

The University of Arizona

The following information was submitted through the [STARS Reporting Tool](#).

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Table of Contents

Institutional Characteristics	3
Institutional Characteristics	3
Academics	11
Curriculum	11
Research	37
Engagement	45
Campus Engagement	45
Public Engagement	74
Operations	92
Air & Climate	92
Buildings	101
Dining Services	113
Energy	120
Grounds	130
Purchasing	137
Transportation	158
Waste	170
Water	183
Planning & Administration	192
Coordination, Planning & Governance	192
Diversity & Affordability	212
Health, Wellbeing & Work	226
Investment	235
Innovation	243
Innovation	243

The information presented in this submission is self-reported and has not been verified by AASHE or a third party. If you believe any of this information is erroneous, please see the [process for inquiring](#) about the information reported by an institution.

Institutional Characteristics

Institutional Characteristics

The passthrough subcategory for the boundary

Credit
Institutional Boundary
Operational Characteristics
Academics and Demographics

Institutional Boundary

Criteria

This won't display

"---" indicates that no data was submitted for this field

Institution type:

Doctorate

Institutional control:

Public

Which campus features are present and included in the institutional boundary?:

	Present?	Included?
Agricultural school	Yes	Yes
Medical school	Yes	Yes
Pharmacy school	Yes	Yes
Public health school	Yes	Yes
Veterinary school	No	No
Satellite campus	Yes	No
Hospital	Yes	Yes
Farm larger than 5 acres or 2 hectares	Yes	No
Agricultural experiment station larger than 5 acres or 2 hectares	Yes	No

Reason for excluding agricultural school:

Reason for excluding medical school:

Reason for excluding pharmacy school:

Reason for excluding public health school:

Reason for excluding veterinary school:

Reason for excluding satellite campus:

Satellite campuses such as UA South and the Phoenix campus of the UA College of Medicine are not within the main campus boundary.

Reason for excluding hospital:

Reason for excluding farm:

The campus farm is not considered part of main campus.

Reason for excluding agricultural experiment station:

There are several agricultural experiment stations associated with the University of Arizona; however, they are not considered part of main campus.

Narrative:

Operational Characteristics

Criteria

n/a

Submission Note:

This is an updated version of the operational characteristics given in the AASHE STARS 2012 Report Prepared by the University of Arizona. All data is reported to the best of the author's knowledge. Please note that the information found here will reflect 2012 AASHE STARS submission. In 2015 or 2016, the UA will reapply for AASHE STARS rating and will have an updated submission boundary.

Healthcare space is estimated using the gross square footage of the Arizona Health Sciences Center for 2010 as published in the UA Factbook.

"---" indicates that no data was submitted for this field

Endowment size:

527,000,000 US/Canadian \$

Total campus area:

391 Acres

IECC climate region:

Hot-Dry

Locale:

Large city

Gross floor area of building space:

14,160,561 Gross Square Feet

Conditioned floor area:

Floor area of laboratory space:

3,294,224 Square Feet

Floor area of healthcare space:

1,306,349 Square Feet

Floor area of other energy intensive space:

0 Square Feet

Floor area of residential space:

1,854,586 Square Feet

Electricity use by source::

	Percentage of total electricity use (0-100)
Biomass	---
Coal	---
Geothermal	---
Hydro	---
Natural gas	---
Nuclear	---
Solar photovoltaic	---
Wind	---
Other (please specify and explain below)	---

A brief description of other sources of electricity not specified above:

Energy used for heating buildings, by source::

	Percentage of total energy used to heat buildings (0-100)
Biomass	---
Coal	---
Electricity	---

Fuel oil	---
Geothermal	---
Natural gas	---
Other (please specify and explain below)	---

A brief description of other sources of building heating not specified above:

Academics and Demographics

Criteria

n/a

Submission Note:

This information is an updated version of the 2012 UA AASHE STARS Report. It has been reformatted to comply with AASHE STARS 2.0 as best as possible.

The number of hospital beds reported is based on the number given for University of Arizona Medical Center published by Wikipedia.

"---" indicates that no data was submitted for this field

Number of academic divisions:

39

Number of academic departments (or the equivalent):

164

Full-time equivalent enrollment:

38,076

Full-time equivalent of employees:

11,834

Full-time equivalent of distance education students:

3,800

Total number of undergraduate students:

30,592

Total number of graduate students:

8,494

Number of degree-seeking students:

38,076

Number of non-credit students:

0

Number of employees:

14,834

Number of residential students:

6,189

Number of residential employees:

0

Number of in-patient hospital beds:

467

Academics

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.

Credit
Academic Courses
Learning Outcomes
Undergraduate Program
Graduate Program
Immersive Experience
Sustainability Literacy Assessment
Incentives for Developing Courses
Campus as a Living Laboratory

Responsible Party

Benjamin Champion

Director

Office of Sustainability

Criteria

Part 1

Institution offers sustainability courses and/or courses that include sustainability and makes an inventory of those courses publicly available.

Part 2

Institution's academic departments (or the equivalent) offer sustainability courses and/or courses that include sustainability.

In order to report and earn points for this credit, the institution must conduct a course inventory. The inventory should consist of two parts:

- 1) An inventory of sustainability courses that includes, at minimum, the title, department (or equivalent), and level of each course (i.e. undergraduate or graduate), as well as a brief description if the sustainability focus of the course is not apparent from its title
- 2) An inventory of other courses that include sustainability. The inventory includes, at minimum, the title, department (or the equivalent), and level of each course and a description of how sustainability is integrated into each course.

A course may be a sustainability course or it may include sustainability; no course should be identified as both:

- A sustainability course is a course in which the primary and explicit focus is on sustainability and/or on understanding or solving one or more major sustainability challenge (e.g. the course contributes toward achieving principles outlined in the [Earth Charter](#)).
- 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.

For guidance on conducting a course inventory and distinguishing between sustainability courses and courses that include sustainability, see *Standards and Terms* and the Credit Example in the [STARS Technical Manual](#). 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.

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 *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.

This credit does not include continuing education and extension courses, which are covered by *EN 11: Continuing Education*.

Submission Note:

This submission is based on the 2012 UA AASHE STARS submission and formatted to meet AASHE STARS Version 2.0 as best possible.

The number of graduate and undergraduate courses taught was estimated as an equal 50/50 share. This may not be the actual proportion, but given the data we have at this time we believe this will suffice until the next AASHE STARS submission.

UA will be working to update these numbers with its next full STARS submission in late 2015.

"---" indicates that no data was submitted for this field

Figures required to calculate the percentage of courses with sustainability content::

	Undergraduate	Graduate
Total number of courses offered by the institution	4,149	4,149
Number of sustainability courses offered	72	14
Number of courses offered that include sustainability	572	492

Number of academic departments (or the equivalent) that offer at least one sustainability course and/or course that includes sustainability (at any level):

111

Total number of academic departments (or the equivalent) that offer courses (at any level):

165

Number of years covered by the data:

Two

A copy of the institution's inventory of its course offerings with sustainability content (and course descriptions):

[UA Sustainability Courses Spring 2009 to Spring 2011.xlsx](#)

An inventory of the institution's course offerings with sustainability content (and course descriptions):

The website URL where the inventory of course offerings with sustainability content is publicly available:

[Campus Sustainability Data Collector | AASHE](#)

A brief description of the methodology the institution followed to complete the course inventory:

The Office of Sustainability in cooperation with the Office of the Registrar and faculty members compiled a list of sustainability courses for the two year period of Spring 2009 to Spring 2011. The Registrar provided the Office of Sustainability with the active course catalog as well as a list of courses offered since Spring 2009 through Spring 2011. A graduate assistant analyzed both the catalog and the course offerings looking at titles and descriptions to determine if the courses are sustainability related or focused. Along with this data, academic departments were asked to forward lists of courses they felt were sustainability related or focused.

How did the institution count courses with multiple offerings or sections in the inventory?:

A brief description of how courses with multiple offerings or sections were counted (if different from the options outlined above):

Which of the following course types were included in the inventory?:

	Yes or No
Internships	Yes
Practicums	Yes
Independent study	Yes
Special topics	Yes
Thesis/dissertation	Yes
Clinical	Yes
Physical education	Yes
Performance arts	Yes

Does the institution designate sustainability courses in its catalog of course offerings?:

No

Does the institution designate sustainability courses on student transcripts?:

No

Learning Outcomes

Responsible Party

Benjamin Champion
Director
Office of Sustainability

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
- Course level

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 *EN 11: Continuing Education*. Programs that include co-curricular aspects may count as long as there is an academic component of the program. Learning outcomes at the course level count if the course is required to complete 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 Standards and Terms.

Institutions that do not specify learning outcomes as a matter of policy or standard practice may report graduates from sustainability-focused programs (i.e. majors, minors, concentrations and the equivalent as reported for *AC 3: Undergraduate Program* and *AC 4: Graduate Program*) in lieu of the above criteria.

Submission Note:

Please note that this submission is based off of information collected for the 2012 UA AASHE STARS Report. Another comprehensive evaluation will be made in late 2015.

"---" indicates that no data was submitted for this field

Number of students who graduated from a program that has adopted at least one sustainability learning outcome:

1,139

Total number of graduates from degree programs:

8,596

A copy of the list or inventory of degree, diploma or certificate programs that have sustainability learning outcomes:

A list of degree, diploma or certificate programs that have sustainability learning outcomes:

Agricultural and Resource Economics
Agricultural Technology Management and Education
Anthropology
Architecture
Arid Lands Resource Sciences
Atmospheric Sciences
Biology
Biosystems Engineering
Chemistry
Chemical Engineering
Chemical and Environmental Engineering
Civil Engineering
Ecology and Evolutionary Biology
Economics
Economics, Law, & the Environment
Entomology and Insect Science
Environmental Health Sciences
Environmental and Water Resources Economics
Environmental Science
Genetics
Geographic Information Systems Technology
Geography
Geosciences
Global Change
Hydrology
Hydrometeorology Program
Integrated Science
Landscape Architecture
Lowell Program in Economic Geology
Meteorology
Mining Engineering
Natural Resources
Natural Science for Teachers
Planning
Plant Pathology
Plant Sciences
Professional Science Master's
Public Health
Public Policy and Administration
Regional Development
Remote Sensing and Spatial Analysis
Science Education

Soil, Water and Environmental Science
Statistics
Sustainable Built Environments
Systems Engineering
Tri-University Master of Engineering Degree
Water Policy

A list or sample of the sustainability learning outcomes associated with degree, diploma or certificate programs (if not included in an inventory above):

The website URL where information about the institution's sustainability learning outcomes is available:

Undergraduate Program

Responsible Party

Benjamin Champion

Director

Office of Sustainability

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).

Extension certificates and other certificates that are not part of academic degree programs do not count for this credit; they are covered in *EN 11: Continuing Education*.

Submission Note:

The UA is currently working on Green Degree Guide which will help students locate concentrations, minors, and full degrees that deal with sustainability. This tool will be available later in 2015.

"---" indicates that no data was submitted for this field

Does the institution offer at least one sustainability-focused major, degree program, or the equivalent for undergraduate students?:

Yes

The name of the sustainability-focused, undergraduate degree program (1st program):

Sustainable Built Environments

A brief description of the undergraduate degree program (1st program):

The College of Architecture + Planning + Landscape Architecture is pleased to offer an extraordinary degree opportunity for students interested in entering the new green economy. The Bachelor of Science in Sustainable Built Environments is a 4-year, 120-credit, interdisciplinary undergraduate degree that educates students in the comprehensive understanding of sustainability principles and prepares them with the skills to make our communities, buildings, and landscapes more sustainable.

The website URL for the undergraduate degree program (1st program):

[Campus Sustainability Data Collector | AASHE](#)

<http://www.portal.environment.arizona.edu/academics/undergrad-degrees>

The name of the sustainability-focused, undergraduate degree program (2nd program):

Environmental and Water Resource Economics

A brief description of the undergraduate degree program (2nd program):

A degree in Environmental Water Resource and Economics (EWRE) prepares students to assume responsible positions in the management of the world's natural and human resources. Students develop skills through their studies in agribusiness management, finance, economic theory, natural resource economics, environmental regulation, quantitative techniques, and economic development, both domestic and international. This major is flexible so that students choose coursework from a variety of departments across campus depending on their area of focus. In the Environmental & Water Resource Economics major you will: receive training in environmental and natural resource economics and quantitative methods as well as integrate your studies with science, politics, law, information technology, project management, marketing, and communications. Students in this major will take four core classes and then design their own degree drawing from courses in three areas of specialization: Environmental and Water Sciences, Management and Policy, or Quantitative Methods.

The website URL for the undergraduate degree program (2nd program):

<http://www.portal.environment.arizona.edu/academics/undergrad-degrees>

The name of the sustainability-focused, undergraduate degree program (3rd program):

Natural Resources

A brief description of the undergraduate degree program (3rd program):

Students can select any of the six options or emphasis areas in the Natural Resources Major:

Conservation Biology | Ecology and Management of Rangelands | Fisheries Conservation & Management | Wildlife Conservation & Management | Global Change Ecology and Management | Watershed Management and Ecohydrology

Each academic option provides the background required for at least entry-level positions with most agencies and organizations involved in natural resources conservation and management, and for graduate programs in applied ecology or resource management.

The website URL for the undergraduate degree program (3rd program):

<http://www.portal.environment.arizona.edu/academics/undergrad-degrees>

The name and website URLs of all other sustainability-focused, undergraduate degree program(s):

<http://www.portal.environment.arizona.edu/academics/undergrad-degrees>

Does the institution offer one or more sustainability-focused minors, concentrations or certificates for undergraduate

students?:

Yes

The name of the sustainability-focused undergraduate minor, concentration or certificate (1st program):

Natural Resources

A brief description of the undergraduate minor, concentration or certificate (1st program):

Like the major above, that Natural Resources Minor offers information that will help student qualify for entry level positions in natural resource management or wildlife conservation.

Students can receive minors in Natural Resources for the following areas:

Conservation Biology

Fisheries Conservation and Management

Rangeland Ecology and Management

Watershed Management and Ecohydrology

Wildlife Conservation and Management

The website URL for the undergraduate minor, concentration or certificate (1st program):

<http://www.snre.arizona.edu/academics/prospective-students/undergraduate-degrees>

The name of the sustainability-focused undergraduate minor, concentration or certificate (2nd program):

Soils, Water and Environmental Science (SWES)

A brief description of the undergraduate minor, concentration or certificate (2nd program):

The SWES minor provides students with scientific tools and experience needed to inform practitioners and policymakers in the areas on environmental science, including but not limited to, industrial hygiene, ecology, environmental chemistry, environmental law and more.

The website URL for the undergraduate minor, concentration or certificate (2nd program):

<https://swes.cals.arizona.edu/undergrad-program/guidelines>

The name of the sustainability-focused undergraduate minor, concentration or certificate (3rd program):

A brief description of the undergraduate minor, concentration or certificate (3rd program):

The website URL for the undergraduate minor, concentration or certificate (3rd program):

The name, brief description and URL of all other undergraduate-level sustainability-focused minors, concentrations

and certificates:

Graduate Program

Responsible Party

David Bradshaw
Program Coordinator
UA Office of Sustainability

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).

Extension certificates and other certificates that are not part of academic degree programs do not count for this credit; they are covered in *EN 11: Continuing Education*.

Submission Note:

The University of Arizona does not have graduate minors specifically focused on sustainability, however minor in degree subject areas that address sustainability are available though their name does not explicitly include the term sustainability.

"---" indicates that no data was submitted for this field

Does the institution offer at least one sustainability-focused major, degree program, or the equivalent for graduate students?:

Yes

The name of the sustainability-focused, graduate-level degree program (1st program):

Economics, Law and the Environment

A brief description of the graduate degree program (1st program):

The first of its kind in the nation, Program on Economics, Law, & the Environment (ELE) is a collaborative research and education initiative of The University of Arizona's James E. Rogers College of Law and the College of Agriculture and Life Sciences. The program generates research on contemporary issues related to the use and conservation of environmental and natural resources, taking an innovative interdisciplinary approach to pair economic insights with theory, institutions, and practice of law.

The website URL for the graduate degree program (1st program) :

[Campus Sustainability Data Collector | AASHE](#)

<http://portal.environment.arizona.edu/degrees/graduate/law>

The name of the sustainability-focused, graduate-level degree program (2nd program):

Planning

A brief description of the graduate degree program (2nd program):

The Planning Degree Program administers an interdisciplinary MS in planning and offers three broad areas of concentration: environmental/healthy cities planning, international/borderlands planning, and land use and community development.

The website URL for the graduate degree program (2nd program):

<http://portal.environment.arizona.edu/degrees/graduate/planning>

The name of the sustainability-focused, graduate-level degree program (3rd program):

Water, Society and Policy

A brief description of the graduate degree program (3rd program):

The website URL for the graduate degree program (3rd program):

<http://portal.environment.arizona.edu/academics/graduate-degrees>

The name and website URLs of all other sustainability-focused, graduate-level degree program(s):

More graduate degree programs focused on or related to sustainability can be found at

www.sustainability.arizona.edu

under the Academics tab.

Does the institution offer one or more graduate-level sustainability-focused minors, concentrations or certificates?:

Yes

The name of the graduate-level sustainability-focused minor, concentration or certificate (1st program):

Economics, Law, and the Environment

A brief description of the graduate minor, concentration or certificate (1st program):

The first of its kind in the nation, Program on Economics, Law, & the Environment (ELE) is a collaborative research and education initiative of The University of Arizona's James E. Rogers College of Law and the College of Agriculture and Life Sciences. The program generates research on contemporary issues related to the use and conservation of environmental and natural resources, taking an innovative interdisciplinary approach to pair economic insights with theory, institutions, and practice of law.

The website URL for the graduate minor, concentration or certificate (1st program):

<http://www.portal.environment.arizona.edu/degrees/graduate/law>

The name of the graduate-level sustainability-focused minor, concentration or certificate (2nd program):

Planning

A brief description of the graduate minor, concentration or certificate (2nd program):

The website URL for the graduate minor, concentration or certificate (2nd program):

<http://portal.environment.arizona.edu/degrees/graduate/planning>

The name of the graduate-level sustainability-focused minor, concentration or certificate (3rd program):

AIS GRADUATE CERTIFICATE IN RENEWABLE NATURAL RESOURCES

A brief description of the graduate minor, concentration or certificate (3rd program):

The American Indian Studies Program (AIS), with assistance from the School of Natural Resources and Environment (SNRE), is offering an academic Post-Baccalaureate Certificate in the administration and management of American Indian natural resources. To obtain the Certificate, students must complete a 12-unit program of study that includes core and thematic courses. The program is designed for students to begin in the fall and complete in one to two academic years.

