular place sufficient to afford a decent standard of living for the worker and her or his family. Elements of a decent standard of living include food, water, housing, education, health care, transport, clothing, and other essential needs including provision for unexpected events.

Living Wage Calculator

The [Living Wage Calculator](#) is a tool produced by Dr. Amy K. Glasmeier and the Massachusetts Institute of Technology. The calculator is designed to provide a minimum estimate of the cost of living for low wage families in the United States. Calculator results assume a standard full-time work-year of 2,080 hours (52, 40 hour work weeks).

Living Wage Canada

Living Wage Canada is a site/portal to facilitate learning and information sharing among Canadian communities to help build a national living wage movement. [The website](#) includes details about the Canadian Living Wage Framework which provides a consistent living wage definition, calculation methodology, and strategy for recognizing corporate and community leadership who commit to pass a living wage policy.

Low Income Cut-Off

Low Income Cut-Offs (LICOs) are Canadian income thresholds below which a family will likely devote a larger share of its income on the necessities of food, shelter and clothing than the average family. LICOs may be found in tables included in the *Low Income Lines* publications available on the [Statistics Canada website](#).

Poverty indicator

An official threshold or guideline used to determine poverty level and/or eligibility for public benefits to meet basic needs.

Total compensation

Total compensation refers to the total wages and benefits provided to employees. Total compensation may include in-kind benefits that address basic needs (e.g., food, housing, transportation, healthcare, retirement) and are funded by the institution.

PA 12: Assessing Employee Satisfaction

1 point available

A. Credit Rationale

This credit recognizes institutions that support the engagement of their employees by conducting a regular survey or other evaluation. Evaluating employee satisfaction and engagement helps institutions gauge their performance as an employer and can identify strengths as well as areas for development.

B. Criteria

Institution conducts a survey or other evaluation that allows for anonymous feedback to measure employee satisfaction and engagement. The survey or equivalent may be conducted institution-wide or may be done by individual departments or divisions. The evaluation addresses (but is not limited to) the following areas:

- Job satisfaction
- Learning and advancement opportunities
- Work culture and work/life balance

The institution has a mechanism in place to address issues raised by the evaluation.

C. Applicability

This credit applies to all institutions.

D. Scoring

Institutions earn the maximum of 1 point available for this credit by conducting an assessment of employee satisfaction and engagement that meets the criteria outlined above and that covers all employees (directly or by representative sample). Incremental points are available based on the percentage of employees assessed. For example, an institution that regularly assesses the satisfaction of all faculty members (who compose $\frac{1}{3}$ of all employees), but does not assess staff (who compose $\frac{2}{3}$ of employees) would earn $\frac{1}{3}$ point ($\frac{1}{3}$ of the points available for this credit).

An institution that conducts an assessment using a representative sample earns points based on the total population from which the sample is drawn. For example, an institution that conducts an assessment with a sample that is representative of the entire employee population would earn the maximum of 1 point available for this credit. Likewise, an institution that conducts an assessment with a sample that is representative of 50 percent of its total employee population would earn 0.5 points (half of the points available for this credit).

An institution that conducts an assessment of an unrepresentative portion of the employee population earns points based on the actual number of employees assessed. For example, an institution that conducts a mandatory survey of all non-supervisory staff (60 percent of the total employee population) would earn 0.6 points (60 percent of the points available for this credit).

E. Reporting Fields

Required

- ☐ Has the institution conducted a survey or other evaluation that allows for anonymous feedback to measure employee satisfaction and engagement during the previous three years?

If yes, provide:

- ☐ Percentage of employees (staff and faculty) assessed, directly or by representative sample (0-100)
- ☐ A brief description of the institution's methodology for evaluating employee satisfaction and engagement, including assessment timeframes
- ☐ A brief description of the mechanism(s) by which the institution addresses issues raised by the evaluation (including examples from the previous three years)

Optional

- ☐ The website URL where information about the programs or initiatives is available
- ☐ Additional documentation to support the submission (upload)
- ☐ Data source(s) and notes about the submission
- ☐ Contact information for a responsible party (a staff member, faculty member, or administrator who can respond to questions regarding the data once it is submitted and available to the public)

F. Measurement

Timeframe

Report current policies and practices and on the most recent employee satisfaction and engagement evaluation conducted within the three years prior to the anticipated date of submission.