The website URL for the graduate minor, concentration or certificate (3rd program):

The name and website URLs of all other graduate-level, sustainability-focused minors, concentrations and certificates:

<http://www.portal.environment.arizona.edu/academics/graduate-certificates>

Immersive Experience

Responsible Party

Benjamin Champion

Director

Office of Sustainability

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 the Credit Example in the STARS Technical Manual for further guidance.

"---" indicates that no data was submitted for this field

Does the institution offer at least one immersive, sustainability-focused educational study program that meets the criteria for this credit?:

Yes

A brief description of the sustainability-focused immersive program(s) offered by the institution:

The School of Geography and Development collaborates with local schools and the Community Food Bank to provide community gardens in low-income neighborhoods or areas where fresh produce is prohibitively expensive. Students participate in the program as interns. Before being sent into the field, interns learn about the physical aspects of sustainable gardening from Community Food Bank experts, including garden design, irrigation and soil enhancement. Professor Marston instructs interns on population and resource dynamics and community building processes while professors from the Department of Education are brought in to lecture on how to engage with young people in the classroom.

The program provides an opportunity for students to use sustainability as a lens in creating community as well as to examining and changing the way the community relates to food.

The website URL where information about the immersive program(s) is available:

<http://www.arizona.edu/features/digging-community-lessons-ochoa-garden>

Sustainability Literacy Assessment

Responsible Party

Benjamin Champion
Director
Office of Sustainability

Criteria

Institution conducts an assessment of the sustainability literacy of its students. The sustainability literacy assessment focuses on knowledge of sustainability topics and may also address values, behaviors and/or beliefs. Assessments that focus exclusively on values, behaviors and/or beliefs are not sufficient to earn points for this credit.

Institution may conduct a follow-up assessment of the same cohort group(s) using the same instrument.

This credit includes graduate as well as undergraduate students.

Submission Note:

UA will implement a survey in later 2015 to provided an updated assessment of sustainability literacy for our next full STARS submission.

"---" indicates that no data was submitted for this field

The percentage of students assessed for sustainability literacy (directly or by representative sample) and for whom a follow-up assessment is conducted:

12.20

The percentage of students assessed for sustainability literacy (directly or by representative sample) without a follow-up assessment:

12.20

A copy of the questions included in the sustainability literacy assessment(s):

The questions included in the sustainability literacy assessment(s) :

Here is a link to a copy of the assessment used.

<https://stars.aashe.org/media/secure/272/2/22/389/UA%20Sustainability%20Assessment%20Fall%2020201>

A brief description of how the assessment(s) were developed:

The assessment was developed based on a review of current assessments used by other universities and an assessment promoted by the American College Personnel Association (ACPA). Questions from the ACPA's Sustainability Assessment were amended so as to better reflect the impact of the curriculum and time spent at the University of Arizona on the understanding of sustainability principles in addition to measuring behavior.

A brief description of how the assessment(s) were administered:

The assessment was administered online to a representative randomly selected sample population of 3700 seniors for a period of 17 days starting on November 28, 2011 to December 14, 2011.

To encourage a higher response rate, all participants who completed the survey were given the opportunity to enter into a raffle to win one of ten gift cards worth \$35 each.

A brief summary of results from the assessment(s):

The major findings of the assessment indicate:

- 1.Seniors at the UA are generally concerned about environmental, social, and economic sustainability issues, with over 50% reporting as being “very concerned” or “extremely concerned.”
- 2.Over half of respondents indicate that their career choices have been or will be influenced by concerns regarding sustainability to a moderate or considerable degree.
- 3.Respondents indicate that the UA has improved awareness and understanding of sustainability topics through the academic curriculum.

The website URL where information about the literacy assessment(s) is available:

Incentives for Developing Courses

Responsible Party

David Bradshaw
Program Coordinator
UA Office of Sustainability

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.

"---" indicates that no data was submitted for this field

Does the institution have an ongoing incentives program or programs that meet the criteria for this credit?:

Yes

A brief description of the program(s), including positive outcomes during the previous three years:

Environmental Teacher Initiative at the University of Arizona sets aside \$2 million to bring distinguished and rising instructors in environmental fields to the University of Arizona. The funds are split between being used for promoting better teacher salaries and as start up funds for research or new programs.

There is also another \$3.5 million dollars devoted to water, environmental, and renewable energy research, teaching, and outreach. This pool of funds includes the Udall Fellowship, Biosphere 2 research, and travel grants for faculty and graduate students.

A brief description of the incentives that faculty members who participate in the program(s) receive:

Faculty receive funding and recognition for their efforts and participation.

The website URL where information about the incentive program(s) is available:

Campus as a Living Laboratory

Responsible Party

David Bradshaw
Program Coordinator
UA Office of Sustainability

Criteria

Institution is utilizing its infrastructure and operations for multidisciplinary student learning, applied research and practical work that advances sustainability on campus in at least one of the following areas:

- Air & Climate
- Buildings
- Dining Services/Food
- Energy
- Grounds
- Purchasing
- Transportation
- Waste
- Water
- Coordination, Planning & Governance
- Diversity & Affordability
- Health, Wellbeing & Work
- Investment
- Public Engagement
- Other

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 and contributes to positive sustainability outcomes on campus (see the Credit Example in the [STARS Technical Manual](#)). On-campus internships and non-credit work (e.g. that take place under supervision of sustainability staff or committees) may count as long as the work has a learning component.

This credit does not include immersive education programs, co-curricular activities, or community-based work, which are covered by AC 5: *Immersive Experience*, credits in the Campus Engagement subcategory, and credits in the Public Engagement subcategory, respectively.

"---" indicates that no data was submitted for this field

Is the institution utilizing the campus as a living laboratory in the following areas?:

	Yes or No
--	-----------

Air & Climate	Yes
Buildings	Yes
Dining Services/Food	Yes
Energy	Yes
Grounds	Yes
Purchasing	Yes
Transportation	Yes
Waste	Yes
Water	Yes
Coordination, Planning & Governance	Yes
Diversity & Affordability	Yes
Health, Wellbeing & Work	Yes
Investment	No
Public Engagement	Yes
Other	No

A brief description of how the institution is using the campus as a living laboratory for Air & Climate and the positive outcomes associated with the work:

The University of Arizona is committed to finding solutions to climate change and adaptation. In addition to off campus research, the University campus is commonly used to test innovative methods aimed at improving air quality and lowering climate impacts. Research conducted at Controlled Environment Agricultural Center is testing ways to better grow crops in efficient and more environmentally friendly ways. The findings of the CEAC are used for agricultural industry, NASA, and climate science purposes.

Another example of how the University uses campus as a laboratory for sustainability solutions is through behavioral change initiatives related to energy, water and waste. For example, Residence Life annually hosts recycling and energy conservation competitions to promote sustainable behaviors. Additionally, Residence Life is testing the use of digital media in the residence halls as a way to increase

sustainability literacy of students living on campus. These efforts combined with student groups such as Students for Sustainability's projects ranging from student led waste reduction to growing food on campus are in effect are testing ways to better engage students and visitors to campus around sustainability.

A brief description of how the institution is using the campus as a living laboratory for Buildings and the positive outcomes associated with the work:

The University of Arizona has over 300 buildings on campus that range from historical to modern in design. Finding ways to utilize such a variety of buildings to meet the evolving needs of the University is imperative and has resulted in new ideas coming from employee and student partnerships. The University of Arizona's Facilities Management and Planning, Design & Construction units work with University students to develop ways to improve the way buildings on campus work. For example, engineering students have worked with Facilities Management to redesign ductwork so as to better cool laboratories. Architectural students periodically provide designs for new buildings on campus that incorporate goals stipulated in the Comprehensive campus plan. Furthermore, on campus units engage students to find ways to improve traffic through buildings and even ways to improve waste diversion in buildings across campus. In all these efforts have led the University to better utilize space on campus and provide an expanding number of services without needing to rely upon new construction.

A brief description of how the institution is using the campus as a living laboratory for Dining Services/Food and the positive outcomes associated with the work:

The University of Arizona is committed to using the campus as a living laboratory for Dining Services/Food. Through Smart Moves program we are testing out new menus that utilized more nutritious items, local items, and more sustainable items. Furthermore, we are utilizing the campus gardens and rooftop garden in the Union for use in on campus kitchens and recipes. Lastly, the University is actively promoting the use of UA Agricultural Center meat products for events on campus such as homecoming, Spring Fling and more.

A brief description of how the institution is using the campus as a living laboratory for Energy and the positive outcomes associated with the work:

The University of Arizona is home to one of the largest and most sophisticated chiller plant in the world. Facilities Management actively looks for ways to tweak the plant's systems to be more efficient and works with students to devise ways to better cool laboratories on campus through design or technological changes. Additionally, students are actively promoting the use of solar photovoltaic energy for multiple uses on campus including rooftop installation and golf cart use. Furthermore, the students and faculty are researching ways that algae as well as biodiesel can be used for multiple campus uses such as in the Cat Tran shuttle system vehicles and even for building generators. Lastly, the University is partnering with Tucson Electric Power to test solar panels at the Solar Panel Test Yard helping the University, the public, and the industry determine what panels work the best for the arid southwest.

A brief description of how the institution is using the campus as a living laboratory for Grounds and the positive outcomes associated with the work:

Through the efforts of Facilities Management, the Campus Arboretum and student groups at the University of Arizona making our Grounds more sustainable. Facilities Management is working with graduate students and businesses to test out the use of a new type of fertilizer that not only improves soil health but also use less water. The Campus Arboretum works with Facilities Management as well as plant sciences students to test out ways to better manage trees on campus and implement best practices the promote tree health and an active Arboretum. Another high profile partnership is the work that student group Compost Cats is doing take plant waste generated

through the management of the over 390 acres of the University and turn it into high quality compost. Through these efforts and more, the University is actively improving the effectiveness of grounds management practices while engaging the entire University community.

A brief description of how the institution is using the campus as a living laboratory for Purchasing and the positive outcomes associated with the work:

The University of Arizona adopted a Green Purchasing policy in 2012. The Office of Sustainability with support of the UA Green Fund is implementing an awareness campaign and training program that is helping campus purchasers follow the policy. Additionally, materials and tutorials are being developed to further advance sustainable procurement on campus. Lastly, the University's Dining Services is looking into purchasing more local and sustainable meat and produce for use in campus restaurants.

A brief description of how the institution is using the campus as a living laboratory for Transportation and the positive outcomes associated with the work:

The University of Arizona's Parking and Transportation Services is actively implementing and looking into ways to promote alternative transportation, public transit and pedestrian safety on campus. Through infrastructure improvements and bolstering awareness the University has been able to become a Silver Rated Bicycle Friendly school by the League of American Bicyclists. Additionally, the University has increased the number of alternative fuel and E85 fueled vehicles over the past five years including the purchase of a Nissan Leaf. The University has also developed partnerships with Hertz to have rental cars on campus and with Zimride to promote ridesharing and carpooling.

A brief description of how the institution is using the campus as a living laboratory for Waste and the positive outcomes associated with the work:

The University of Arizona uses campus to test new ideas for waste collection and diversion. Facilities Management works with Students for Sustainability to improve waste and recycle bin placement in all buildings and at large events such as athletic events and University hosted events like the Tucson Festival of Books. Additionally, the University is pursuing nontraditional waste diversion through large scale composting through efforts of Compost Cats as well as through the reuse of used cooking oil to make biodiesel for Cat Tran Shuttles and small scale power generation experiments.

A brief description of how the institution is using the campus as a living laboratory for Water and the positive outcomes associated with the work:

The University of Arizona is situated in an arid environment that has battled drought for the past ten years. Needless to say, water use and conservation is taken seriously at the University of Arizona. Facilities Management monitors water use and looks for ways to improve water conservation through partnerships with business and students to test new methods of improving the health and water retention of soil. Students on campus also design water harvesting and xeriscape areas as part of a water harvesting class. These efforts and others help improve water conservation and education on campus and in the community.

A brief description of how the institution is using the campus as a living laboratory for Coordination, Planning & Governance and the positive outcomes associated with the work:

The University of Arizona is committed to engaging the entire university community in decision making and governance. Through committees such as the President's Advisory Council on Environmental Sustainability, students, faculty, staff, administrators and

community members are given the opportunity to help steer the direction of the University to complete its mission. Additionally, students are given opportunities to serve in leadership roles outside of student government such as the student led Green Fund committee and the Student Services Advisory Fee Board. These opportunities are engaging students through active management of University processes.

A brief description of how the institution is using the campus as a living laboratory for Diversity & Affordability and the positive outcomes associated with the work:

The University of Arizona is committed to Diversity and Affordability as stated in the Strategic Plan but also through the University's mission as a super land grant institution. The University is exploring new ways to fund merit and need based scholarships. One example is the Arizona Assurance Program that is helping Arizona students go to college and finish in four years. Another example of how the University is a leader is through its Diversity programming and resources. The University has cultural centers for underrepresented groups and has transition services for veterans and community college students. For more information on the innovative work that the University is doing on campus to promote diversity and affordability please visit

<http://www.arizona.edu/diversity/about-us>

A brief description of how the institution is using the campus as a living laboratory for Health, Wellbeing & Work and the positive outcomes associated with the work:

The University of Arizona is leader in using the campus to test new methods of improving the health, wellbeing and work of employees and students. The University's Life and Work Connections program is committed to and recognized for efforts that promote work life balance as well as nontraditional work arrangements. The Smart Moves program focuses on nutrition and health of the University by promoting better dietary choices (including sustainable food options), active lifestyles, and more healthful choices. Campus Health is a leader in providing health education to campus and in testing new ways to disseminate information to the varied audience that represents the University of Arizona. Together, these programs and others, help to improve the lives of students and employees on campus using methods that can be replicated in other organizations and communities.

A brief description of how the institution is using the campus as a living laboratory for Investment and the positive outcomes associated with the work:

None

A brief description of how the institution is using the campus as a living laboratory for Public Engagement and the positive outcomes associated with the work:

The University of Arizona is committed to research the way that people connect with place. Through the efforts of research units and Student Affairs the University is able to analyze the ways that people interact with and relate to the University. In particular, the efforts of Student Affairs and Enrollment Management are concerned with finding ways to better engage students on campus as well as in the community. Some of these efforts involve programs that incorporate the use of public interaction in on campus events and planning while others focus on doing outreach to improve awareness of university programming, opportunities and general knowledge. Additionally, research centers such as the Drachman Institute test new ways to conduct civic engagement and multiple stakeholder decision making. The result of these efforts is the creation of best practices that can better facilitate community outreach and more inclusive decision making.

A brief description of how the institution is using the campus as a living laboratory in Other areas and the positive outcomes associated with the work:

None

The website URL where information about the institution's campus as a living laboratory program or projects is available:

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.

Credit
Academic Research
Support for Research
Access to Research

Responsible Party

Benjamin Champion

Director

Office of Sustainability

Criteria

Part 1

Institution's faculty and/or staff conduct sustainability research and the institution makes an inventory of its sustainability research publicly available.

Part 2

Institution's academic departments (or the equivalent) include faculty and staff who conduct 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.

In order to report for this credit, the institution should conduct an inventory to identify its sustainability research activities and initiatives.

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 research inventory should be based on the definition of "sustainability research" outlined in Standards and Terms and include, at minimum, all research centers, laboratories, departments, and faculty members whose research focuses on or is related to sustainability.

Submission Note:

This submission content was developed for the UA 2012 STARS submission and will be updated in later 2015 for the next full UA STARS submission.

"---" indicates that no data was submitted for this field

Number of the institution's faculty and/or staff engaged in sustainability research:

825

Total number of the institution's faculty and/or staff engaged in research:

2,053

Number of academic departments (or the equivalent) that include at least one faculty or staff member that conducts

sustainability research:

14

The total number of academic departments (or the equivalent) that conduct research:

18

A copy of the sustainability research inventory that includes the names and department affiliations of faculty and staff engaged in sustainability research:

Names and department affiliations of faculty and staff engaged in sustainability research:

<https://stars.aashe.org/media/secure/272/2/25/397/UA%20Sustainability%20Faculty%20Researchers%202009%20to%20Summer%202011.xlsx>

A brief description of the methodology the institution followed to complete the research inventory:

Information regarding the number of faculty conducting research, sustainability related or not, was determined through the use of statistics stored in UA Analytics, and through counting of faculty researchers in each department and research center.

Classifying faculty as conducting sustainability research was conducted by looking at the faculty member research, research center affiliation, and whether or not they are affiliate with the UA Institute of the Environment.

A brief description of notable accomplishments during the previous three years by faculty and/or staff engaged in sustainability research:

The website URL where information about sustainability research is available:

Support for Research

Responsible Party

Benjamin Champion

Director

Office of Sustainability

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.
 - Formally adopted 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 e-learning objects focused on sustainability.
-

Submission Note:

This submission content was developed for previous UA STARS submissions, but remains accurate as these programs are ongoing.

"---" indicates that no data was submitted for this field

Does the institution have a program to encourage student sustainability research that meets the criteria for this credit?:

Yes

A brief description of the institution's program(s) to encourage student research in sustainability:

Undergraduate and Graduate students have ample opportunity to get involved in all types of research including projects that deal with sustainability themes. UA is host to many research centers which provide opportunities for students to work with faculty on research. UA also has several programs that promote students to start individual research projects.

A sampling of Undergraduate research programs can be found at

<http://www.arizona.edu/undergraduate-research-opportunities>

For a list of graduate level research opportunities please visit

<http://www.arizona.edu/graduate-research-opportunities>

For a list of all the research centers at the University of Arizona please visit

<http://www.arizona.edu/research-centers>

The website URL where information about the student research program is available:

Does the institution have a program to encourage faculty sustainability research that meets the criteria for this credit?:

Yes

A brief description of the institution's program(s) to encourage faculty research in sustainability:

The University of Arizona supports faculty through several programs. Specifically through Confluence: Center for Creative Inquiry, Community Connections Grants, Faculty Seed Grants, and the George H. Davis Fellowship the University of Arizona encourages faculty to pursue innovative research in both field specific and interdisciplinary areas. The Confluence Center funds the social sciences and the arts, the Community Connections Grants fund projects that encourage development of ties in the community, the Faculty Seed grants provide funds to start innovative research that could later be sponsored by outside sources, and the Davis Fellowship helps defray the costs of attending conferences, meetings, etc., at which the researcher would present findings, scholarship or creative activities.

Additionally in 2008, the Institute of the Environment received \$9 million to encourage faculty to conduct environmental sustainability research and to recruit high quality researchers. The Institute of the Environment continues to provide annual grants to faculty to incentivize environmental and sustainability research; the Institute of the Environment is funded through the Office of the Vice President for Research.

The website URL where information about the faculty research program is available:

<http://www.vpr.arizona.edu/resources>

Has the institution formally adopted policies and procedures that give positive recognition to interdisciplinary, transdisciplinary, and multidisciplinary research during faculty promotion and/or tenure decisions?:

Yes

A brief description or the text of the institution's policy regarding interdisciplinary research:

The University of Arizona's Graduate Interdisciplinary Programs (GIDPs) transcend departmental boundaries by facilitating cutting edge teaching and research where traditional disciplines interface. The fusion of ideas, techniques, and expertise from the traditional academic fields provides for the evolution of modern and imaginative methods of research, and the creation of new fields of endeavor. The high value placed on interdisciplinary research and education is one of the ways that The University of Arizona is fostering innovation and creativity among faculty and students. The 14 Graduate Interdisciplinary Programs are an integral part of the Mission Statement of the University of Arizona, and student enthusiasm for the programs is one of their strongest characteristics. Outstanding research and educational facilities attract the best and brightest students. In 2008, GIDPs produced 10% of all Ph.D. degrees at the University of Arizona. Interdisciplinary excellence among faculty is enhanced through GIDPs. Faculty participating in GIDPs develop strong partnerships with academic and research institutes campus-wide, state-wide and nationally. Currently, nearly 700 faculty from 14 colleges are actively involved in GIDPs at the University of Arizona. This strong network of cooperative relationships signifies the intellectual fusion put into practice through The University of Arizona's Graduate Interdisciplinary Programs. GIDP faculty is also significantly successful in obtaining NIH and NSF grants.

The website URL where information about the treatment of interdisciplinary research is available:

<http://gidp.arizona.edu/>

Does the institution provide ongoing library support for sustainability research and learning that meets the criteria for this credit?:

Yes

A brief description of the institution's library support for sustainability research and learning:

The University of Arizona Library provides and maintains research guides for various fields related to sustainability, such as environmental science, business and natural resources. In addition, the UA Libraries have dedicated librarians for topics in the humanities, sciences, and social sciences that can assist researchers and students alike in finding information to aid in research or class projects.

The website URL where information about the institution's library support for sustainability is available:

Responsible Party

David Bradshaw
Program Coordinator
UA Office of Sustainability

Criteria

Institution has a formally adopted open access policy that ensures that versions of all future scholarly articles by faculty and staff and all future theses and dissertations are deposited in a designated open access repository.

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.

"---" indicates that no data was submitted for this field

Total number of institutional divisions (e.g. schools, colleges, departments) that produce research:

18

Number of divisions covered by a policy assuring open access to research:

18

A brief description of the open access policy, including the date adopted and repository(ies) used:

The University of Arizona does not have a formal open access policy; however the UA advocates that UA researchers and authors retain the rights to their work. The UA hosts a UA Campus Repository for researchers, as well as the public, may view valuable research. Lastly, the UA Libraries publishes information and tips for UA scientists, researchers and students to help them retain open access to their work.

A copy of the open access policy:

The open access policy:

The University of Arizona does not have a formal open access policy; however the UA advocates that UA researchers and authors retain the rights to their work. The UA hosts a UA Campus Repository for researchers, as well as the public, may view valuable research. Lastly, the UA Libraries publishes information and tips for UA scientists, researchers and students to help them retain open access to their work.

The website URL where the open access repository is available:

[Campus Sustainability Data Collector | AASHE](#)

<http://arizona.openrepository.com/arizona/>

A brief description of how the institution's library(ies) support open access to research:

The University of Arizona supports open access to research through the operation of an online open repository and through the advocacy of open access to research through provision tips and best practices for faculty and staff to follow.

The website URL where information about open access to the institution's research is available:

<http://www.library.arizona.edu/services/faculty/scholcom/issues.html>

Engagement

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.

Credit
Student Educators Program
Student Orientation
Student Life
Outreach Materials and Publications
Outreach Campaign
Employee Educators Program
Employee Orientation
Staff Professional Development

Student Educators Program

Responsible Party

Benjamin Champion

Director

Office of Sustainability

Criteria

Institution coordinates an ongoing peer-to-peer sustainability outreach and education program for degree-seeking students. The institution:

- Selects or appoints students to serve as educators and formally designates the students as educators (paid and/or volunteer),
- Provides formal training to the educators in how to conduct outreach, and
- Offers faculty or staff and/or other financial support to the program.

This credit focuses on programs for degree-seeking students enrolled in a for-credit program. Continuing education and/or non-credit students are excluded from this credit.

This credit recognizes ongoing student educator programs that engage students 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 avail themselves of the outreach and education offerings.

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 *EN 5: Outreach Campaign* and *EN 3: Student Life*.

Submission Note:

Information on degree-seeking students and numbers of students served by programs have been brought up-to-date with the latest data available from the UA Factbook (<http://factbook.arizona.edu/>) - as of March 2015, data for FY14 is available.

"---" indicates that no data was submitted for this field

Does the institution coordinate one or more ongoing student, peer-to-peer sustainability outreach and education programs that meet the criteria for this credit?:

Yes

Number of degree-seeking students enrolled at the institution:

40,621

Name of the student educators program (1st program):

Eco Reps

Number of students served (i.e. directly targeted) by the program (1st program):

7,216

A brief description of the program, including examples of peer-to-peer outreach activities (1st program):

Eco Reps are the voice for sustainability in the residence halls at the University of Arizona. They are responsible for providing sustainability programming to the residence halls on their own and in conjunction with Resident Assistants. They use their training to tailor programming to each residence hall. They also work to raise awareness for various types of sustainability issues, such as recycling and environmental justice through programming and through administering competitions between the residence halls such as Battle of the Utilities and Recycle Mania.

A brief description of how the student educators are selected (1st program):

Eco Reps are self-selected in the Residence Halls. Each Hall Council has one position, Director of Sustainability, that residents can run for. This individual is charged with representing his or her Hall Council at all Eco Rep meetings as well as incorporating sustainability concepts and practices into Hall Council programming. Each Hall Council Eco Rep is responsible for running Recycle Mania at each hall as well as creating and implementing sustainability related programming.

In addition to the Hall Council position, residents can become general Eco Reps for their Residence Hall. The general Eco Reps help the Director of Sustainability with programming.

A brief description of the formal training that the student educators receive (1st program):

All Eco Reps attend weekly 1.5 hour meetings which include presentations created by Residence Life, covering the triple bottom line of people, planet, and profit. Eco Reps take the information imparted through the presentation to their respective Hall Councils and communities.

A brief description of the financial or other support the institution provides to the program (1st program):

Eco Reps have a budget around \$2600 dollars coming from dedicated funds from Residence Life. Individual Hall Councils allocate may allocate more money to Eco Rep programs upon request.

Staff support of Eco Reps comes in the form of Residence Life's Coordinator of Sustainability Education leading the Eco Rep Program. Residence Life pays for this salary in its entirety.

Name of the student educators program (2nd program):

Students for Sustainability

Number of students served (i.e. directly targeted) by the program (2nd program):

40,621

A brief description of the program, including examples of peer-to-peer outreach activities (2nd program):

Students for Sustainability is a student group on campus administered through the Associated Students of the University of Arizona (ASUA). The group's mission is to engage students around projects that build a sustainable university and raise awareness for sustainability issues in student life.

Students for Sustainability engages students through several of all of its programs. The group runs and helps maintain on campus gardens in which both students and employees are encouraged to participate; Grassroots, which is a peer to peer volunteering group for sustainability projects; Green the Greek, which focuses on promoting recycling in fraternity and sorority organizations on campus; Compost Cats, which is a student administered campus and local business composting service that aims to create agriculture grade compost that can be used for University and for business use. Throughout all of the programs, training and education is provided by the students involved as well as by other student groups that partner on the projects.

A brief description of how the student educators are selected (2nd program):

Students for Sustainability has a dedicated administrative staff, interns, and volunteers. The administrative staff consists of an executive director, an administrative director and a graduate assistant, all of which are selected by the Associate Students of the University of Arizona (ASUA). These individuals are responsible for running the Grassroots student volunteer program, Ecoalition which coordinates club activities related to sustainability, and individual projects such as Compost Cats, Garden in the Desert, and the Recycle Team.

Interns are selected through a competitive application process that includes short answer written questions and phone interviews with either the executive or administrative director.

Volunteers are encouraged to sign up to help with particular projects based upon their respective time commitments.

A brief description of the formal training that the student educators receive (2nd program):

The administrative staff and interns of Students for Sustainability learn to action plan, manage complex projects, communicate effectively across the UA landscape and how to conduct media relations and outreach efforts. These skills are taught through a weekend retreat and through assignments and hands-on experience.

Additionally, interns learn specific skills according to which project an intern selects for the year. Examples include operating large farm machinery for composting, identification of recyclable material for the recycling project, and contract management for the gardening project.

A brief description of the financial or other support the institution provides to the program (2nd program):

The University of Arizona supports Students for Sustainability with financial funding and assigned UA personnel. Projects are financially supported through an annual budget allocation of \$5,000 from ASUA. If more funds are needed they are acquired through fundraising.

Name of the student educators program (3rd program):

Number of students served (i.e. directly targeted) by the program (3rd program):

A brief description of the program, including examples of peer-to-peer outreach activities (3rd program):

A brief description of how the student educators are selected (3rd program):

A brief description of the formal training that the student educators receive (3rd program):

A brief description of the financial or other support the institution provides to the program (3rd program):

Name(s) of the student educator program(s) (all other programs):

Number of students served (i.e. directly targeted) by all other student educator programs:

A brief description of the program(s), including examples of peer-to-peer outreach activities (all other programs):

A brief description of how the student educators are selected (all other programs):

A brief description of the formal training that the student educators receive (all other programs):

A brief description of the financial or other support the institution provides to the program (all other programs):

Total number of hours student educators are engaged in peer-to-peer sustainability outreach and education activities annually:

The website URL for the peer-to-peer student outreach and education program(s):

Responsible Party

Benjamin Champion

Director

Office of Sustainability

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).

Because orientation activities vary from one institution to another, prominent inclusion of sustainability may not take the same form on each campus. Prominent inclusion of sustainability may also take different forms for different types of students (e.g. undergraduate students, transfer students, graduate students). When reporting for this credit, each institution will determine what prominent inclusion of sustainability means given its particular context. (See the Credit Example in the STARS Technical Manual.)

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.

This credit was marked as **Not Pursuing** so Reporting Fields will not be displayed.

Responsible Party

Benjamin Champion

Director

Office of Sustainability

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
- Sustainable 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 and 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

Multiple programs and initiatives may be reported for each category and each category may include institution-governed and/or student-governed programs.

Submission Note:

This submission content is primarily based on 2012 AASHE STARS submission by UA, but as of March 2015 content that is no longer accurate has been updated and all URLs have been verified. A more comprehensive update will be completed in late 2015 as part of the next full UA STARS submission.

"---" indicates that no data was submitted for this field

Does the institution have one or more co-curricular sustainability programs and initiatives that fall into the following categories?:

	Yes or No
Active student groups focused on sustainability	Yes
Gardens, farms, community supported agriculture (CSA) or fishery programs, or urban agriculture projects where students are able to gain experience in organic agriculture and sustainable food systems	Yes
Student-run enterprises that include sustainability as part of their mission statements or stated purposes	Yes
Sustainable investment funds, green revolving funds or sustainable microfinance initiatives through which students can develop socially, environmentally and fiscally responsible investment and financial skills	Yes
Conferences, speaker series, symposia or similar events related to sustainability that have students as the intended audience	Yes
Cultural arts events, installations or performances related to sustainability that have students as the intended audience	---
Wilderness or outdoors programs that follow Leave No Trace principles	Yes
Sustainability-related themes chosen for themed semesters, years, or first-year experiences	Yes
Programs through which students can learn sustainable life skills	Yes
Sustainability-focused student employment opportunities offered by the institution	Yes

<p>Graduation pledges through which students pledge to consider social and environmental responsibility in future job and other decisions</p>	<p>---</p>
<p>Other co-curricular sustainability programs and initiatives</p>	<p>---</p>

The name and a brief description of each student group focused on sustainability:

The Honors Student Council Sustainability Committee is one of several committees in UA's Honors Student Council. The committee focuses on creating student-led environmental sustainability initiatives on campus and in the greater Tucson community

The website URL where information about student groups is available:

<http://www.portal.environment.arizona.edu/students/clubs-and-groups>

A brief description of 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:

The UA Community Garden is a collective of students who share a passion for growing and consuming food. Our goal is to transform and manage unused spaces on the University of Arizona campus into verdant gardens where people can grow crops and plants organically. Such use of land will allow local members to reclaim areas as a space for sustainable practices, with an emphasis on community building and maintaining the desert ecosystem. We established and currently run two gardens on the UA campus, including the UA Community Garden.

The website URL where information about the organic agriculture and/or sustainable food systems projects and initiatives is available:

<https://www.facebook.com/UACommunityGarden>

A brief description of student-run enterprises that include sustainability as part of their mission statements or stated purposes:

The University of Arizona supports the development of sustainable business and entrepreneurial skills through many venues, but one venue in particular is providing hands on experience in sustainability for future business leaders. This venue is the University of Arizona's chapter of Students In Free Enterprise (SIFE). Members of SIFE work with local organizations helping improve the productivity, efficiency and effectiveness of the organization as well as act as consultants for specific projects the organizations are implementing.

One of SIFE's most recent project, called "Food 4 Thought," is helping students at the Wildcat School learn about recycling, school gardening, eating healthy, and composting. With support from the University of Arizona's Norton School of Family and Consumer Sciences, SIFE members are developing a business plan and applying for a grant for the school garden and education program that will ensure the longevity of the project into the foreseeable future in terms of financial and employee/volunteer support. Through this process students learn about and tackle issues of financial decision making, basic business sense and "strategic planning" for gardens and the usage of garden produce.

The website URL where information about the student-run enterprise(s) is available:

A brief description of the sustainable investment or finance initiatives:

The University of Arizona Green Fund Committee is a student led investment vehicle. The Green Fund uses funds generated by a student fee to support projects that will make the institution more sustainable. With an initial budget of \$400,000 the 10 member committee is responsible for reviewing requests for proposals, marketing the committees efforts, and selecting final Green Fund recipients. The Green Fund allows students the opportunity to act as venture capitalists by giving them the power to invest student funds into projects that will make the University of Arizona more sustainable while following the guidelines set forth by the Administration and Business Affairs departments in effect providing an experience that develops investment skills and socially responsible project identification.

For more information please see:

<http://www.studentaffairs.arizona.edu/greenfund/>

Additionally there is another opportunity for students to learn investment skills which may involve sustainability concepts.

The Eller College of Management offers an Applied Portfolio Management Class to both undergraduates and MBA students that allows students to manage the Don Seelye Fund which worth almost \$1 million. While the fund does not focus entirely on socially responsible investment, it has managed socially responsible investments in companies such as Clean Harbors.

For specific information please see:

http://www.uafoundation.org/impact/articles/article_00055.shtml

The website URL where information about the sustainable investment or finance initiatives is available:

A brief description of conferences, speaker series, symposia or similar events related to sustainability that have students as the intended audience:

The Institute of the Environment schedules speaker and conferences on environmental sustainability topics with students and the community being the intended audience. One conference of note, was the Adaptation Futures Conference that hosted world renowned scientists, policy makers, and practitioners from all over the world to discuss climate change adaptation.

The website URL where information about the event(s) is available:

A brief description of cultural arts events, installations or performances related to sustainability that have students as

the intended audience:

The website URL where information about the cultural arts event(s) is available:

A brief description of wilderness or outdoors programs for students that follow Leave No Trace principles:

Outdoor Adventures provides students with the opportunity to experience the wonder and glory of the Arizona landscape and beyond. Program activities include various types of climbing, hiking, canyoneering, canoeing, SCUBA diving, mountain biking, surfing, backpacking as well as training to be a Wilderness First Responder. Before all trips, participants attend a mandatory meeting discussing the Leave No Trace principles and specific information related to the area the group will visit.

The website URL where information about the wilderness or outdoors program(s) is available:

<http://rec.arizona.edu/program/outdoor-adventures>

A brief description of sustainability-related themes chosen for themed semesters, years, or first-year experiences:

The Division of Student Life coordinates a Faculty Fellows program that places faculty in residence halls to be a resource for students and to offer programming around their interests. One of these faculty fellows has a keen interest in sustainability and supports students in residence halls with these interests. This program is being modified in 2015 to further support student engagement around UA engagement competencies, of which sustainability is one of six. There will be sustainability-focused faculty fellows in the future to offer even more focused attention on sustainability for UA students.

In the Fall of 2008, the students from the Honors College chose the book *Ishmael: An Adventure of Mind and Body* as common reading for incoming Honors students. The book was given out to all Honors Students as part of New Student Orientation.

Students who chose the book designed a series of fall activities starting with a summer blog about the book. The semester begins with a week-long, free film series in Gallagher theater. The Honors Forum lunch series focused on the issue of sustainability all semester featuring Professor Guy McPherson focusing on sustainability themes in the common reading; Professor Paul Wilson focusing on food sustainability; Professor Sharon Megdal focusing on Water in the Southwest; and Professor Annie Nequette focusing on sustainability in architecture. In addition to a response contest, poetry readings, book discussion groups, and community service projects, the Common Reading program culminated in a presentation at the Honors College Convocation during Family Weekend by Professor Jonathon Overpeck, Director of the UA Institute for the Study of Planet Earth, Sustainability and Global Change. The convocation provided an opportunity for all UA families and students to learn about ecological and social issues facing our planet and to be inspired to make changes in our own human behavior that will impact the environment.

The Honors College changes the theme each year, but the topics typically deal with self awareness, breaking stereotypes, and broadening horizons on current topics of interest.

The website URL where information about the theme is available:

<https://www.studentaffairs.arizona.edu/faculty/fellows/index.php>

A brief description of program(s) through which students can learn sustainable life skills:

Virtual tours of each residence hall are posted online at Residence Life's website; however, model rooms may also be toured upon request with the Community Director of each residence hall.

The LEED Platinum residence halls of Arbol de La Vida Hall and Likins Hall, are perhaps the most sustainably designed rooms on campus, but all residence hall rooms can be an example of sustainable living. For instance, Campus Tours focus on the amenities and the services that each hall has such as recycling, specialized lighting, and heating/cooling controls. Specifically, tour groups visit halls on Highland Avenue like Colonia De Laz or Villa del Puente being sure to highlight the ways residents can make their living experience comfortable and sustainable.

Specifically when students tour Likins Hall or Arbol de La Vida Hall, they are shown the following amenities found in every room:

- Roof-mounted solar panels will provide a significant amount of the hot water needs
- Computer-designed awnings on the south side of buildings allows for optimal sunlight in the winter and blocks it in the summer
- Low-flow water fixtures include low-flow showerheads and faucets and dual-flush toilets
- Smart thermostats in the rooms that recognize when the room is unoccupied and reduce energy consumption
- Multiple “green” outlets per room that shut off power to anything plugged in if the room is unoccupied
- Large windows open for direct ventilation and sunlight and feature dual window shades

The website URL where information about the sustainable life skills program(s) is available:

<http://www.life.arizona.edu/home/housing-options/hall-descriptions>

A brief description of sustainability-focused student employment opportunities:

Residence Life conducts a waste audit annually that informs residence hall educational outreach, and student leaders are employed to conduct this audit. Additionally, a paid student leader runs an outreach program to off-campus apartment complexes. In total, in five years, residence life sustainability coordination has employed 29 students.