Sampling and Data Standards

Institutions may choose to assess employee satisfaction and engagement by administering a survey or the equivalent to a [representative sample](#) of the employee population being assessed or by surveying the entire employee population being assessed (e.g., by making the assessment mandatory).

Institutions may report on a single assessment or on multiple assessments that target different groups (e.g., faculty, supervisory staff, and non-supervisory staff).

G. Standards and Terms

Representative sample

A representative sample is a subset of a statistical population that accurately reflects the members of the entire population. A representative sample should be an unbiased indication of what the entire population is like. For example, in a student population of 1000 students in which 25 percent of the students are enrolled in a business school, 50 percent are enrolled in humanities programs, and 25 percent are enrolled in science programs, a representative sample might include 200 students: 50 business students, 100 humanities students, and 50 science students. Likewise, a representative sample of purchases should accurately reflect the institution's total purchases, accounting for seasonal and other variations in product availability and purchasing.

PA 13: Wellness Program

1 point available

A. Credit Rationale

This credit recognizes institutions that support the wellbeing of their employees and students. Providing wellness programs and related services can enhance the health and wellbeing of the entire campus community.

B. Criteria

Institution has a wellness and/or employee assistance program that makes available counseling, referral, and wellbeing services to all students, staff, and/or faculty members.

C. Applicability

This credit applies to all institutions.

D. Scoring

Institutions earn the maximum of 1 point available for this credit for making counseling, referral, and wellbeing services available to all members of the campus community. Partial points are available based on the number of groups for whom the institution makes wellness services available. For example, an institution that makes wellness services available to all members of 2 of the groups listed would earn $\frac{2}{3}$ point ($\frac{2}{3}$ of the points available for the credit).

E. Reporting Fields

Required

- ☐ Does the institution have a wellness and/or employee assistance program that makes counseling, referral, and wellbeing services available to all members of the following groups?
 - ☐ Students
 - ☐ Staff
 - ☐ Faculty
- ☐ A brief description of the institution's wellness and/or employee assistance program(s), including information to support each affirmative response above

Optional

- ☐ The website URL where information about the programs or initiatives is available
- ☐ Additional documentation to support the submission (upload)
- ☐ Data source(s) and notes about the submission
- ☐ Contact information for a responsible party (a staff member, faculty member, or administrator who can respond to questions regarding the data once it is submitted and available to the public)

F. Measurement

Timeframe

Report on current program status and offerings at the time of submission.

Sampling and Data Standards

Not applicable

G. Standards and Terms

Not applicable

PA 14: Workplace Health and Safety

2 points available

A. Credit Rationale

This credit recognizes institutions that help ensure the health and safety of their employees. Institutions that reduce workplace injuries and occupational disease cases help ensure that all employees have a safe working environment.

B. Criteria

Part 1

Institution has reduced its total number of recordable workplace injuries and occupational disease cases per full-time equivalent (FTE) employee compared to a baseline.

Part 2

Institution has fewer than 6 recordable workplace injuries and occupational disease cases annually per 100 full-time equivalent (FTE) employees.

This credit includes employees of contractors working on-site for whom the institution is liable for workplace safety, for example workers for whom the institution is mandated to report injuries and disease cases by a health and safety authority such as the U.S. Occupational Health and Safety Administration (OSHA) or the Canadian Center for Occupational Health and Safety (CCOHS). Injuries and disease cases include OSHA/CCOHS-recordable fatal and non-fatal injuries (or the equivalent) arising out of or in the course of work and cases of diseases arising from a work-related injury or the work situation or activity (e.g., exposure to harmful chemicals, stress, ergonomic issues). See *F. Measurement*, below, for further guidance on reporting injuries and disease cases.

C. Applicability

This credit applies to all institutions.

D. Scoring

Each part is scored independently.

Part 1

Institutions earn the maximum of 1 point available for Part 1 for having no recordable workplace injuries and occupational disease cases in the performance year. Incremental points are awarded based on the reduction achieved from a baseline. For example, an institution that reduced its total number of recordable workplace injuries and occupational disease cases per full-time equivalent (FTE) employee by 50 percent compared to a baseline would earn 0.5 points (half of the points available for Part 1).