The Office of Sustainability also regularly employs students to work on a variety of projects, such as communications/outreach, green purchasing within the university, development of internships and others.

Students for Sustainability has a wide variety of programs and experiences that feature paid student coordinators, including Greening the Game for football game recycling, Compost Cats for community and campus composting, and more.

The website URL where information about the student employment opportunities is available:

A brief description of graduation pledges through which students pledge to consider social and environmental responsibility in future job and other decisions:

The website URL where information about the graduation pledge program is available:

A brief description of other co-curricular sustainability programs and initiatives:

The website URL where information about other co-curricular sustainability programs and initiatives is available:

Outreach Materials and Publications

Responsible Party

Benjamin Champion

Director

Office of Sustainability

Criteria

Institution produces outreach materials and/or publications that foster sustainability learning and knowledge. The publications and outreach materials may include the following:

- 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
- A vehicle to publish and disseminate student research on sustainability
- Building signage that highlights green building features
- Food service area 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 alternative 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 incorporating sustainability into the residential experience
- Regular coverage of sustainability in the main student newspaper, either through a regular column or a reporter assigned to the sustainability beat
- Other

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.

Submission Note:

Most of this submission content is based on previous 2012 UA AASHE STARS submission. As of March 2015, all content has been verified, and updated where necessary. Some new entries have been made.

"---" indicates that no data was submitted for this field

Does the institution produce the following outreach materials and/or publications that foster sustainability learning and knowledge? :

Yes or No

A central sustainability website that consolidates information about the institution's sustainability efforts	Yes
A sustainability newsletter	Yes
Social media platforms that focus specifically on campus sustainability	Yes
A vehicle to publish and disseminate student research on sustainability	No
Building signage that highlights green building features	Yes
Food service area signage and/or brochures that include information about sustainable food systems	Yes
Signage on the grounds about sustainable groundskeeping and/or landscaping strategies employed	No
A sustainability walking map or tour	No
A guide for commuters about how to use alternative methods of transportation	Yes
Navigation and educational tools for bicyclists and pedestrians	Yes
A guide for green living and incorporating sustainability into the residential experience	Yes
Regular coverage of sustainability in the main student newspaper, either through a regular column or a reporter assigned to the sustainability beat	Yes
Other sustainability publications or outreach materials not covered above	---

A brief description of the central sustainability website:

The University of Arizona's sustainability website is a descriptive portal for environmental sustainability at the university. There is information on academics, research, leadership and students involved with sustainability. The university's environmental portal is also a good resource:

<http://www.portal.environment.arizona.edu/>

The website URL for the central sustainability website:

<http://sustainability.arizona.edu/>

A brief description of the sustainability newsletter:

UA Environment Weekly is an environment and sustainability Listserv that keeps students, faculty, staff, and the public informed and up-to-date on seminars, presentations, workshops, conferences, and other events; funding opportunities; environmental and sustainability news; course offerings; and much more at the UA.

The website URL for the sustainability newsletter:

<http://portal.environment.arizona.edu/>

A brief description of the social media platforms that focus specifically on campus sustainability:

The UA Office of Sustainability maintains a Facebook page with regular postings about news and activities at UA related to sustainability.

The website URL of the primary social media platform that focuses on sustainability:

https://www.facebook.com/UA_Sustainability

A brief description of the vehicle to publish and disseminate student research on sustainability:

The website URL for the vehicle to publish and disseminate student research on sustainability:

A brief description of building signage that highlights green building features :

Buildings that have green building features have a sign post outside the building explaining what feature or process that allows the building to be considered sustainable.

The website URL for building signage that highlights green building features :

A brief description of food service area signage and/or brochures that include information about sustainable food systems:

University of Arizona Dining services proudly displays signs indicating whether restaurants have organic or local food menu options. This is done most prominently at The Cellar.

The website URL for food service area signage and/or brochures that include information about sustainable food systems:

A brief description of signage on the grounds about sustainable groundskeeping and/or landscaping strategies:

The website URL for signage on the grounds about sustainable groundskeeping and/or landscaping strategies:

A brief description of the sustainability walking map or tour:

From August to April, the public is invited to visit campus through guided tours. These tours often cite sustainability features throughout campus, but not in a systematically programmed way. Efforts are underway to develop a set of GIS layers to the main interactive online campus map that feature sustainability elements of campus. This will provide a platform for more systematic integration of sustainability into campus tours as well.

The website URL of the sustainability walking map or tour:

<http://universityrelations.arizona.edu/presidential-events-visitor-services>

A brief description of the guide for commuters about how to use alternative methods of transportation:

Parking and Transportation Services at the University of Arizona strongly encourage students, faculty, staff, and commuters to consider incorporating alternative modes of travel into their lives. Parking and Transportation's Travel Reduction website has information on programs offered by the University as well as the community that promote public transportation, carpooling, and nonmotorized travel options.

The website URL for the guide for commuters about how to use alternative methods of transportation:

<http://parking.arizona.edu/alternative/altoptions.php>

A brief description of the navigation and educational tools for bicyclists and pedestrians:

Parking and Transportation Services at the University of Arizona offers extensive bicycle educational and navigation information on its website.

The website URL for navigation and educational tools for bicyclists and pedestrians:

<https://parking.arizona.edu/alternative/bike.php>

A brief description of the guide for green living and incorporating sustainability into the residential experience:

Residence Life publishes on its website a list of 15 tips to being green and sustainable in the residence halls. The 15 topics covered are Reduce, Reuse, Recycle, Get to Know Someone Different than You, Increasing Financial Literacy, Buy Local, Reduce Water Consumption, Reduce Paper Consumption, Avoid Wrapping Paper, Report Leaks, Throw Away Cigarette Butts, Cut Down on Packaging, Unplug, and Use Compact Fluorescent Bulbs.

In addition to these tips, Residence Life distributes to every resident a recycling guide that covers how the University recycles.

The website URL for the guide for green living and incorporating sustainability into the residential experience:

<http://www.life.arizona.edu/home/hall-living/sustainability/resources/tips>

A brief description of regular coverage of sustainability in the main student newspaper, either through a regular column or a reporter assigned to the sustainability beat:

The Daily Wildcat assigns one reporter to cover sustainability issues and environmental issues.

The website URL for regular coverage of sustainability in the main student newspaper, either through a regular column or a reporter assigned to the sustainability beat:

<http://wildcat.arizona.edu/>

A brief description of another sustainability publication or outreach material not covered above (1st material):

The website URL for this material (1st material):

Does the institution produce another sustainability publication or outreach material not covered above? (2nd material):

A brief description of this material (2nd material):

The website URL for this material (2nd material):

Does the institution produce another sustainability publication or outreach material not covered above? (3rd material):

A brief description of this material (3rd material):

The website URL for this material (3rd material):

Does the institution produce another sustainability publication or outreach material not covered above? (4th material):

A brief description of this material (4th material):

The website URL for this material (4th material):

Does the institution produce another sustainability publication or outreach material not covered above? (5th material):

A brief description of this material (5th material):

The website URL for this material (5th material):

Does the institution produce another sustainability publication or outreach material not covered above? (6th material):

A brief description of this material (6th material):

The website URL for this material (6th material):

Does the institution produce another sustainability publication or outreach material not covered above? (7th material):

A brief description of this material (7th material):

The website URL for this material (7th material):

Does the institution produce another sustainability publication or outreach material not covered above? (8th material):

A brief description of this material (8th material):

The website URL for this material (8th material):

Outreach Campaign

Responsible Party

Benjamin Champion
Director
Office of Sustainability

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 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 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 labs or green office 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.

To measure if a campaign yields measurable, positive results, institutions should compare pre-campaign performance to performance during or after the campaign. The following impacts are not sufficient for this credit:

- Increased awareness
 - Additional members of a mailing list or group
-

"---" indicates that no data was submitted for this field

Has the institution held at least one sustainability-related outreach campaign directed at students within the previous three years that has yielded measurable, positive results in advancing sustainability?:

Yes

Has the institution held at least one sustainability-related outreach campaign directed at employees within the previous three years that has yielded measurable, positive results in advancing sustainability?:

Yes

The name of the campaign (1st campaign):

Recycle Mania

A brief description of the campaign (1st campaign):

The UA participates in Recycle Mania as a whole university but also holds a Recycle Mania competition for the Residence Halls. During the ten week program, the university promotes recycling in the Student Union, Facilities Management, and Residence Life through greater advertising and awareness campaigns. Facilities are encouraged to use less materials and power during this period.

A brief description of the measured positive impact(s) of the campaign (1st campaign):

Recycle Mania allowed UA as a whole to recycle large amounts of waste. The following are summaries of UA results from the past several years of the competition (the 2015 competition is currently underway):

2014: 388,952

2013: 507,934

2012: 420,296

The number of sustainable or sustainability-related programs hosted in support of Recycle Mania in residence halls are the following:

2014: 70

2013: 130

2012: 133

The website URL where information about the campaign is available (1st campaign):

<http://www.life.arizona.edu/home/hall-living/sustainability/events/recycle-mania>

The name of the campaign (2nd campaign):

A brief description of the campaign (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 outreach campaigns, including measured positive impacts:

Employee Educators Program

Responsible Party

David Bradshaw
Program Coordinator
UA Office of Sustainability

Criteria

Institution administers or oversees an ongoing faculty/staff peer-to-peer sustainability outreach and education program.

In the program, employee sustainability educators are formally designated and receive formal training or participate in an institution-sponsored orientation. The institution offers financial or other support to the program.

This credit recognizes ongoing programs that engage employees 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 avail themselves of the outreach and education offerings.

Training and/or professional development opportunities in sustainability for staff are excluded from this credit. These activities are covered in *EN 8: Staff Professional Development*.

"---" indicates that no data was submitted for this field

Does the institution administer or oversee an ongoing faculty/staff peer-to-peer sustainability outreach and education program that meets the criteria for this credit?:

Yes

Total number of employees:

11,834

Name of the employee educators program (1st program) :

YOUnion Aid

Number of employees served by the program (1st program):

1,000

A brief description of how the employee educators are selected (1st program):

YOUnion Aid is run by a committee of staff. Staff members are not required to sit on the committee, but are encouraged to do so. The chair of the committee changes each year.

A brief description of the formal training that the employee educators receive (1st program):

Staff receive training from the current chair of the committee on overall sustainability goals. Staff bring their own knowledge from work experience or education to the committee. This knowledge is disseminated to other members of the committee through discussion in meetings and interaction on projects that the committee pursues.

A brief description of the staff and/or other financial support the institution provides to the program (1st program):

The program is run by staff. While there are not specific funds set aside for the program, requests for funds for YOUNION Aid projects are accepted through the Unions general fund.

The website URL where information about the program is available (1st program):

Name of the employee educators program (2nd program):

Number of employees served by the program (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 (2nd program):

A brief description of the financial or other support the institution provides to the program (2nd program):

The website URL where information about the program is available (2nd program):

Name(s) of the employee educator program(s) (all other programs):

Number of employees served by all other programs:

A brief description of how the employee educators are selected (all other programs):

A brief description of the formal training that the employee educators receive (all other programs):

A brief description of the staff and/or other financial support the institution provides to the program(s) (all other programs):

The website URL where information about the program(s) is available (all other programs):

Employee Orientation

Responsible Party

David Bradshaw
Program Coordinator
UA Office of Sustainability

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).

Submission Note:

This information is based off of the UA 2012 AASHE STARS Report. While the total number of employees that work for the AHSC, is known for the time period reported due to data collection limitations, it is believed that 30% is a moderately conservative estimate using the proportion of employees at University of Arizona Medical Center to UA employees.

"---" indicates that no data was submitted for this field

The percentage of new employees that are offered orientation and/or outreach and guidance materials that cover sustainability topics:

30

A brief description of how sustainability is included in new employee orientation:

New employee Orientation for UA employees, specifically those working in the Arizona Health Sciences Center, includes information about the green campus initiative. Employees learn about recycling practices and other means of maintaining a "green" workplace.

The website URL where information about sustainability in new employee orientation is available:

Staff Professional Development

Responsible Party

David Bradshaw
Program Coordinator
UA Office of Sustainability

Criteria

Institution makes available training and/or other professional development opportunities in sustainability to all staff at least once per year.

Separate training opportunities for each department would count for this credit, as long as each staff member has an opportunity to learn about sustainability at least once per year. It is not necessary that each staff member attend such trainings; the credit is based on making training available to all staff.

This credit applies to staff members only; it does not include faculty members.

The following training opportunities are not sufficient for this credit:

- Specialized training for a small group of staff
 - The opportunity to participate in an institutional sustainability committee or group
-

"---" indicates that no data was submitted for this field

Does the institution make available training and/or other professional development opportunities in sustainability to all staff at least once per year?:

Yes

A brief description of the sustainability trainings and professional development opportunities available to staff :

Human Resources offers a wide variety of professional development opportunities for employees interested in pursuing leadership roles and intact workgroups.

Human Resources does not offer specific sustainability training however the professional development opportunities available to employees helps maintain sustainability in our workforce by creating strong and competent leaders.

The percentage of staff that participated in training and/or other professional development opportunities in sustainability during the previous year:

The website URL where information about staff training opportunities in sustainability is available:

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.

Credit
Community Partnerships
Inter-Campus Collaboration
Continuing Education
Community Service
Community Stakeholder Engagement
Participation in Public Policy
Trademark Licensing
Hospital Network

Community Partnerships

Responsible Party

David Bradshaw
 Program Coordinator
 UA Office of Sustainability

Criteria

Institution has one or more formal partnership(s) with the local community, including school districts, government agencies, non-profit organizations, businesses and/or other entities, to work together to advance sustainability within the community.

Each partnership conforms to one of the following types:

Type of Partnership	Indicators
<p>A. Supportive</p>	<ul style="list-style-type: none"> • <i>Scope:</i> Addresses a sustainability topic or a specific aspect of sustainability (e.g. community garden, environmental remediation, community environmental health and education) • <i>Duration:</i> May be time-limited (short-term projects and events), multi-year, or ongoing • <i>Commitment:</i> Institutional involvement may include financial and/or staff support or may be limited to resource sharing and/or endorsement • <i>Governance:</i> Campus and community leaders or representatives are engaged in program/project development
<p>B. Collaborative</p>	<ul style="list-style-type: none"> • <i>Scope:</i> Addresses one or more sustainability challenge and may simultaneously support social equity and wellbeing, economic prosperity, and ecological health (e.g. a green jobs program in an economically disadvantaged neighborhood) • <i>Duration:</i> May be time-limited, multi-year, or ongoing • <i>Commitment:</i> Institution provides faculty/staff, financial, and/or material support • <i>Governance:</i> Campus and local community members are both engaged in program/project development, from agenda setting and planning to decision-making, implementation and review

C.Transformative

- *Scope:* Catalyzes community resiliency and local/regional sustainability by simultaneously supporting social equity and wellbeing, economic prosperity, and ecological health on a community or regional scale (e.g. “transition” projects and partnerships focused on community adaptation to climate change)
- *Duration:* Is multi-year or ongoing and proposes or plans for institutionalized and systemic change
- *Commitment:* Institution provides faculty/staff and financial or material support
- *Governance:* Partnership has adopted a stakeholder engagement framework through which community members, vulnerable populations, faculty, staff, students and other stakeholders are engaged in program/project development, from agenda setting and planning to decision-making, implementation and review

An institution may have multiple partnerships of each type, however no single partnership may be both supportive and collaborative, collaborative and transformative, or supportive and transformative.

Recognizing the diversity of forms that community partnerships may take, it is not required that a partnership meet all of the criteria listed to be considered supportive or collaborative. A partnership must meet all of the criteria listed to be considered transformative, however. For further guidance in identifying community partnerships that meet the criteria for each type, see the Credit Example in the [STARS Technical Manual](#).

This credit recognizes campus-community partnerships that advance sustainability in an explicit and participatory way. 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 local partnerships and contribute toward sustainability, they are not included in this credit. Community service is covered by *EN 12: Community Service*.

"---" indicates that no data was submitted for this field

Does the institution have at least one formal sustainability partnership with the local community that meets the criteria as “supportive”?:

Yes

A brief description of the institution’s supportive sustainability partnership(s) with the local community:

The University is partnered with a variety of organizations that work to promote sustainable management of natural resources and growth. Most partnerships focus on sustainable water management, climate, and agricultural practices.

UA is also partnered with schools through SAHRA, the Tree Ring Lab, and the Biology Project in addition to other collaborative partnerships.

SAHRA, Sustainability of semi-Arid Hydrology Riparian Areas, focuses on creating curriculum that promotes hydrologic literacy among a variety of audiences and across all learning levels.

The Laboratory is a widely known and frequently used educational attraction for many types of groups, including University of Arizona classes and labs, classes from other universities and from primary and secondary schools, and various non-academic organizations. Faculty, staff, and students have helped prepare museum displays and visit schools and community organizations, and lead tours of the Laboratory of Tree-Ring Research. The lab has many handouts, including K-12 teacher kits, and hands-on demonstrations suitable for many age groups.

The Biology Project is an online resource project run by UA, but intended for use by students and teachers in the community. The project creates curriculums for teachers at the college level and below, as well as modules for student use to enhance learning of biology.

Does the institution have at least one formal sustainability partnership with the local community that meets the criteria as “collaborative”?:

Yes

A brief description of the institution's collaborative sustainability partnership(s):

The University of Arizona through the land grant mission has fostered many collaborative partnerships that address sustainability issues. One partnership in particular to note is the Compost Cats agreements with the surrounding businesses and nonprofit organizations. Compost Cats works with 15 businesses and nonprofits collecting compostable waste to be transformed in high quality compost. The compost is then used on campus, by the community food bank, and the San Xavier Coop Farm. The rest is sold to interested businesses and people at competitive rates.

This partnership started in January 2011 by a group of motivated students and has progressively grown larger to incorporate businesses, government and nonprofit organizations. The University has supported the growth of Compost Cats through the awarding of UA Green Fund grant funding. Currently, Compost Cats is arranging for a more robust partnership with the City of Tucson and the Reid Park Zoo as well as additional businesses.

Another example of a collaborative partnership is the Drachman Institute’s Community Outreach Partnership Center. The center is supported through seed funding from US Department of Housing and Development awarded to the Drachman Institute starting in 2003 and additional funding and staff time from the University of Arizona. The center focuses on housing, development, transportation, community neighborhood planning and planning and design for native peoples. The center works with local governments, tribes and organizations to produce plans, reports, and presentations that address the themes outlined above. To create these products the center facilitates conversations between multiple stakeholders and works closely with city, county and tribal officials.