STARS awards only positive points; points will not be deducted if the total number of recordable workplace injuries and occupational disease cases per FTE employee increased rather than decreased during the time period.

Points earned are calculated according to the formula below. Please note that users do not have to calculate the number of points earned themselves; points earned will be calculated automatically when the data listed under *E. Reporting Fields* is entered in the online Reporting Tool.

$$\text{Points Earned} = 1 \times \{ [(A/B) - (C/D)] / (A/B) \}$$

A = Number of recordable workplace injuries and occupational disease cases, baseline year

B = Full-time equivalent of employees, baseline year

C = Number of recordable workplace injuries and occupational disease cases, performance year

D = Full-time equivalent of employees, performance year

Part 2

Institutions earn the maximum of 1 point available for Part 2 for having no recordable workplace injuries and occupational disease cases in the performance year. Incremental points are awarded based on the institution's performance between the [minimum performance threshold](#) of 6 recordable workplace injuries and occupational disease cases per 100 FTE employees and the performance target of 0 recordable injuries and disease cases. For example, an institution that had 3 recordable workplace injuries and occupational disease cases per 100 FTE employees in the performance year would earn 0.5 points (half of the points available for Part 2).

Points earned for Part 2 are calculated according to the formula below. Please note that users do not have to calculate the number of points earned themselves; points earned will be calculated automatically when the data listed under *E. Reporting Fields* is entered in the online Reporting Tool.

$$\text{Points Earned} = 1 \times \{ [0.06 - (A / B)] / 0.06 \}$$

A = Number of recordable workplace injuries and occupational disease cases, performance year

B = Full-time equivalent of employees, performance year

E. Reporting Fields

Required

- ☐ Number of recordable workplace injuries and occupational disease cases, performance year
- ☐ Number of recordable workplace injuries and occupational disease cases, baseline year
- ☐ Full-time equivalent of employees, performance year
- ☐ Full-time equivalent of employees, baseline year
- ☐ Start date, performance year or 3-year period
- ☐ End date, performance year or 3-year period
- ☐ Start date, baseline year or 3-year period
- ☐ End date, baseline year or 3-year period

If end date of the baseline year/period is 2004 or earlier, provide:

- ☐ A brief description of when and why the workplace health and safety baseline was adopted (e.g., in sustainability plans and policies or in the context of other reporting obligations)

Optional

- ☐ A brief description of the institution's workplace health and safety initiatives, including how workers are engaged in monitoring and advising on health and safety programs
- ☐ The website URL where information about the programs or initiatives is available
- ☐ Additional documentation to support the submission (upload)
- ☐ Data source(s) and notes about the submission
- ☐ Contact information for a responsible party (a staff member, faculty member, or administrator who can respond to questions regarding the data once it is submitted and available to the public)

F. Measurement

Timeframe

Performance Year

Report the most recent data available from within the three years prior to the anticipated date of submission. Institutions may use the most recent single year for which data is available or an average from throughout the period. Institutions may choose the annual start and end dates that work best with the data they have (e.g., fiscal or calendar year), as long as data are reported from a consecutive 12-month (or 3-year) period.

Report FTE employees from the same time period as that from which workplace health and safety data are drawn (e.g., the consecutive 12-month or 3-year period that most closely overlaps with the injuries and disease cases performance period).

Baseline Year

Report data from the baseline year, which may be:

- Any year from 2005 to the present
- A baseline year, 1990 to 2004, that the institution has adopted as part of its sustainability plans or policies or in the context of other reporting obligations

Recommended best practices for defining a baseline include:

- Using the average of three consecutive years to reduce the impact of outliers
- Ensuring that baseline and performance year data are valid and reliable (e.g., that the data were gathered in the same manner)

Institutions without valid and reliable historical data should use performance year data for both the baseline and performance year. Following this approach, an institution would not be able to claim points for reductions during its first STARS submission, but would be able to use its newly established baseline for subsequent submissions.

Institutions may choose the start and end dates that work best with the data they have (e.g., fiscal or calendar year), as long as data are reported from a consecutive 12-month (or 3-year) period. Report FTE employees from the same period as that from which workplace health and safety data are drawn (e.g., the consecutive 12-month or 3-year period that most closely overlaps with the injuries and disease cases baseline period).