Does the institution have at least one formal sustainability partnership with the local community that meets the criteria as “transformative”?:

Yes

A brief description of the institution's transformative sustainability partnership(s) with the local community:

The UA Renewable Energy Network (REN) is a university-wide initiative designed to support the expanded regional, national, and global use of abundant, clean, and economical renewable energy by connecting community and industry to the UA’s research and educational programs.

REN partners with researchers, students, business and government leaders to reduce our reliance on carbon-emitting energy sources; increase access to energy services and economic development potential; effectively integrate renewable energy into a complex electric grid system; develop pathways for advanced energy innovation; understand the link between energy and water and improve access to these services, and promote sustainable approaches for urban and rural energy delivery systems.

This partnership is multi-year in nature and is supported by University staff, faculty and researchers. REN projects engage the community in discussion, outreach and research that ultimately will lead to a more economically vibrant, socially just and environmentally friendly community.

A brief description of the institution’s sustainability partnerships with distant (i.e. non-local) communities:

As a nationally ranked environmental research institution, the University of Arizona has many partnerships that go beyond the University campus. One such organization that has been creating partnerships that impact distant communities is the Climate Assessment for the Southwest (CLIMAS). CLIMAS is actively engaging communities across the western United States, tribal nations, and the US-Mexico border region. CLIMAS develops tools and reports around the themes of adaptation and vulnerability, climate science, communication of science, decision support, drought, economics and livelihoods, ecosystems, health and water. These reports and tools are being developed for specific communities as well as for the region as a whole, and are integral to increasing the capacity of communities to adapt to climate change, deal with drought and make decisions based upon actionable science.

For more information about CLIMAS, check out

www.climas.arizona.edu

The website URL where information about sustainability partnerships is available:

<http://portal.environment.arizona.edu/outreach>

Inter-Campus Collaboration

Responsible Party

Benjamin Champion

Director

Office of Sustainability

Criteria

Institution collaborates with other colleges and universities to support and help build the campus sustainability community.

See the Credit Example in the STARS Technical Manual for guidance on identifying appropriate collaborations.

Submission Note:

This content is based on previous AASHE STARS submissions, but as of March 2015 the content is still accurate and relevant. Efforts will be made later in 2015 to further elaborate on this content more comprehensively represent inter-institutional collaboration efforts at UA, which are extensive and growing.

"---" indicates that no data was submitted for this field

Does the institution collaborate with other colleges and universities to support and help build the campus sustainability community?:

Yes

A brief summary of papers, guides, presentations, and other resources the institution has developed to share their sustainability experience with other institutions:

The University of Arizona sustainability website (

sustainability.arizona.edu

) maintains a set of links and resources to share about UA sustainability efforts with the wider world, including other universities and institutions in the Tucson community and Arizona more broadly.

University of Arizona Residence Life promotes the use of its recycling tips and program materials for use by other schools associated with the Recyclemania competition.

Another way that the University of Arizona supports the campus sustainability is through modeling practices that create a more inclusive and accepting campus and work culture. One example in particular is the Life and Work Connections program administered by Human Resources. The program recently was touted in case study by Caryn Jung, David Swihart, and Darci Thompson as a model program for establishing a family friendly campus.

The names of local, state/provincial, regional, national, or international campus sustainability organizations or consortia in which the institution participates and/or is a member:

Climate Assessment for the Southwest (CLIMAS)

Southwest Institute for Research on Women (SIROW)

Joint International Unit on Water, Environment and Public Policy

SRC/SEMATECH Engineering Research Center for Environmentally Benign Semiconductor Manufacturing (

<http://erc.arizona.edu/>

)

A brief summary of additional ways the institution collaborates with other campuses to advance sustainability :

The University of Arizona has many departments and research programs that focus on furthering the cause of sustainability issues. Through projects like the Climate Assessment for the Southwest (CLIMAS) and collaborative projects of the Water Resources Research Center, UA has advanced environmental sustainability. As a top research university, UA is also involved in many National Science Foundation funded projects as well as other non-climate related projects such as those promoted by the Bureau of Applied Research in Anthropology and other research centers on campus.

The website URL where information about cross-campus collaboration is available:

Continuing Education

Responsible Party

David Bradshaw
Program Coordinator
UA Office of Sustainability

Criteria

Part 1

Institution offers continuing education courses that address sustainability.

Courses that address sustainability include continuing education sustainability courses and continuing education courses that include sustainability. Courses that can be taken for academic credit are not included in this credit. They are covered by 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.

Submission Note:

A tally of the continuing education or professional development courses offered by the Outreach College was conducted. Of these courses, courses that are a part of the Green Industry program are counted as being sustainability related due to their subject matter

"---" indicates that no data was submitted for this field

Does the institution offer continuing education courses that address sustainability?:

Yes

Number of continuing education courses offered that address sustainability:

33

Total number of continuing education courses offered:

254

A copy of the list and brief descriptions of the continuing education courses that address sustainability:

A list and brief descriptions of the continuing education courses that address sustainability:

The inventory can be found at:

<http://ce.arizona.edu/business-and-professional-training-catalog>

in the Sustainability and Green Jobs Section.

Also an inventory can be found for Online Green Job and Energy Training at:

<http://ce.arizona.edu/online-training>

Does the institution have at least one sustainability-themed certificate program through its continuing education or extension department?:

Yes

A brief description of the certificate program:

The Green Industry certification program develops professionals a career in sustainable business practices. The online certification program offers 33 separate tracks that individuals may take ranging from Sustainability 101 to more specialized certifications such as Supply Chain Professional CSCP.

Year the certificate program was created:

2,009

The website URL where information about sustainability in continuing education courses is available :

http://outreachcollege.arizona.edu/ec2k/catalog_prof.asp?heading_id=228

Responsible Party

David Bradshaw
Program Coordinator
UA Office of Sustainability

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 full-time student per year.

Institutions may exclude non-credit, continuing education, and/or part-time students from this credit.

Submission Note:

The University of Arizona does not have a centralized program that records the community service activity of students; however the number of students participating in community service can be estimated using National Survey for Student Engagement (NSSE) data and student enrollment numbers.

NSSE reports on the proportion of freshman and seniors that perform community service. For the STARS Report, the University of Arizona is using the most current NSSE data (2009) and applying the data to most recent student population figures. To determine the number of sophomores and juniors participating in community service, a linear relationship between class standing and likelihood to engage in community service is assumed. Based on this assumption community service proportions for sophomores and juniors was estimated in a linear fashion using NSSE data as starting and ending points. It must be noted that there is some error associated with the NSSE data due to less than desired response rate (roughly 33%) and time lag created due to administration of the survey every three years.

For graduate, doctoral, and non-degree seeking students, 2010 Bureau of Labor Statistics data on the percentage of 25 to 34 year olds engaging in community service is used to generate a community service engagement figure for this group, assuming that most graduate students fall within this age range.

The sum of students engaging in community service for each class standing was then calculated to create an aggregate UA student community service engagement figure.

The number of students in each class standing was retrieved from the University of Arizona's Office of Institutional Research and Planning Support, and NSSE data was retrieved from UA Assessment, a division of the Office of the Provost.

Number of students engaged in community service:

18,079

Total number of students :

39,086

Does the institution wish to pursue Part 2 of this credit (community service hours)?:

Yes

Total number of student community service hours contributed during a one-year period:

90,118

Does the institution include community service achievements on student transcripts?:

Yes

A brief description of the practice of including community service on transcripts, if applicable:

The University of Arizona provides students the opportunity to list community service on their transcripts through participation in the Leadership and Involvement Transcript Program. Students register with the program and input leadership and community service hours into a central database. Upon request, students can generate either an unofficial or official co-curricular transcript that is verified by the University of Arizona Center for Student Involvement and Leadership. These transcripts can then be used in addition to resumes and curriculum vitae.

Does the institution provide incentives for employees to participate in community service (on- or off-campus)?:

A brief description of the institution's employee community service initiatives:

The website URL where information about the institution's community service initiatives is available:

Community Stakeholder Engagement

Responsible Party

David Bradshaw

Program Coordinator

UA Office of Sustainability

Criteria

Institution has adopted a framework for community stakeholder engagement in governance, strategy and operations. The framework includes:

1) Policies and procedures that ensure community stakeholder engagement is applied systematically and regularly across the institution's activities (e.g. planning and development efforts, capital investment projects, and/or other activities and decisions that affect the broader community)

And

2) Established practices to identify and engage relevant community stakeholders, including any vulnerable or underrepresented groups.

Frameworks 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.

This credit does not include the engagement of internal campus stakeholders (e.g. students, faculty and staff); internal stakeholder engagement is covered in *PA 3: Governance*.

Submission Note:

The University of Arizona engages community stakeholders throughout its operations and governance mechanisms and structures. The 2012 AASHE STARS Report does not have information to address this credit in full so the University of Arizona chooses to not pursue this selection at this time. This credit will be addressed in the next UA AASHE STARS Report.

This credit was marked as **Not Pursuing** so Reporting Fields will not be displayed.

Participation in Public Policy

Responsible Party

David Bradshaw
Program Coordinator
UA Office of Sustainability

Criteria

Institution advocates for national, state/provincial, or local public policies that support campus sustainability or that otherwise advance sustainability.

The policy advocacy must be done by the institution, not by students or a student group. 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.

"---" indicates that no data was submitted for this field

Does the institution advocate for national, state/provincial, or local public policies that support campus sustainability or that otherwise advance sustainability?:

Yes

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:

Advocacy of sustainability is very important for the University of Arizona. Through the work of UA's research centers, UA has advocated for sustainability by presenting and publishing research, assisting in monitoring functions in the community, directing conferences and speaking on topics of sustainability to public policy makers and to the community. Sustainability topics that UA advocates for span across the environmental, social and economic aspects of sustainability.

The University of Arizona hosts symposiums and lecture series open to the public on various topics including global climate change, psychology, astronomy and more. Usually around Earth Day, lectures on sustainability of food production as well as on the role of sustainability in business and theology are open to the public for attendance.

Additionally, professors and researchers at the University of Arizona are called upon by Congress to give expert opinion on topics relating to sustainability. As of May 6, 2010, Lisa Graumlich enlightened the Committee on Energy Independence and Global Warning regarding energy's connection to global warming trends.

Lastly, the UA has publicly pushed for greater diversity in its student body even during times of difficult financial times. Specifically the creation of the Arizona Assurance Scholarship program essentially has advocated for greater access to the university system helping to promote education for all students regardless of income.

A list of UA's research centers can be found at the following website.

<http://www.arizona.edu/research-centers>

Brief examples include:

The Udall Center for Studies in Public Policy which focuses on native nation self-governance, the environment, and immigration topics. The center has hosted conferences for the public and government officials on these matters in addition to publishing quality research to help policy makers.

For more information please visit:

<http://udallcenter.arizona.edu/>

The Arizona Research Institute for Solar Energy (AZRISE) focuses on all things solar with the goal of making solar energy a viable and marketable energy source that public policy can promote.

For more information please visit:

<http://azrise.org/about>

The Institute for the Environment which collaborates across the U of A campus to understand, communicate, and solve the environmental challenges facing our world, nation, and state, as well as to help the people of Arizona seize opportunities created by these challenges.

<http://environment.arizona.edu>

A brief description of other political positions the institution has taken during the previous three years:

A brief description of political donations the institution made during the previous three years (if applicable):

The website URL where information about the institution's advocacy efforts is available:

Trademark Licensing

Responsible Party

David Bradshaw
Program Coordinator
UA Office of Sustainability

Criteria

Institution is a member of the Fair Labor Association (FLA) and/or the Worker Rights Consortium (WRC).

Submission Note:

The University of Arizona is a long time supporter of fair labor standards in the workplace which is reflected through long time membership in the WRC and FLA. While the University of Arizona is not a current signatory of the DSP, the University of Arizona is interested in the program and is awaiting the Department of Justice's decision on the legal authority of the DSP before fully committing to the program. UA is a partner in the Alta Gracia Apparel Program in Knight's Apparel Company.

"---" indicates that no data was submitted for this field

Is the institution a member of the Worker Rights Consortium?:

Yes

Is the institution a member of the Fair Labor Association? :

Yes

Has the institution expressed an intention to participate in the WRC's Designated Suppliers Program? :

Yes

The website URL where information about the institution's participation in the WRC, FLA, and/or DSP is available:

Responsible Party

David Bradshaw
Program Coordinator
UA Office of Sustainability

Criteria

Institution's affiliated hospital or health system is a member of the Global Green and Healthy Hospitals Network, the Healthier Hospitals Initiative and/or Practice Greenhealth.

This credit includes hospitals and health systems that are formally affiliated with a higher education institution (sometimes called "university hospitals"). Other types of health care providers (e.g. insurers through which an institution obtains health care for its employees) are not included.

Submission Note:

The University of Arizona Medical Center is committed providing the top healthcare possible while reducing waste and consumption. While not a member of the organizations listed above, the UAMC is committed to excellence in all areas of hospital management.

This credit was marked as **Not Pursuing** so Reporting Fields will not be displayed.

Operations

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.

Credit
Greenhouse Gas Emissions
Outdoor Air Quality

Greenhouse Gas Emissions

Responsible Party

Benjamin Champion

Director

Office of Sustainability

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 be validated internally by campus personnel who are independent of the GHG accounting and reporting process and/or verified by an independent, external third party.

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 (MtCO_{2e}) per gross square foot (0.002 MtCO_{2e} per gross square metre) of floor area.

Performance for Part 3 of this credit is assessed using EUJ-adjusted floor area, a figure that accounts for significant differences in energy use intensity (EUI) between types of building space.

For this credit, the following carbon offsets may be counted:

1. Institution-catalyzed carbon offsets (popularly known as "local offsets")
2. Carbon sequestration due to land that the institution manages specifically for sequestration (as documented in policies, land management plans or the equivalent)
3. Carbon storage from on-site composting
4. Third-party verified purchased carbon offsets

Purchased Renewable Energy Certificates (RECs) that are either Green-e Energy certified or meet Green-e Energy's technical requirements and are verified as such by a third party may be counted as zero emissions energy for purposes of Scope 2 GHG accounting.

Purchased carbon offsets and RECs that have not been third-party verified do not count.

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.

Submission Note:

All numbers for emissions and weighted campus users have been updated to FY13 data.

Please note that square feet of energy intensive space is an estimate based on the yearly space inventory of campus for the year corresponding to the GHG data. This inventory breaks out laboratory and healthcare space on its own. The "other energy intensive space" noted represents the university's central computing and IT infrastructure space.

"---" indicates that no data was submitted for this field

Does the institution's GHG emissions inventory include all Scope 1 and Scope 2 GHG emissions?:

Yes

Does the institution's GHG emissions inventory include all Scope 3 GHG emissions from any of the following categories?:

	Yes or No
Business travel	Yes
Commuting	Yes
Purchased goods and services	No
Capital goods	No
Fuel- and energy-related activities not included in Scope 1 or Scope 2	No
Waste generated in operations	Yes

Does the institution's GHG emissions inventory include Scope 3 emissions from other categories?:

Yes

A brief description of the methodology and/or tool used to complete the GHG emissions inventory:

The UA determined it's boundary using an operational control approach. Emissions data and estimates were provided to the consultant by UA Staff, and the consultant used the CA-CP calculator to develop the inventory and deliver a final report. For some sources (e.g., commuting), consultants were provided with CO2-e values.

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?:

Yes

A brief description of the internal and/or external verification process:

As described in the description of the methodology, the data was provided to a certified third party consultant. Results were internally reviewed for accuracy and questions raised if there were issues.

Scope 1 and Scope 2 GHG emissions::

	Performance Year	Baseline Year
Scope 1 GHG emissions from stationary combustion	85,622 <i>Metric Tons of CO2 Equivalent</i>	67,994 <i>Metric Tons of CO2 Equivalent</i>
Scope 1 GHG emissions from other sources	2,615 <i>Metric Tons of CO2 Equivalent</i>	2,554 <i>Metric Tons of CO2 Equivalent</i>
Scope 2 GHG emissions from purchased electricity	94,754 <i>Metric Tons of CO2 Equivalent</i>	105,114 <i>Metric Tons of CO2 Equivalent</i>
Scope 2 GHG emissions from other sources	0 <i>Metric Tons of CO2 Equivalent</i>	0 <i>Metric Tons of CO2 Equivalent</i>

Figures needed to determine total carbon offsets::

	Performance Year	Baseline Year
Institution-catalyzed carbon offsets generated	0 <i>Metric Tons of CO2 Equivalent</i>	0 <i>Metric Tons of CO2 Equivalent</i>
Carbon sequestration due to land that the institution manages specifically for sequestration	201 <i>Metric Tons of CO2 Equivalent</i>	166 <i>Metric Tons of CO2 Equivalent</i>
Carbon storage from on-site composting	0 <i>Metric Tons of CO2 Equivalent</i>	0 <i>Metric Tons of CO2 Equivalent</i>
Third-party verified carbon offsets purchased	0 <i>Metric Tons of CO2 Equivalent</i>	0 <i>Metric Tons of CO2 Equivalent</i>

A brief description of the institution-catalyzed carbon offsets program:

Currently there is not a program in place, but the University of Arizona is looking into developing a program.

A brief description of the carbon sequestration program and reporting protocol used:

Carbon sequestration was estimated using i-Tree software, and is based on the sequestration of our Campus Arboretum.

A brief description of the composting and carbon storage program:

Through the University of Arizona's Compost Cats program food waste, animal bedding, and green waste from campus and food waste from over 20 restaurants in Tucson is being converted into compost at the San Xavier Coop farm. Information pertaining to the amount of carbon dioxide equivalent tons saved through the program is not available for the fiscal year this data covers, since this program has been developed subsequently. Future GHG inventories for UA will include composting carbon storage.

A brief description of the purchased carbon offsets, including third party verifier(s) and contract timeframes:

None

Figures needed to determine “Weighted Campus Users”::

	Performance Year	Baseline Year
Number of residential students	7,209	6,084
Number of residential employees	0	0
Number of in-patient hospital beds	0	0
Full-time equivalent enrollment	40,314	35,743
Full-time equivalent of employees	11,928	11,842
Full-time equivalent of distance education students	0	0

Start and end dates of the performance year and baseline year (or three-year periods):

	Start Date	End Date
Performance Year	July 1, 2012	June 30, 2013
Baseline Year	July 1, 2008	June 30, 2009

A brief description of when and why the GHG emissions baseline was adopted:

The GHG emissions baseline represents the first year UA completed a full GHG inventory. So this is our baseline year for comparison to subsequent GHG inventories.