Sampling and Data Standards

U.S. and Canadian institutions should report the total number of fatal and non-fatal injuries and occupational disease cases as reported to the [Occupational Health and Safety Administration](#) (OSHA) and the Canadian [Center for Occupational Health and Safety](#) (CCOHS), respectively. Other institutions should report data as generally required by the health and safety authority with jurisdiction over the institution. Minor (first-aid level) injuries should be excluded to the extent feasible.

G. Standards and Terms

Full-time equivalent

Consistent with [Eurostat](#), full-time equivalent (FTE) is defined as follows:

A full-time equivalent, sometimes abbreviated as FTE, is a unit to measure employed persons or students in a way that makes them comparable although they may work or study a different number of hours per week.

An institution should report its best estimates for FTE figures, annualized as feasible and calculated according to relevant national, regional or international standards. IPEDS, for example, calculates the number of FTE staff by summing the total number of full-time staff and adding one-third of the total number of part-time staff.

Minimum performance threshold

Minimum performance thresholds are benchmarks against which campus performance may be assessed for scoring purposes. The thresholds used in this version of STARS were calculated at the first decile for institutions reporting under STARS 2.0 as of July 31, 2015 and rounded to the nearest hundredth. In other words, 90 percent of institutions rated under STARS 2.0 before July 31, 2015 performed better than the minimum threshold. Extreme outliers were excluded from the calculations.

Scoring Example: Workplace Health and Safety

The following data describe Example University:

Part 1

- A. Number of recordable workplace injuries and occupational disease cases, baseline year = 15
- B. Full-time equivalent of employees, baseline year (FTE) = 1,200
- C. Number of recordable workplace injuries and occupational disease cases, performance year = 9
- D. Full-time equivalent of employees, performance year (FTE) = 1,250

$$\begin{aligned}\text{Points earned} &= 1 \times \{ [(A/B) - (C/D)] / (A/B) \} \\ &= 1 \times \{ [(15/1,200) - (9/1,250)] / (15/1,200) \} \\ &= 1 \times \{ [0.0125 - 0.0072] / 0.0125 \} \\ &= 1 \times \{ 0.0053 / 0.0125 \} \\ &= 1 \times 0.424 \\ &= \mathbf{0.42} \text{ points}\end{aligned}$$

Part 2

- A. Number of recordable workplace injuries and occupational disease cases, performance year = 9
- B. Full-time equivalent of employees, performance year (FTE) = 1,250

$$\begin{aligned}\text{Points earned} &= 1 \times \{ [0.06 - (A / B)] / 0.06 \} \\ &= 1 \times \{ [0.06 - 9 / 1,250] / 0.06 \} \\ &= 1 \times \{ [0.06 - (.0072)] / 0.06 \} \\ &= 1 \times \{ 0.0528 / 0.06 \} \\ &= \mathbf{0.88} \text{ points}\end{aligned}$$

$$\begin{aligned}\text{Total points earned} &= 0.42 + 0.88 \\ &= \mathbf{1.3} \text{ points}\end{aligned}$$

Innovation & Leadership (IN)

The credits in this category recognize institutions that are seeking innovative solutions to sustainability challenges and demonstrating sustainability leadership in ways that are not otherwise captured in STARS.

Institutions may earn up to four Innovation & Leadership points. An institution's overall, percentage-based STARS score is increased by the number of these bonus points it earns. For example, if an institution earned 30 percent of available points in the four main STARS categories, earning 2 Innovation & Leadership points would raise its final score to 32.

There are two types of Innovation & Leadership credits available. The number of points available for each type is outlined in the following table:

Credit type	Points per credit	Points available
Exemplary Practice	0.5	4
Innovation	1	4
Total points earned ➔		Up to 4

An institution may claim any combination of exemplary practice and innovation credits and may include as many of these credits in a submission as desired, however the maximum number of points applied toward scoring is capped at 4.

Exemplary Practice

A catalog of credits available

Exemplary practice credits recognize specific initiatives that demonstrate sustainability leadership. Exemplary practices include:

- Emerging best practices that are not otherwise recognized in STARS (e.g., seeking independent review of STARS data prior to submission).
- Initiatives and outcomes that are a step beyond what is recognized in a standard credit (e.g., achieving third party certification for a program or exceeding the highest criterion of an existing credit).
- Exemplary initiatives and outcomes that are only relevant to a minority of institution types or regions (e.g., participation in green hospital networks).

Exemplary practice credits may be claimed in multiple submissions as long as the criteria are being met at the time of submission.

A catalog of currently available exemplary practice credits and associated reporting fields is available in the online STARS Reporting Tool and on the [STARS website](#).

Innovation

4 credits available

Innovation credits are open-ended and reserved for new, extraordinary, unique, groundbreaking, or uncommon outcomes, policies, and practices that address sustainability challenges and are not covered by an existing credit or exemplary practice option.

- 1) In general, innovation credits should have roughly similar impacts or be on the same scale as other STARS credits.
- 2) Outcomes, policies, and practices that are innovative for the institution's region or institution type are eligible for innovation credits.
- 3) The innovative practice, policy, program, or outcome must be ongoing or have occurred within the three years prior to the anticipated date of submission.
- 4) The innovative practice or program has to be something that the institution has already implemented; planned activities do not count.
- 5) The innovative practice or program should originate from an area within the defined institutional boundary.
- 6) Practices, policies, and programs that were once considered innovative but are now widely adopted (e.g., being the first institution to enact a policy 20 years ago that is now common) may not be claimed as innovation credits.
- 7) Multiple activities or practices whose sum is innovative can be considered for an innovation credit as long as those activities or practices are related. Listing a series of unrelated accomplishments or events under a single innovation credit is not accepted.
- 8) While the practices that led to receiving an award may be appropriate for an innovation credit, winning awards and/or high sustainability rankings in other assessments is not, in and of itself, grounds for an innovation credit. When the innovation is part of a partnership, the summary provided must clearly describe the institution's role in the innovation.

An institution can only claim a particular activity as an innovation credit once. When re-submitting for a STARS rating, an innovation credit that the institution submitted previously cannot be re-submitted. However, an institution that has made significant advancements to a project or program that was previously submitted as an innovation may resubmit based on those advancements if the project or program is still considered innovative.

To help verify that the policy, practice, program, or outcome that the institution is claiming for an innovation credit is truly innovative, the institution may submit a letter of affirmation from an individual with relevant expertise in the associated content area or a press release or publication featuring the innovation.

Reporting Fields

Please note that institutions will report on each innovation credit separately.

Required

- ☐ Name or title of the innovative policy, practice, program, or outcome
- ☐ A brief description of the innovative policy, practice, program, or outcome that outlines how credit criteria are met and any positive measurable outcomes associated with the innovation
- ☐ Does the innovation describe a new, extraordinary, unique, groundbreaking, or uncommon outcome, policy or practice that is not already covered by an existing STARS credit?
- ☐ Is the innovative practice, policy, program, or outcome ongoing or has it occurred within the three years prior to the anticipated date of submission?
- ☐ Has the institution previously received a STARS innovation credit for this specific practice, policy, program, or outcome?
- ☐ Which of the following impact areas does the innovation most closely relate to (select up to three):
 - ☐ Curriculum
 - ☐ Research
 - ☐ Campus Engagement
 - ☐ Public Engagement
 - ☐ Air & Climate
 - ☐ Buildings
 - ☐ Energy
 - ☐ Food & Dining
 - ☐ Grounds
 - ☐ Purchasing
 - ☐ Transportation
 - ☐ Waste
 - ☐ Water
 - ☐ Coordination & Planning
 - ☐ Diversity & Affordability
 - ☐ Investment & Finance
 - ☐ Wellbeing & Work
 - ☐ Other (e.g., arts and culture or technology; please specify and also select at least one *related* topic from the list above)

Optional

- ☐ A letter of affirmation from an individual with relevant expertise or a press release or publication featuring the innovation (upload)
- ☐ The website URL where information about the programs or initiatives is available
- ☐ Additional documentation to support the submission (upload)
- ☐ Data source(s) and notes about the submission
- ☐ Contact information for a responsible party (a staff member, faculty member, or administrator who can respond to questions regarding the data once it is submitted and available to the public)

Standards and Terms

Sustainability challenges

Consistent with [Transforming Our World: The 2030 Agenda for Sustainable Development](#) (United Nations, 2015), major sustainability challenges include (but are not limited to) climate change, global poverty and inequality, natural resource depletion, and environmental degradation. To identify courses, research, programs, and initiatives that contribute towards understanding or solving sustainability challenges, it is helpful to ask:

- Does it contribute towards realizing one or more of the principles outlined in the [Earth Charter](#)?
And/or
- Does it contribute towards achieving one or more of the targets embedded in the United Nations [Sustainable Development Goals](#) (SDGs)?