Gross floor area of building space, performance year:

9,992,812 *Square Feet*

Floor area of energy intensive building space, performance year:

	Floor Area
Laboratory space	1,262,028 <i>Square Feet</i>
Healthcare space	19,248 <i>Square Feet</i>
Other energy intensive space	22,299 <i>Square Feet</i>

Scope 3 GHG emissions, performance year::

	Emissions
Business travel	18,175 <i>Metric Tons of CO2 Equivalent</i>
Commuting	22,688 <i>Metric Tons of CO2 Equivalent</i>
Purchased goods and services	---
Capital goods	---
Fuel- and energy-related activities not included in Scope 1 or Scope 2	---
Waste generated in operations	8,966 <i>Metric Tons of CO2 Equivalent</i>
Other categories (please specify below)	0 <i>Metric Tons of CO2 Equivalent</i>

A brief description of the sources included in Scope 3 GHG emissions from "other categories":

no other categories of sources of scope 3 emissions were quantified

A copy of the most recent GHG emissions inventory:

[UA Greenhouse Gas Report FY 2013 Report final.pdf](#)
[Campus Sustainability Data Collector | AASHE](#)

The website URL where the GHG emissions inventory is posted:

http://rs.acupcc.org/search/?institution_name=University+of+Arizona&carnegie_class=%3F%3F&state_or_province=%3F%3F

A brief description of the institution's GHG emissions reduction initiatives, including efforts made during the previous three years:

Outdoor Air Quality

Responsible Party

David Bradshaw
Program Coordinator
UA Office of Sustainability

Criteria

Part 1

Institution has adopted policies or guidelines to improve outdoor air quality and minimize air pollutant emissions from mobile sources. Policies and/or guidelines may include, but are not limited to, prohibiting vehicle idling, restrictions on the use of powered lawn care equipment, and other strategies for minimizing mobile emissions.

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. 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.

Submission Note:

This submission is based on the 2012 University of Arizona AASHE STARS Report submitted in February 2012.

"---" indicates that no data was submitted for this field

Does the institution have policies and/or guidelines in place to improve outdoor air quality and minimize air pollutant emissions from mobile sources?:

Yes

A brief description of the policies and/or guidelines to improve outdoor air quality and minimize air pollutant emissions from mobile sources:

The University of Arizona has a no-idling policy for specific areas of campus. Additionally, the UA has a no-smoking policy for areas within 25 feet of building entrances, exits and fresh air intake grills, and in seating areas of assembly occupancies such as stadiums, or any area where flammable materials are handled or stored, or where other significant fire hazards may exist. Smoking is also prohibited in University owned vehicles.

Has the institution completed an inventory of significant air emissions from stationary sources on campus?:

Yes

A brief description of the methodology(ies) the institution used to complete its air emissions inventory:

The University of Arizona uses the Mass Balance methodology to report its yearly Facility Level GHG emissions to the EPA. The University reports Carbon Dioxide, Methane, and Nitrous Oxide emissions.

Weight of the following categories of air emissions from stationary sources::

	Weight of Emissions
Nitrogen oxides (NO_x)	<i>48 Tons</i>
Sulfur oxides (SO_x)	<i>0 Tons</i>
Carbon monoxide (CO)	<i>0 Tons</i>
Particulate matter (PM)	<i>0 Tons</i>
Ozone (O₃)	<i>0 Tons</i>
Lead (Pb)	<i>0 Tons</i>
Hazardous air pollutants (HAPs)	<i>0 Tons</i>
Ozone-depleting compounds (ODCs)	<i>---</i>
Other standard categories of air emissions identified in permits and/or regulations	<i>82,837 Tons</i>

A brief description of the institution's initiatives to minimize air pollutant emissions from stationary sources, including efforts made during the previous three years:

The University of Arizona has made improvements to its cogeneration plants to be more efficient and have installed a chilled ice system that allows the University to cut back the amount of natural gas burned to produce electricity needed for running the air conditioning. The system works by using electricity during nonpeak hours to create ice which is then allowed to melt during the next day to meet the University's chilled water and air conditioning needs.

The website URL where information about the institution's outdoor air quality policies, guidelines or inventory is available:

<http://ghgdata.epa.gov/ghgp/main.do>

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.

Credit
Building Operations and Maintenance
Building Design and Construction
Indoor Air Quality

Building Operations and Maintenance

Responsible Party

Benjamin Champion
Director
Office of Sustainability

Criteria

Institution owns and operates buildings that are:

1) Certified under a green building rating system for existing buildings, e.g. LEED® for Existing Buildings: Operations & Maintenance (O&M)

And/or

2) Operated and maintained in accordance with formally adopted sustainable operations and maintenance guidelines and policies that cover all of the following:

- Impacts on the surrounding site
- Energy consumption
- Building-level energy metering
- Usage of environmentally preferable materials
- Indoor environmental quality
- Water consumption
- Building-level water metering

Building space that meets multiple criteria listed above should not be double-counted.

Submission Note:

Exact dates with the exception of the year are estimates.

"---" indicates that no data was submitted for this field

Does the institution have any building space certified under the following green building rating systems for existing buildings?:

	Yes or No
LEED for Existing Buildings or another 4-tier rating system used by an Established Green Building Council (GBC)	No

The DGNB system, Green Star Performance, or another 3-tier GBC rating system	No
BREEAM-In Use, CASBEE for Existing Building, or another 5-tier GBC rating system	No
Other non-GBC rating systems (e.g. BOMA BEST, Green Globes)	No

A brief description of the green building rating system(s) used and/or a list or sample of certified buildings and ratings:

Total floor area of eligible building space (operations and maintenance):

13,774,235 *Square Feet*

Floor area of building space that is certified at each level under a 4-tier rating system for existing buildings used by an Established Green Building Council::

	Certified Floor Area
Minimum Level (e.g. LEED Certified)	0 <i>Square Feet</i>
3rd Highest Level (e.g. LEED Silver)	0 <i>Square Feet</i>
2nd Highest Level (e.g. LEED Gold)	0 <i>Square Feet</i>
Highest Achievable Level (e.g. LEED Platinum)	0 <i>Square Feet</i>

Floor area of building space that is certified at each level under a 3-tier rating system for existing buildings used by an Established Green Building Council::

	Certified Floor Area
Minimum Level	---
Mid-Level	---
Highest Achievable Level	---

Floor area of building space that is certified at each level under a 5-tier rating system for existing buildings used by an Established Green Building Council::

	Certified Floor Area
Minimum Level	---
4th Highest Level	---
Mid-Level	---
2nd Highest Level	---
Highest Achievable Level	---

Floor area of building space that is certified at any level under other green building rating systems for existing buildings:

Floor area of building space that is maintained in accordance with formally adopted sustainable building operations and maintenance guidelines or policies, but NOT certified:

13,774,235 *Square Feet*

A copy of the sustainable building operations and maintenance guidelines or policies:

[ccp_sustainability.pdf](#)

The date the guidelines or policies were formally adopted:

April 6, 2011

A brief description of the sustainable building operations and maintenance program and/or a list or sample of buildings covered:

The University of Arizona Facilities Management is Green Guard Certified for environmentally friendly custodial practices for all buildings on campus.

A brief description of how the institution ensures compliance with sustainable building operation and maintenance guidelines and policies:

UA Facilities Management trains all custodial staff using Green Guard Certified methods.

The website URL where information about the institution's certified buildings and/or sustainable operations and maintenance guidelines or policies is available:

<http://www.fm.arizona.edu/se/sustain-home.html>

Building Design and Construction

Responsible Party

Benjamin Champion

Director

Office of Sustainability

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. the LEED® for New Construction and Major Renovations, LEED for Commercial Interiors, LEED for Healthcare, and/or LEED for Core and Shell Green Building Rating Systems)

2) Certified Living under the Living Building Challenge (LBC)

And/or

3) Designed and built in accordance with formally adopted green building guidelines and policies that cover all of the following topics:

- Impacts on the surrounding site
- Energy consumption
- Building-level energy metering
- Usage of environmentally preferable materials
- Indoor environmental quality
- Water consumption
- Building-level water metering

Building space that meets multiple criteria listed above should not be double-counted.

Submission Note:

This response is an update in spring 2015 with data from UA Planning, Design, and Construction department.

"---" indicates that no data was submitted for this field

Does the institution have any building space certified under the following green building rating systems for new construction and major renovations?:

	Yes or No
--	-----------

LEED or another 4-tier rating system used by an Established Green Building Council (GBC)	Yes
The DGNB system, Green Star, or another 3-tier GBC rating system	No
BREEAM, CASBEE, or another 5-tier GBC rating system	No
The Living Building Challenge	No
Other non-GBC rating systems (e.g. BOMA BEST, Green Globes)	No

A brief description of the green building rating system(s) used and/or a list of certified buildings and ratings:

All Eligible Building Criteria include the following projects from the past three years:

1. Family and Consumer Sciences/McClelland Park
2. AZCC Levy Building, Remodel first floor
3. Highland Commons, Renovation of 2nd and 3rd Floors
4. SUMC-Bookstore, TENANT IMPR STARBUCKS / NIKE
5. The Law Commons
6. Indoor Practice Facility
7. Glen G Curtis BLDG-YUMA FARM, Finish Shell Space
8. The Law Annex
9. Computer Center, Renovate Room 215A
10. AHSC, Surgery Admin/Oncology Renovations
11. Medical Research BLDG, Renovate Rooms 140K,L,M,N,P
12. AHSC, Women's Health & Resource Center Office
13. Keating Bioresearch BLDG, Renovate Rooms 5, 7 & 50

Total floor area of eligible building space (design and construction):

1,574,354 *Square Feet*

Floor area of building space that is certified at each level under a 4-tier rating system for new construction and major renovations used by an Established Green Building Council::

	Certified Floor Area
Minimum Level (e.g. LEED Certified)	0 <i>Square Feet</i>
3rd Highest Level (e.g. LEED Silver)	0 <i>Square Feet</i>

2nd Highest Level (e.g. LEED Gold)	498,883 <i>Square Feet</i>
Highest Achievable Level (e.g. LEED Platinum)	335,284 <i>Square Feet</i>

Floor area of building space that is certified at each level under a 3-tier rating system for new construction and major renovations used by an Established Green Building Council::

	Certified Floor Area
Minimum Level	---
Mid-Level	---
Highest Achievable Level	---

Floor area of building space that is certified at each level under a 5-tier rating system for new construction and major renovations used by an Established Green Building Council::

	Certified Floor Area
Minimum Level	---
4th Highest Level	---
Mid-Level	---
2nd Highest Level	---
Highest Achievable Level	---

Floor area of building space certified Living under the Living Building Challenge:

Floor area of building space that is certified at any level under other green building rating systems for new construction and major renovations:

Floor area of building space that was designed and constructed in accordance with green building policies or guidelines but NOT certified:

740,187 *Square Feet*

A copy of the guidelines or policies :

[Sustainable_Building_Interim.pdf](#)

The date the guidelines or policies were adopted:

March 7, 2009

A brief description of the green building guidelines or policies and/or a list or sample of buildings covered:

As stated in the presidential memorandum on Campus Sustainability at the University of Arizona dated 9/28/07, the University is committed to a leadership role in promoting sustainability on our campus and in our design and construction practices. The University has established a goal, wherever appropriate, to acquire LEED Silver Certification as established by the United States Green Building Council. Therefore the following criteria should be followed:

• WHERE REQUIRED

- New Buildings - A minimum of LEED Silver Certification for all new construction, where appropriate.
- Building Expansions - Major building expansions should anticipate LEED Silver Certification for the expansion, if possible, and if the project scope and budget support it, for the entire building. This goal will be established at project initiation.
- Renovations - Renovation projects are defined as those projects involving the alteration of a portion of an existing building. Renovations range from simple aesthetic improvements to complex physical reconfigurations and systems' replacement. Due to the potential range of existing conditions – and the ability of a renovation project to address such conditions – it is incumbent that each renovation project undergoes an evaluation early in the budgeting and/or design process to determine if LEED certification can be achieved.

In general, for minor renovations or room specific renovations, requirements for LEED Certification will not be part of the project scope. For projects where major renovation is part of the scope, inclusion of LEED Silver Certification should be anticipated. For example, in major renovation projects that affect entire floors or buildings, LEED Silver Certification should be anticipated if reasonably feasible.

• DESIGN CRITERIA

- In general, sustainable design precepts appropriate for the Sonoran Desert environment should be incorporated – water conservation, building orientation, sun exposure and shade are issues of special concern in desert environments.
- Appropriate passive solar design techniques should be incorporated and where the project scope and budget support it, solar water heating and photovoltaic systems should be considered if determined to be economically viable
- Desert appropriate landscape design, water harvesting techniques and use of the University's reclaimed water system where available should be incorporated.
- Appropriate day lighting design should be considered to minimize the requirements for artificial lighting and to promote the interior/exterior connection of the building.
- Appropriate use of construction materials, mechanical, electrical, and plumbing systems should be selected that not only result in a building with an intended useful life of 50 to 100 years but respond to the attributes of the Sonoran Desert environment.

A brief description of how the institution ensures compliance with green building design and construction guidelines and policies:

All building projects are signed off by Planning, Design, and Construction (PDC). PDC is responsible for ensuring that all construction projects follow University of Arizona guidelines and policies.

The website URL where information about the institution's certified buildings and/or green building design and construction guidelines or policies is available:

<http://www.pdc.arizona.edu/workwithua/dss/>

Indoor Air Quality

Responsible Party

Benjamin Champion

Director

Office of Sustainability

Criteria

Institution has an indoor air quality (IAQ) management program that includes 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.

Policies and plans 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.

Submission Note:

Occupied Building Space data was compiled from the UA Real Estate Administration Physical Campus Inventory reports for buildings that fall within the institutional boundary outlined at the beginning of this report.

Figures may not reflect UA Factbook sources due to subtle differences between the institutional boundary and the boundary reported by the UA Factbook.

"---" indicates that no data was submitted for this field

Floor area of building space covered by an indoor air quality (IAQ) management program that meets the criteria for this credit:

9,992,812 Square Feet

Gross floor area of building space:

9,992,812 Square Feet

A brief description of the institution's indoor air quality program(s):

The department of Risk Management and Safety at the University of Arizona utilizes a reactive indoor air quality program. The program covers all buildings and is based on collaboration between the users of the buildings and RMS in which users file complaints which RMS responds to.

The website URL where information about the institution's indoor air quality program(s) is available:

<http://risk.arizona.edu/healthandsafety/iaq.shtml>

Dining Services

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.

Please note that while dining services can also play an important role in conserving energy and water, reducing waste, and purchasing environmentally preferable materials other than food, STARS measures these impacts across the institution instead of by department; therefore, the benefits of these actions are captured in the Energy, Water, Waste, and Purchasing subcategories, respectively.

Credit
Food and Beverage Purchasing
Low Impact Dining

Food and Beverage Purchasing

Responsible Party

Benjamin Champion

Director

Office of Sustainability

Criteria

Part 1

Institution's dining services purchase food and beverages that meet at least one of the following criteria:

- Local and community-based

And/or

- Third party verified to be ecologically sound, fair and/or humane

Food and beverage purchases that meet both criteria listed above (e.g. local community-based products that are Certified Organic) should not be double-counted.

Local community- based products:

- Are sourced from local community-based producers (directly or through distributors)
- Contain raw ingredients (excluding water) that are third party verified and/or locally harvested and produced (e.g. bread made with Organic flour or local honey) and
- Exclude products from Concentrated Animal Feeding Operations (CAFOs), products that have minimal nutritional value (e.g. soda, chewing gum, candies made predominantly from sweeteners), and products from producers that have been convicted of one or more labor law violations within the previous three years

Products that are not local and community-based must be third party verified to count. Recognized third party standards and certifications for food and beverages are outlined in the [STARS Technical Manual](#). Institutions located outside the U.S. and Canada may use additional third party certifications to identify ecologically sound, fair and humane products, provided the certifications are reported in "Notes about this submission".

Part 1 of this credit includes food and beverage purchases for on-campus dining operations and catering services operated by the institution or the institution's primary dining services contractor (e.g. Aramark, Bon Appétit Management Company, Chartwells, Sodexo). On-site franchises, convenience stores, vending services, and concessions are excluded from Part 1.

Part 2

Institution's on-site franchises, convenience stores, vending services, and/or concessions purchase food and beverages that are third party verified and/or locally sourced (i.e. meet the criteria outlined in Part 1).

Submission Note:

Information for this credit was obtained from Dining Services and Shamrock Foods. Shamrock Foods represents 95% of Dining Services expenditures. The percentage seen above is an estimate reflected by both Dining Services and Shamrock Foods.

This submission represents data from the 2012 UA AASHE STARS submission and has not been updated to current data. With the planned AASHE STARS submission in later 2015, this data will be updated.

"---" indicates that no data was submitted for this field

Percentage of dining services food and beverage expenditures that are local and community-based and/or third party verified:

3

A copy of an inventory, list or sample of sustainable food and beverage purchases:

An inventory, list or sample of sustainable food and beverage purchases:

The University of Arizona purchases some meats, produce, etc. from local farms and ranchers.

Does the institution wish to pursue Part 2 of this credit (food and beverage expenditures for on-site franchises, convenience stores, vending services, or concessions)?:

No

Percentage of on-site franchise, convenience store, vending services, and concessions food and beverage purchases that are local and community-based and/or third party verified:

A copy of an inventory, list or sample of on-site franchise, convenience store, vending machine, and/or concessions food and beverage purchases that are sustainably produced:

An inventory, list or sample of on-site franchise, convenience store, vending machine, and/or concessions food and beverage purchases that are sustainably produced:

A brief description of the sustainable food and beverage purchasing program:

Not applicable. There is not a program in place, although sustainable food purchasing is done whenever possible.

A brief description of the methodology used to track/inventory sustainable food and beverage purchases:

Methods into collectively tracking food and beverage purchases are being explored.

Total annual food and beverage expenditures:

Which of the following food service providers are present on campus and included in the total food and beverage expenditure figures?:

	Present?	Included?
Dining operations and catering services operated by the institution	---	---
Dining operations and catering services operated by a contractor	---	---
Franchises	---	---
Convenience stores	---	---
Vending services	---	---
Concessions	---	---

Has the institution achieved the following?:

	Yes or No
Fair Trade Campus, College or University status	---
Certification under the Green Seal Standard for Restaurants and Food Services (GS-46)	---
Marine Stewardship Council (MSC) certification	---
Signatory of the Real Food Campus Commitment (U.S.)	---

A brief description of other sustainable restaurant and food service standards that the institution's dining services operations are certified under:

The website URL where information about the institution's sustainable food and beverage purchasing efforts is

available:

Low Impact Dining

Responsible Party

Benjamin Champion

Director

Office of Sustainability

Criteria

Part 1

Conventionally produced animal products comprise less than 30 percent of the institution's total dining services food purchases.