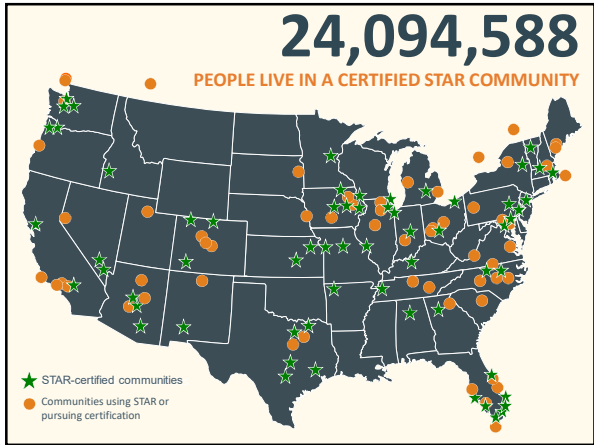
STAR
COMMUNITIES

SUSTAINABILITY
TOOLS FOR
ASSESSING &
RATING COMMUNITIES

SET GOALS.
MEASURE PROGRESS.
IMPROVE YOUR COMMUNITY.

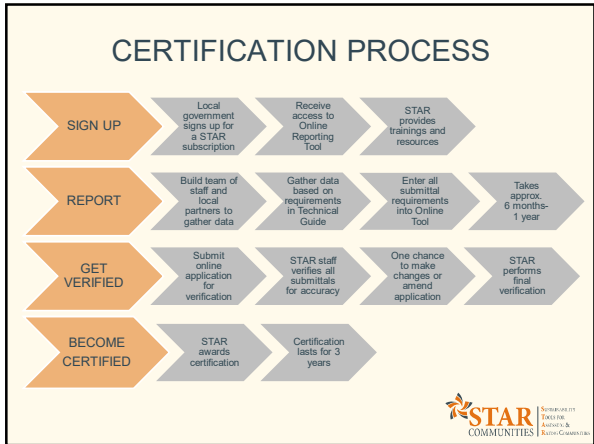
ANN ARBOR IS A 4 STAR CITY

Ann Arbor
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THE STAR COMMUNITY RATING SYSTEM

Built Environment	Climate & Energy	Economy & Jobs	Education, Arts & Community	Equity & Engagement	Health & Safety	Natural Systems
Ambient Noise & Light	Climate Adaptation	Business Retention & Development	Arts & Culture	Civic Engagement	Active Living	Green Infrastructure
Community Water Systems	Greenhouse Gas Mitigation	Green Market Development	Community Cohesion	Civil & Human Rights	Community Health & Health Systems	Local Species
Competition & Complete Communities	Greening the Energy Supply	Local Economy	Educational Opportunity & Achievement	Environmental Justice	Emergency Preparedness & Response	Natural Resource Protection
Housing Affordability	Industrial Sector Resource Efficiency	Quality Jobs & Living Wages	Historic Preservation	Equitable Services & Access	Food Access & Nutrition	Outdoor Air Quality
IRL & Redevelopment	Resource Efficient Buildings	Targeted Industry Development	Social & Cultural Diversity	Human Services	Indoor Air Quality	Water in the Environment
Public Spaces	Resource Efficient Public Infrastructure	Workforce Readiness		Poverty Prevention & Alleviation	Natural & Human Hazards	Working Lands
Transportation Choices	Waste Minimization				Safe Communities	



Cities can engage in **annual reporting** and **benchmarking** via the **Leading Indicators Project**.

LEADING STAR
COMMUNITY INDICATORS

BREWING WATER QUALITY	RENEWABLE ELECTRICAL ENERGY SUPPLY	EMPLOYMENT
SAFE WASTEWATER MANAGEMENT	TOTAL SOLID WASTE	MEDIAN HOUSEHOLD INCOME
HOUSING AND TRANSPORTATION COSTS	THIRD-GRADE READING PROFICIENCY	LIVING WAGES
TRANSPORTATION MODE SPLIT	HIGH SCHOOL GRADUATION RATE & GRADUATION RATE EQUITY	FOOD SECURITY AND ASSISTANCE
TRANSPORTATION SAFETY	ENVIRONMENTAL JUSTICE, RISK AND EXPOSURE	ACCESS TO HEALTHFUL FOOD
CLIMATE ADAPTATION, VULNERABILITY ASSESSMENT	EQUITABLE ACCESS & PROXIMITY TO FOUNDATIONAL COMMUNITY ASSETS	VIOLENT CRIME RATE
GREENHOUSE GAS EMISSIONS	BIPOCITIES	DESIGNATED GREEN INFRASTRUCTURE



TECHNICAL GUIDE TO THE RATING SYSTEM

The Technical Guide is the how-to manual to STAR.

It includes:

- Data sources and step-by-step instructions for all STAR evaluation measures
- Best practices & examples of communities leading the way
- Submittal requirements for certification

The image shows a spiral-bound manual titled "2016 Community Rating System Technical Guide" with the STAR Communities logo on the cover.

STAR SUBSCRIPTION LEVELS

Benefits	Basic Access Free	Full Access \$1,000/year
STAR Community Rating System	*	*
Guide to using STAR to support community planning efforts	*	*
STAR Crosswalk project management spreadsheet tool	*	*
Email newsletter, quarterly webinars, case studies, and other STAR publications	*	*
Technical Guide to the STAR Community Rating System	*	*
Community account to the STAR Online Reporting Tool with access to the Resources hub and application for certification		*
Access to the Leading STAR Community Indicators dashboard with a public facing indicators page for your city/county		*
Web-based trainings to support reporting efforts		*
Technical assistance from STAR staff		*
Opportunities to participate in STAR's development via governance and technical committees		*
National recognition for your sustainability efforts with a STAR Community Rating		*

- ### NEXT STEPS
1. Commission review and voting on resolution to Council
 2. Council votes to allocate funds
 3. City staff sends check and orders subscription
 4. Subcommittee drafts Sustainability Framework based on STAR's seven sustainability goal areas by June 2018
 5. Commission review and voting on resolution to Council
 6. Sustainability Framework gets into Master Plan Update
 7. Subcommittee undertakes 21 Leading Indicators project
 8. Draft Leading Indicators for review by Commission and Council by Dec 2018. Annual reporting after that.
 9. Collectively determine next steps for sustainability planning & possible eventual STAR certification

DRAFT RESOLUTION TO COUNCIL

WHEREAS City Council charged the Sustainability Commission with the task of developing a Sustainability Plan for the City of Ypsilanti; and

WHEREAS the STAR Community Rating System is the nation's leading comprehensive framework and certification program for measuring local sustainability; and

WHEREAS the Sustainability Commission and city staff can use the STAR Community Rating System to measure and report on Leading Indicators and perhaps eventually pursue STAR certification which would meet the Commission's mandate for developing a Sustainability Plan;

THEREFORE BE IT RESOLVED, that the Sustainability Commission urges the Ypsilanti City Council to allocate \$1,000 annually to pay for a full subscription to the STAR Communities Rating System.

**Proposed Resolution from the Sustainability Plan Subcommittee to the
Sustainability Commission re: the STAR Communities Rating System**

WHEREAS City Council charged the Sustainability Commission with the task of developing a Sustainability Plan for the City of Ypsilanti; and

WHEREAS the STAR Community Rating System is the nation's leading comprehensive framework and certification program for measuring local sustainability; and

WHEREAS the Sustainability Commission and city staff can use the STAR Community Rating System to measure and report on Leading Indicators and perhaps eventually pursue STAR certification which would meet the Commission's mandate for developing a Sustainability Plan;

THEREFORE BE IT RESOLVED, that the Sustainability Commission urges the Ypsilanti City Council to allocate \$1,000 annually to pay for a full subscription to the STAR Communities Rating System.