Conventionally produced animal products include all food products that contain animal derived (i.e. meat, fish, egg, dairy) ingredients that have not been verified to be sustainably produced. Sustainably produced animal products have been either:

- Third party verified to be ecologically sound and/or humane (see *OP 6: Food and Beverage Purchasing*)

Or

- Verified by the institution to be both ecologically sound and humane (e.g. "Pasture Raised", "Grass Fed" or "Humanely Raised") through a relationship with a local producer

Part 2

Institution:

- Offers diverse, complete-protein vegan options at all meals in at least one dining facility on campus

And

- Provides labels and/or signage that distinguishes between vegan, vegetarian (not vegan), and other items

This credit includes on-campus dining operations and catering services operated by the institution or the institution's primary dining services contractor. On-site franchises, convenience stores, vending machines, and concessions should be excluded to the extent feasible.

Submission Note:

This submission reflects data submitted in the 2012 UA AASHE STARS reporting, and has not been recently updated. It will be updated for the AASHE STARS submission planned for late 2015.

"---" indicates that no data was submitted for this field

Percentage of total dining services food purchases comprised of conventionally produced animal products:

97

A brief description of the methodology used to track/inventory expenditures on animal products:

This is based off of an interview made in 2011 and 2012. This may have changed.

Does the institution offer diverse, complete-protein vegan dining options at all meals in at least one dining facility on campus?:

Yes

Does the institution provide labels and/or signage that distinguishes between vegan, vegetarian (not vegan), and other items?:

Yes

Are the vegan options accessible to all members of the campus community?:

Yes

A brief description of the vegan dining program, including availability, sample menus, signage and any promotional activities (e.g. “Meatless Mondays”):

Sixty five percent of the dishes and sides that students can select from the Student Unions and contracted restaurants are vegetarian or vegan.

Additionally, the Student Unions, UA Dining Services, and Campus Health Services are working in collaboration to create a new menu that will increase this number as well as better inform visitors of the Student Union about healthy eating.

A brief description of other efforts the institution has made to reduce the impact of its animal-derived food purchases:

The website URL where information about where information about the vegan dining program is available:

<http://www.union.arizona.edu/dining/healthy/index.php>

Annual dining services expenditures on food:

Annual dining services expenditures on conventionally produced animal products:

Annual dining services expenditures on sustainably produced animal products:

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.

Credit
Building Energy Consumption
Clean and Renewable Energy

Building Energy Consumption

Responsible Party

Benjamin Champion

Director

Office of Sustainability

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 28 Btu per gross square foot (2.6 Btu per gross square metre) of floor area per 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.

Submission Note:

Descriptive entries are based off of the 2012 STARS Report submitted by the UA. Energy use numbers, building square footage, heating/cooling degree days, and source-site ratios have been updated to FY13 data. Later in 2015, UA will submit a new STARS Report inclusive of FY15 data.

For District Steam and Hot Water Purchased, the figures reported are zero due to the use of the two cogeneration plants at the University of Arizona to provide district steam for campus. The energy associated with the cogeneration plants are covered in the total energy consumption figure.

"---" indicates that no data was submitted for this field

Total building energy consumption, all sources (transportation fuels excluded):

	Performance Year	Baseline Year
Total building energy consumption	2,062,261 <i>MMBtu</i>	3,533,188 <i>MMBtu</i>

Purchased electricity and steam:

	Performance Year	Baseline Year
--	------------------	---------------

Grid-purchased electricity	575,892 <i>MMBtu</i>	580,214.80 <i>MMBtu</i>
District steam/hot water	0 <i>MMBtu</i>	0 <i>MMBtu</i>

Gross floor area of building space::

	Performance Year	Baseline Year
Gross floor area	14,144,905 <i>Gross Square Feet</i>	10,154,673 <i>Gross Square Feet</i>

Floor area of energy intensive space, performance year::

	Floor Area
Laboratory space	1,521,717 <i>Square Feet</i>
Healthcare space	517,991 <i>Square Feet</i>
Other energy intensive space	

Degree days, performance year (base 65 °F / 18 °C)::

	Degree Days
Heating degree days	1,656
Cooling degree days	3,223

Source-site ratios::

	Source-Site Ratio (1.0 - 5.0; see help icon above)
Grid-purchased electricity	1.06
District steam/hot water	1.05

Start and end dates of the performance year and baseline year (or 3-year periods)::

	Start Date	End Date

Performance Year	July 1, 2012	June 30, 2013
Baseline Year	July 1, 2005	June 30, 2006

A brief description of when and why the building energy consumption baseline was adopted:

A brief description of any building temperature standards employed by the institution:

The Student Union Buildings use a HVAC system that is set to turn on according to occupancy hours. The system can also be manually adjusted according to weather forecasts. Equalizing of changes takes roughly a day or so.

A similar system is used for many of the buildings on campus.

A brief description of any light emitting diode (LED) lighting employed by the institution:

Dining Services utilizes LED technology in all walk-in freezers as well as for accent lighting in the student unions.

UA also encourages the suppliers of its vending machines to utilize LED lighting.

A brief description of any occupancy and/or vacancy sensors employed by the institution:

The Student Union Memorial Center utilizes light sensors in strategic locations in the building that are not high traffic areas. Areas where this technology is utilized is in the large storage and refrigeration areas. In the future, light sensors may also be installed in meeting rooms.

Arbol de La Vida and Likins Residence Halls also have motion sensors to reduce energy usage related to lighting.

A brief description of any passive solar heating employed by the institution:

A brief description of any ground-source heat pumps employed by the institution:

A brief description of any cogeneration technologies employed by the institution:

The University of Arizona utilizes two natural gas-fired steam turbines for co-generation of power on campus. Both turbines are located on campus which significantly cuts down transmission loss.

A brief description of any building recommissioning or retrofit program employed by the institution:

A brief description of any energy metering and management systems employed by the institution:

The UA's energy management system (EMS) saves energy through time schedules, reset schedules, economizing, and fan speed control.

The biggest savings in energy occurs with the use of time of day schedules that only run the building HVAC systems during scheduled occupancy times. There are two adjuncts to the scheduling system temperature sensor override and occupancy sensors. In some buildings, special temperature sensors monitor the building core temperature and will automatically start the HVAC system to prevent the interior temperature from going over a critical temperature, usually 85-90 degrees. Many of the larger classrooms and auditoriums now have occupancy sensors that control their temperatures. These spaces are allowed to get up to 82 degrees when empty, but return to their normal occupied temperature soon after they detect a person in the room.

EMS uses reset schedules to modulate the discharge temperature of the air handlers according to the outside air temperature. During the summer, the discharge air temperature is lower than it is in the winter. This allows the air handler fan motor to run more slowly. Due to fan power curves, it only takes a small reduction in fan speed to result in a significant reduction in electrical power used by the fan. The energy saved at the fan is much greater than the extra energy used in chilled water or steam.

In some buildings, the EMS is capable of monitoring the outside and inside temperature and humidity. When the outside conditions are correct, the EMS opens economizer dampers which use outside air to cool the building instead of chilled water or refrigeration. Because of our weather patterns, this method of energy conservation only is viable for a couple of months every year.

The last major energy saving protocol in the EMS is fan speed control. In buildings with full digital controls, the EMS is capable of adjusting the fan speed to provide just the amount of air pressure needed to keep any one room controller from having to be open 100%.

UA specific EMS controls

EMS controls were first installed on campus in the 1980's. Many of those original systems are still in service today. The original systems were a hybrid of digital controls and pneumatic controls. The digital controllers typically operated the air handlers while the room controls were operated with older pneumatic controls. Over the years, EMS controls from different vendors were installed in new buildings and during retrofits of existing buildings. Several years ago, Facilities Management and Planning, Design, and Construction decided to limit EMS systems to the LON LNS standard. In theory, any LON LNS controller, regardless of manufacturer, can be installed in any existing LON LNS EMS. The idea was to avoid having proprietary systems where service was available from only the installing vendor.

While we would like to go back and retrofit every EMS system to meet the LON LNS specification, it cannot be cost justified. Therefore, there is not a homogenous EMS system on campus, but rather a heterogeneous network. Monitoring of building EMS is currently done with three computer systems; Metasys, Invensys, and Tridium AX. The Metasys system is not Web enabled but has supervisory PCs in several shops on campus. The Tridium AX system is a Web based system with drivers for LON LNS and several of the older, proprietary system on campus. The Invensys system also has a web server that monitors/controls several generations of Invensys EMS on campus. Links from the Tridium AX system to the Invensys system provide for a single web server used to monitor/control the majority of EMS on campus. We are investigating drivers that would allow the Tridium AX system to access data from the Metasys network which would then allow at monitoring, but not control, of all but a few buildings from a single Web server.

A brief description of the institution's program to replace energy-consuming appliances, equipment and systems with

high efficiency alternatives:

A brief description of any energy-efficient landscape design initiatives employed by the institution:

A brief description of any vending machine sensors, lightless machines, or LED-lit machines employed by the institution:

The University of Arizona has contracts with Tomdra Incorporated and Coca Cola to supply UA with beverage and food vending machines.

Tomdra has installed technology on several of its snack machines that utilize motion sensor technology in conjunction with LED lighting to reduce energy consumption. The motion sensors turn the LED lighting to full power when people are close enough to the machine while during lull periods the LED lighting adjusts to half power.

A brief description of other energy conservation and efficiency initiatives employed by the institution:

The website URL where information about the institution's energy conservation and efficiency initiatives is available:

Responsible Party

Benjamin Champion

Director

Office of Sustainability

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 for non-electric, on-site energy generation, such as 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) or other similar renewable energy products that are either Green-e Energy certified or meet Green-e Energy's technical requirements 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 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. For example, daylighting, passive solar design, and ground-source heat pumps are not counted in this credit. The benefits of such strategies, as well as improved efficiencies achieved through using cogeneration technologies, are captured by *OP 1: Greenhouse Gas Emissions* and *OP 8: Building Energy Consumption*.

Transportation fuels, which are covered by *OP 1: Greenhouse Gas Emissions* and *OP 18: Campus Fleet*, are not included in this credit.

Submission Note:

Data provided in early 2015 by a utilities energy consultant that supports the UA utilities program and that was the consultant used by UA for its GHG inventory. Data covers FY13.

"---" indicates that no data was submitted for this field

Clean and renewable energy from the following sources::

	Performance Year
Option 1: Clean and renewable electricity generated on-site during the performance year and for which the institution retains or has retired the associated environmental attributes	10,376 <i>MMBtu</i>
Option 2: Non-electric renewable energy generated on-site	0 <i>MMBtu</i>
Option 3: 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	0 <i>MMBtu</i>

Option 4: Purchased third-party certified RECs and similar renewable energy products (including renewable electricity purchased through a certified green power purchasing option)

0 MMBtu

Total energy consumption, performance year:

2,059,824 MMBtu

A brief description of on-site renewable electricity generating devices :

Due to Power Purchasing Agreements that the University of Arizona has in place with Tucson Electric power, the renewable energy generated onsite is not owned by the UA but does help reduce UA's fossil fuel dependence. The projects currently in use onsite are photovoltaic and solar thermal. Below is a list of the names, addresses, type, technology employed, and amount emissions offset through use of the technology.

1) McClelland Park

- a. Location: 650 N. Park Ave, Tucson, AZ
- b. Size: 75.68 kWdc-STC
- c. Type: Photovoltaic
- d. Number and Type of Module: 352 Kyocera KD215GX-LP modules
- e. 89.9 Tons of CO2 emissions offset

2) McClelland Hall

- a) Location: 1130 E. Helen St., Tucson, AZ
- b) Size: 316.48 kWdc-STC
- c) Type: Photovoltaic
- d) Number and Type of Module: 1472 Kyocera KD215GX-LP modules
- e) 385 Tons of CO2 emissions offset

3) Student Recreation Center

- a) Location: 1400 E. 6th St., Tucson, AZ
- b) Size: 27.52 kWdc-STC
- c) Type: Photovoltaic
- d) Number and Type of Module: 128 Kyocera KD215GX-LP modules
- e) 32.3 Tons of CO2 emissions offset

4) Second Street Garage

- a) Location: N. Mountain Ave & E 2nd St., Tucson, AZ
- b) Size: 245 kWdc-STC
- c) Type: Photovoltaic
- d) Number and Type of Module: 1168 Kyocera KD210GX-LP modules
- e) 286 Tons of CO2 emissions offset - Equivalent to the electricity use of 34.8 homes for one year

5) Student Recreation Center (Solar Thermal Pool Heating & Campus Chilled Water Loop Chilling)

- a) Location: 1400 E. 6th St., Tucson, AZ
- b) Size: 987 kW-equivalent (2.9 mmBtu/hr)
- c) Type: Solar thermal
- d) Number and Type of Module: 346 Sunda SEIDO solar collector modules

e) 1317 Tons of CO2 emissions offset

6) Hillenbrand Diving Facility (Solar Thermal Pool Heating)

a) Location: 1827 E. Enke Drive, Tucson, AZ

b) Size: 109 kW-equivalent (0.7 mmBtu/hr) pool heating

c) Type: Solar thermal

d) Number and Type of Module: 50 Solar Skies Model SS-40 glazed flat plate collectors

e) 124 Tons of CO2 emissions offset

A brief description of on-site renewable non-electric energy devices:

A brief description of off-site, institution-catalyzed, renewable electricity generating devices:

<https://techparks.arizona.edu/leading-edge/solar-zone>

The UA Tech Park Solar Zone includes 23 MW of installed solar electric generating capacity. It was developed as a UA research initiative in partnership with Tucson Electric Power and a number of private solar technology companies, and is the largest grid-level, multi-technology solar testing, demonstration and evaluation facility in the country.

The UA Tech Park, a unit of Tech Launch Arizona, is located on property owned by the University of Arizona (Arizona Board of Regents) . The Tech Park is operated by Campus Research Corporation, Inc. ("CRC"), a non-profit corporation that is a component unit affiliate of the UA, pursuant to two Master Leases. The UA Tech Park, which includes a UA South Campus, the Tech Parks Arizona offices and the Arizona Center for Innovation, is integral to the UA's academic and research programs. The Tech Park serves as a key element of the UA's technology commercialization efforts, providing unique research facilities for UA students and faculty, as well as numerous internship and employment opportunities for students and recent graduates.

A brief description of the RECs and/or similar renewable energy products:

The website URL where information about the institution's renewable energy sources is available:

<http://www.fm.arizona.edu/se/sustain-home.html>

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 water and resources.

Credit
Landscape Management
Biodiversity

Landscape Management

Responsible Party

Benjamin Champion

Director

Office of Sustainability

Criteria

Institution's grounds include areas that are managed at one or more of the following levels:

- 1) Managed in accordance with an Integrated Pest Management (IPM) Plan
- 2) Managed in accordance with a sustainable landscape management program

And/or

- 3) Organic, certified and/or protected

The level at which an area of grounds is managed may be determined as outlined in the table below:

Management Level	Standards and/or Certifications Required
1) IPM Plan	IPM plan calls for: <ul style="list-style-type: none">• Using least-toxic chemical pesticides,• Minimum use of chemicals, and• Use of chemicals only in targeted locations and only for targeted species

<p>2) Sustainable Landscape Management Program</p>	<p>The program includes formally adopted guidelines, policies and/or practices that cover all of the following:</p> <ul style="list-style-type: none"> • Integrated pest management (see above) • Plant stewardship - protecting and using existing vegetation (e.g. through the use of a tree care plan), using native and ecologically appropriate plants, and controlling and managing invasive species • Soil stewardship - organic soils management practices that restore and/or maintain a natural nutrient cycle and limit the use of inorganic fertilizers and chemicals • Use of environmentally preferable materials - utilizing reused, recycled and local and sustainably produced landscape materials • Hydrology and water use - restoring and/or maintaining the integrity of the natural hydrology by promoting water infiltration, minimizing or eliminating the use of potable water for irrigation, and protecting/restoring riparian, wetland, and shoreline habitats and lost streams • Materials management and waste minimization - composting and/or mulching waste from groundskeeping, including grass trimmings • Snow and ice management (if applicable) - implementing technologies or strategies to reduce the environmental impacts of snow and ice removal
<p>3) Organic, Certified and/or Protected</p>	<p>Protected areas and land that is:</p> <ul style="list-style-type: none"> • Maintained in accordance with an organic land care standard or sustainable landscape management program that has eliminated the use of inorganic fertilizers and chemical pesticides, fungicides and herbicides in favor of ecologically preferable materials • Certified Organic • Certified under the Forest Stewardship Council (FSC) Forest Management standard • Certified under the Sustainable Sites Initiative™ (SITES™) and/or • Managed specifically for carbon sequestration (as documented in policies, land management plans or the equivalent)

Land that meets multiple criteria should not be double-counted. An area of grounds that does not meet the standards specified for a particular management level should be reported at the next appropriate level for which it does meet the standards. For example, a landscape management program that includes an IPM plan and meets some, but not all, of the other standards listed for a sustainable landscape management plan should be reported at level 1 (IPM Plan).

Submission Note:

This credit is based on the 2012 AASHE STARS Report for the University of Arizona. An updated version of the numbers and findings will be presented sometime late 2015 or in 2016.

"---" indicates that no data was submitted for this field

Figures required to calculate the total area of managed grounds::

	Area
Total campus area	390 Acres
Footprint of the institution's buildings	103 Acres
Area of undeveloped land, excluding any protected areas	0 Acres

Area of managed grounds that is::

	Area
Managed in accordance with an Integrated Pest Management (IPM) Plan	0 Acres
Managed in accordance with a sustainable landscape management program that includes an IPM plan and otherwise meets the criteria outlined	197 Acres
Managed organically, third party certified and/or protected	0 Acres

A copy of the IPM plan:

The IPM plan :

The University practices an Integrated Pest Management Program (IPM) modeled after that outlined by Maryland Department of Agriculture. It has been informal in the past, but is currently being formalized in written policies and procedures. Unless safety and health consideration dictate otherwise, it is based upon action thresholds rather than periodic application of pesticides and herbicides. Grounds and custodial personnel monitor conditions for various pests, and report issues to management. The situation is evaluated, and a decision is made by management if action is required, and at what level. Safety and health issues are central to those decisions, as are risk of infrastructure damage.

An example is that grounds personnel will periodically check random plots and perform a grub-worm count. If a specific threshold is exceeded, appropriate pesticides will be applied. If not, no application is made at that time.

In the case of wasps, they are removed immediately if they pose a sting risk to students, staff, faculty or visitors.

In regard to mosquitoes, a proactive-preventative program is practiced. Any body of standing water or continual dampness is treated with VectoBac in addition to maintenance actions taken to eliminate or minimize standing water and dampness whenever possible.

Regarding bees, action is only taken if the bees pose a safety hazard or have established a hive in an inappropriate place, such as a swarm in a high traffic area. The area is roped off, and the contractor removes the bees during low-traffic hours.