City of Ypsilanti
Planning, Building and Development Department

October 23, 2017

Dear Business Owner/Manager,

As you may be aware, Ypsilanti has been making great strides in solar power within the City. We have recently been nationally recognized as a leader in solar power with a Gold SolSmart award. With over one megawatt of solar power installed in the City, we have more than 50 watts of solar capacity per capita, ranking us in the top 20 in the nation.

The City, in conjunction with SolarYpsi, just installed 50kW of solar power on the City's Firehouse at 525 W. Michigan. You can read about it in Firehouse Magazine (SolarYpsi.org/FireHouseArticle.html) and see pictures and videos about the project on the SolarYpsi website (SolarYpsi.org/installations/FireStation).

Ypsilanti would like to continue this progress by reaching out to businesses within the City that have large roofs and encourage you to look at installing solar power to offset your electrical power usage. Attached is a picture of your roof as analyzed by Google's SunRoof Project website showing that you have a great roof for solar power. The current payback period for solar power can be around seven years, but several variables can make it even better. For example, there is a 30% Federal renewable Energy Tax Credit, and if your building needs a new roof and you install solar power at the same time, you can count a portion of the re-roof project cost for the tax credit as well.

If you are interested, we encourage you to reach out to Dave Strenski of SolarYpsi at Dave@Strenski.com or attend our solar information meeting on Tuesday, November 14th at 5:00 pm at City Hall, 1 South Huron, to learn more.

Sincerely,

Beth Ernat
Director of Community and Economic Development



INFORMATION MEMORANDUM

November 14, 2017

To: City Manager, Mayor, Council, and City Attorney

From: Beth Ernat, Director of Community and Economic Development

Date: November 14, 2017

Subject: General Updates

Huron/Superior Property

The Purchase Agreement expires December 17, 2017. I have asked for updates from the purchaser, Ozone House, on numerous occasions. The last update was received on November 7th, from Katie Doyle, Executive Director, "I am going to meet with our architect tomorrow night so will have more info after that. The overall gist is that the engineers haven't found anything that would make us unable to move forward. We're waiting on a few more reports, including from the Road Commission."

I have not yet received an update but expect to shortly.

Solar Ypsi

Dave Strenski the leader of Solar Ypsi, identified the 50 best rooftop opportunities for solar in Ypsilanti and mailed letters to solicit interest in increasing Ypsi's solar footprint. An open meeting is being held at 5:30 November 14th at City Hall for anyone interested in participation for solar energy analysis.

Sun Shot Challenge Grant

The City of Ypsilanti with partnership from EMU, Ypsilanti Housing Commission, Solar Ypsi and ChartHouse Energy applied for consideration in the Department of Energy's Sun Shot initiative for unique solar energy projects in 2016. The City was not selected as a grant recipient but was allowed to participate in the challenge. The project created was provide a solar roof for the new Parkridge Homes community building and the Ypsilanti landfill (Bell Kramer area) and to provide solar training to local residents of the Parkridge Homes in order to use them for the labor to install the roof at the community building and to install a possible ground mount for the landfill property.

The project is progressing well and the solar training program should begin in December. It is anticipated that the crew used for the community center will also be able to be used for the DPW facility to increase the solar footprint. Currently, the Ypsi project is a lead contender for a final project award of \$250,000.

BELL-KRAMER UPDATE – Continued testing and future rezoning

From City Staff

"As you may recall, in June of this past year AKT Peerless performed 8 sub-slab soil gas samples and indoor air quality monitoring at two locations. Six of the locations were private residences and two of the locations were City owned-parcels. The testing was done to evaluate the historical use of the nearby property to the south and west.

The results of the laboratory analyses did not identify concentrations of target parameters above the MDEQ screening levels and/or laboratory method detection limits (MDLs). Additionally, sub-slab soil gas investigation target parameters were not identified in soil gas at concentrations exceeding MDEQ's vapor intrusion screening levels.

MDEQ recommended in August based on their current standard operating procedure that quarterly testing be completed for one year. Council approved an agreement with AKT for the additional testing. The second test will be performed on November 16th.

Also, it was mentioned that a rezoning proposal would be brought forward as soon as possible and hopefully by October. Our environmental attorney, Saulius Mikalonis from Plunkett Clooney, has been working on a proposal for the zoning and it is more realistic to be brought forward to the Planning Commission in December. We are also looking to have a neighborhood meeting prior to starting the process."