Weeds are treated on an as-needed basis, rather than a periodic basis.

Various licensed contractors are used for specific aspects of the program, including indoor pesticide application, bee removal, and mice removal. These contractors are selected on the basis of IPM practices. Material Safety Data Sheets are on file for all pesticides used.

A brief summary of the institution's approach to sustainable landscape management:

Most grounds management at the University of Arizona is driven by the UA Campus Arboretum guidelines as described in the next field.

A brief description of how the institution protects and uses existing vegetation, uses native and ecologically appropriate plants, and controls and manages invasive species:

The University of Arizona Campus Arboretum was officially nationally recognized by the American Public Gardens Association in 2002. The mission of the UA Campus Arboretum is to preserve, manage, enhance, and expand a vital collection of plants in an active, urban Sonoran Desert setting. To do this the Campus Arboretum provides guidance and focus to those charged with the planning, development and management of the plant collections of the University of Arizona Campus Arboretum, with the aim of optimizing utilization of available resources to realize the Campus Arboretum's mission through effective and appropriate collections development.

The Collection's Policy, which defines the plant selection criteria states that living plants acquired by the University of Arizona Campus Arboretum should meet the goals and objectives of the Arboretum, as defined by the Mission Statement. Specifically, plants selected for acquisition by the Campus Arboretum should have an emphasis on adaptation to arid or semi-arid conditions or serve some educational value if otherwise. Arid and semi-arid regions shall be defined as those receiving annual rainfall of under 250 mm (10 inches) and under 500 mm (20 inches) respectively. Acquisitions should be adapted to the ambient temperature conditions of the site in Tucson, AZ of between -8C and 42C.

A brief description of the institution's landscape materials management and waste minimization policies and practices:

The University of Arizona uses a collaborative process for composting grounds keeping trimmings on campus. Facilities Management works with Students for Sustainability in the Compost Cats project. Facilities Management provides student interns from Students for Sustainability with waste generated from maintaining the campus grounds. Students for Sustainability then uses this waste in addition to waste from the Student Unions and manure from the Agricultural Center to be made into compost piles. The high quality compost generated through this project is then reused on campus or, eventually, sold to the community.

A brief description of the institution's organic soils management practices:

Please see the Campus Arboretum's guide.

A brief description of the institution’s use of environmentally preferable materials in landscaping and grounds management:

Please see the Comprehensive Campus Plan section on sustainability (

http://www.pdc.arizona.edu/resources/documents/ccp_sustainability.pdf

).

A brief description of how the institution restores and/or maintains the integrity of the natural hydrology of the campus:

Please see the Comprehensive Campus Plan section on sustainability (

http://www.pdc.arizona.edu/resources/documents/ccp_sustainability.pdf

).

A brief description of how the institution reduces the environmental impacts of snow and ice removal (if applicable):

A brief description of any certified and/or protected areas:

Is the institution recognized by the Arbor Day Foundation's Tree Campus USA program (if applicable)?:

Yes

The website URL where information about the institution’s sustainable landscape management programs and practices is available:

Responsible Party

David Bradshaw
Program Coordinator
UA Office of Sustainability

Criteria

The 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.

Submission Note:

The University of Arizona does complete assessments of biodiversity on its experimental ranges, astronomy sites, and elsewhere but these areas are not considered part of main campus which is the institutional boundary for this submission.

This credit was marked as **Not Pursuing** so Reporting Fields will not be displayed.

Purchasing

This subcategory seeks to recognize institutions that are using their purchasing power to help build a sustainable economy. Collectively, colleges and universities 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.

Credit
Electronics Purchasing
Cleaning Products Purchasing
Office Paper Purchasing
Inclusive and Local Purchasing
Life Cycle Cost Analysis
Guidelines for Business Partners

Responsible Party

Benjamin Champion

Director

Office of Sustainability

Criteria

Part 1

Institution has an institution-wide stated preference to purchase computers and/or other electronic products that are EPEAT registered or meet similar multi-criteria sustainability standards for electronic products. This can take the form of purchasing policies, guidelines, or directives.

Policies and directives 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.

Part 2

Institution purchases EPEAT registered products for desktop and notebook/laptop computers, displays, thin clients, televisions and imaging equipment.

This credit does not include servers, mobile devices such as tablets and smartphones, or specialized equipment for which no EPEAT certified products are available.

Submission Note:

Expenditure data is based on information provided by Procurement and Contracting Services on the vendors that the University of Arizona utilizes for office and computer equipment purchases. The majority of this data is from the Arizona BuyWays Program, Purchase Orders information, and P-Card purchases made from July 2010 until February 3, 2012. UA will seek to provide more current data in its next full STARS submission in late 2015.

"---" indicates that no data was submitted for this field

Does the institution have an institution-wide stated preference to purchase computers and/or other electronic products that are EPEAT registered or meet similar multi-criteria sustainability standards for electronic products?:

Yes

A copy of the electronics purchasing policy, directive, or guidelines:

The electronics purchasing policy, directive, or guidelines :

Policy Title: Green Purchasing

Policy Number: 4.16

Effective: February 6, 2012

The University of Arizona is committed to the stewardship of the environment and to reducing the University's dependence on non-renewable energy. These "Green Purchasing" policies and procedures support the University's commitment to sustainability. The goal of this policy is to reduce the adverse environmental impact of our purchasing decisions by buying goods and services from manufacturers and vendors who share our commitment to the environment. Green purchasing is the method whereby environmental and social considerations are given similar weight to the price, availability, and performance criteria that colleges and universities use to make purchasing decisions. Green purchasing is also known as "environmentally preferred purchasing (EPP), green procurement, affirmative procurement, eco-procurement, and environmentally responsible purchasing", particularly within the US Federal Government Agencies. Green purchasing minimizes negative environmental and social effects through the use of environmentally friendly products. The Director of Procurement and Contracting Services has determined that transactions not exceeding \$5,000 are impracticable to monitor for compliance with this policy. Departments are encouraged to make every effort to comply with this policy when making purchases.

The aim of this environmental purchasing strategy is to develop policies consistent with these Principles:

Minimize the consumption of non-replaceable natural resources by reviewing current and proposed future usage and evaluating the pros and cons of alternatives.

Seek alternatives to products and processes that are detrimental to the environment by using more "environmentally friendly" products and processes.

Minimize waste, including: any packaging, waste produced by the product (or service) in questions, and waste generated by the eventual disposal of the product.

Maximize the reuse and recycling of materials.

Stimulate demand for "environmentally friendly" products by letting manufacturers and suppliers know environmental performance we expect in products.

Energy

Desktop computers, notebooks, and monitors purchased should meet all Electronic Product Environmental Assessment Tool (EPEAT) environmental criteria designated as "gold" as contained in the IEEE 1680 Standard for the Environmental Assessment of Personal Computer Products.

Copiers and printers purchased should be compatible with the use of recycled content and remanufactured products.

All electrical products purchased by UA shall meet the US EPA Energy Star certification when available and practicable. When products with Energy Star labels are not available, products that are in the upper 25 percent of energy efficiency as designated by the Federal Energy Management Program should be used.

When acquiring vehicles, the University shall purchase/lease less polluting alternatives to diesel, such as compressed natural gas, biobased fuels, hybrids, electric batteries, and fuel cells, as available and suitable for the use intended.

When acquiring or replacing inefficient interior or exterior lighting, energy efficient equipment shall be purchased.

Water

Purchase only the most water efficient appliances available. This includes, but is not limited to, high performance fixtures like toilets, low-flow faucets and aerators, and upgraded irrigation systems.

Toxins and Pollutants

Cleaning solvents should be biodegradable, phosphate free, and citrus-based when their use will not compromise quality of service.

Industrial and institutional cleaning products that meet Green Seal certification standards or environmental preferability and performance shall be purchased or required to be used by janitorial contractors.

All surfactants and detergents used shall be readily biodegradable and shall not contain phosphates.

Vacuum cleaners that meet the requirements of the Carpet and Rug Institute's "Green Label Testing Program - Vacuum Cleaner Criteria" (capable of capturing 96 percent of particulates measuring 0.3 microns and operating with a sound level less than 70dba) shall be used by in-house staff and required for janitorial contractors.

Whenever possible, products and equipment should not contain lead or mercury. For products that contain lead or mercury, preference should be given to those products with lower quantities of these metals and to vendors with established lead and mercury recovery

programs.

Pest control shall be managed through prevention - physical and mechanical - and through the purchase of environmentally friendly products. As a last resort, use of the least toxic pest control substance is required.

Biobased Products

Vehicle fuels made from non-wood, plant-based contents such as vegetable oils are encouraged.

Paper, paper products, and construction products made from non-wood, plant-based contents such as agricultural crops and residues are encouraged.

Recycling

Thirty percent postconsumer waste recycled paper with a brightness factor of 88 for all applications shall be the standard when the price is comparable, quality of service is not compromised nor the health and safety of employees prejudiced.

When specifying asphalt concrete, aggregate base or Portland Cement concrete for road construction projects, recycled, reusable, or reground materials shall be used when practicable.

The use of reclaimed stone and brick and the use of secondary or recycled aggregates is encouraged.

Transportation products, including signs, cones, parking stops, delineators, channelizers, and barricades shall contain the highest postconsumer content practicable.

Products that are durable, long lasting, reusable, or refillable are preferred whenever feasible.

Packaging

Packaging that is reusable, recyclable, or compostable is preferred, when suitable uses and programs exist, as is eliminating packaging or using the minimum amount necessary for product protection to the greatest extent practicable.

Green Building

Green purchasing concepts shall be integrated into architectural designs, final construction documents, and the final construction of all University buildings and renovations of property or facilities owned by the University. All buildings and renovations undertaken by the University shall follow green building practices for design, construction, and operations, where appropriate, as described in the LEED Rating System.

When maintaining buildings, products such as paint, carpeting, adhesives, furniture and casework with the lowest amount of volatile organic compounds (VOCs), highest recycled content, and low or no formaldehyde shall be used when practicable.

All carpet distributors and/or manufacturers of carpet installed at the University shall have a carpet recycling plan that is approved

Purchasing and Contracting Services.

The use of chlorofluorocarbon and halon-containing refrigerants, solvents, and other products shall be phased out, and new purchases of heating/ventilating/air conditioning, refrigeration, insulation and fire suppression systems shall not contain them.

Landscaping

All landscape renovations, construction, and maintenance performed by internal staff members or contractors providing landscaping services shall employ sustainable landscape management techniques for design, construction, and maintenance whenever possible. This includes, but is not limited to, integrated pest management, drip irrigation, composting, and use of mulch and compost that give preference to those produced from regionally generated plant debris and/or food waste programs.

Landscape structures constructed of recycled content materials are encouraged. The amount of impervious surfaces in the landscape shall be limited, whenever practicable. Permeable substitutes, such as permeable asphalt or pavers, are encouraged for walkways, patios, and driveways.

Plants should be selected to minimize waste by choosing species that are appropriate to the microclimate. Native and drought-tolerant plants that require no or minimal watering once established should be purchased.

Exceptions

These policies are designed to do the most good for the resources expended. When the cost of following the policies outweighs their benefits, a variance/waiver may be obtained through Procurement and Contracting Services.

The Director of Procurement and Contracting Services or designees has the authority to waive any requirements of this policy.

A brief description of steps the institution has taken to ensure that the purchasing policy, directives, or guidelines are followed:

The University of Arizona encourages employees to purchase items using the AZ BuyWays program that utilizes select vendors. If products are purchased that do not meet the policy, they must be justified using written documentation as per purchasing policy.

Does the institution wish to pursue Part 2 of this credit (expenditures on EPEAT registered electronics)?:

Yes

Expenditures on EPEAT registered desktop and laptop computers, displays, thin clients, televisions, and imaging equipment::

	Expenditure Per Level
EPEAT Bronze	0 US/Canadian \$
EPEAT Silver	11,607.50 US/Canadian \$
EPEAT Gold	287,097.95 US/Canadian \$

Total expenditures on desktop and laptop computers, displays, thin clients, televisions, and imaging equipment:

607,142.93 US/Canadian \$

The website URL where information about the institution's electronics purchasing policy, directive, or guidelines is available:

http://www.pacs.arizona.edu/manual_page04#Green_Purchasing

Cleaning Products Purchasing

Responsible Party

Benjamin Champion

Director

Office of Sustainability

Criteria

Part 1

Institution has an institution-wide stated preference to purchase cleaning and janitorial products that are Green Seal™ or UL Environment (EcoLogo)™ certified and/or meet similar multi-criteria sustainability standards for cleaning and janitorial products. This can take the form of purchasing policies, guidelines, or directives.

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.

Part 2

Institution's main cleaning or housekeeping department(s) and/or contractor(s) purchase Green Seal or UL Environment (EcoLogo) certified cleaning and janitorial products.

Cleaning and janitorial products include, at minimum:

- Cleaning/degreasing agents
- General-purpose, bathroom, glass, and carpet cleaners
- Biologically-active cleaning products (enzymatic and microbial products)
- Floor-care products, e.g. floor finish and floor finish strippers
- Hand cleaners
- Sanitary paper products, e.g. toilet tissue, facial tissue, paper towels, napkins, and placemats
- Plastic film products (e.g. garbage bags/liners)
- Laundry care products including powder, liquid or pre-measured dosage laundry detergents, stain removers and dryer sheets
- Specialty surface cleaning products and odor removers, including but not limited to: boat cleaning products; deck and outdoor furniture cleaning products; graffiti removers; metal cleaning products; motor vehicle (automotive/tire/wheel) cleaning products; motor vehicle windshield washing fluid; optical lens cleaning products; oven cleaning products; upholstery cleaning products; and other cleaning products sold for specific specialty uses

Submission Note:

This content is based on the 2012 UA STARS submission. It will be fully updated in later 2015 for our next full STARS submission.

"---" indicates that no data was submitted for this field

Does the institution have an institution-wide stated preference to purchase third party certified cleaning and janitorial products?:

Yes

A copy of the green cleaning product purchasing policy, directive, or guidelines:

The green cleaning product purchasing policy, directive, or guidelines:

Policy Title: Green Purchasing

Policy Number: 4.16

Effective: February 6, 2012

The University of Arizona is committed to the stewardship of the environment and to reducing the University's dependence on non-renewable energy. These "Green Purchasing" policies and procedures support the University's commitment to sustainability. The goal of this policy is to reduce the adverse environmental impact of our purchasing decisions by buying goods and services from manufacturers and vendors who share our commitment to the environment. Green purchasing is the method whereby environmental and social considerations are given similar weight to the price, availability, and performance criteria that colleges and universities use to make purchasing decisions. Green purchasing is also known as "environmentally preferred purchasing (EPP), green procurement, affirmative procurement, eco-procurement, and environmentally responsible purchasing", particularly within the US Federal Government Agencies. Green purchasing minimizes negative environmental and social effects through the use of environmentally friendly products. The Director of Procurement and Contracting Services has determined that transactions not exceeding \$5,000 are impracticable to monitor for compliance with this policy. Departments are encouraged to make every effort to comply with this policy when making purchases.

The aim of this environmental purchasing strategy is to develop policies consistent with these Principles:

Minimize the consumption of non-replaceable natural resources by reviewing current and proposed future usage and evaluating the pros and cons of alternatives.

Seek alternatives to products and processes that are detrimental to the environment by using more "environmentally friendly" products and processes.

Minimize waste, including: any packaging, waste produced by the product (or service) in questions, and waste generated by the eventual disposal of the product.

Maximize the reuse and recycling of materials.

Stimulate demand for "environmentally friendly" products by letting manufacturers and suppliers know environmental performance we expect in products.

Energy

Desktop computers, notebooks, and monitors purchased should meet all Electronic Product Environmental Assessment Tool (EPEAT) environmental criteria designated as "gold" as contained in the IEEE 1680 Standard for the Environmental Assessment of Personal Computer Products.

Copiers and printers purchased should be compatible with the use of recycled content and remanufactured products.

All electrical products purchased by UA shall meet the US EPA Energy Star certification when available and practicable. When products with Energy Star labels are not available, products that are in the upper 25 percent of energy efficiency as designated by the Federal Energy Management Program should be used.

When acquiring vehicles, the University shall purchase/lease less polluting alternatives to diesel, such as compressed natural gas, biobased fuels, hybrids, electric batteries, and fuel cells, as available and suitable for the use intended.

When acquiring or replacing inefficient interior or exterior lighting, energy efficient equipment shall be purchased.

Water

Purchase only the most water efficient appliances available. This includes, but is not limited to, high performance fixtures like toilets,

low-flow faucets and aerators, and upgraded irrigation systems.

Toxins and Pollutants

Cleaning solvents should be biodegradable, phosphate free, and citrus-based when their use will not compromise quality of service.

Industrial and institutional cleaning products that meet Green Seal certification standards or environmental preferability and performance shall be purchased or required to be used by janitorial contractors.

All surfactants and detergents used shall be readily biodegradable and shall not contain phosphates.

Vacuum cleaners that meet the requirements of the Carpet and Rug Institute's "Green Label Testing Program - Vacuum Cleaner Criteria" (capable of capturing 96 percent of particulates measuring 0.3 microns and operating with a sound level less than 70dba) shall be used by in-house staff and required for janitorial contractors.

Whenever possible, products and equipment should not contain lead or mercury. For products that contain lead or mercury, preference should be given to those products with lower quantities of these metals and to vendors with established lead and mercury recovery programs.

Pest control shall be managed through prevention - physical and mechanical - and through the purchase of environmentally friendly products. As a last resort, use of the least toxic pest control substance is required.

Biobased Products

Vehicle fuels made from non-wood, plant-based contents such as vegetable oils are encouraged.

Paper, paper products, and construction products made from non-wood, plant-based contents such as agricultural crops and residues are encouraged.

Recycling

Thirty percent postconsumer waste recycled paper with a brightness factor of 88 for all applications shall be the standard when the price is comparable, quality of service is not compromised nor the health and safety of employees prejudiced.

When specifying asphalt concrete, aggregate base or Portland Cement concrete for road construction projects, recycled, reusable, or reground materials shall be used when practicable.

The use of reclaimed stone and brick and the use of secondary or recycled aggregates is encouraged.

Transportation products, including signs, cones, parking stops, delineators, channelizers, and barricades shall contain the highest postconsumer content practicable.

Products that are durable, long lasting, reusable, or refillable are preferred whenever feasible.

Packaging

Packaging that is reusable, recyclable, or compostable is preferred, when suitable uses and programs exist, as is eliminating packaging or using the minimum amount necessary for product protection to the greatest extent practicable.

Green Building

Green purchasing concepts shall be integrated into architectural designs, final construction documents, and the final construction of all University buildings and renovations of property or facilities owned by the University. All buildings and renovations undertaken by the University shall follow green building practices for design, construction, and operations, where appropriate, as described in the LEED Rating System.

When maintaining buildings, products such as paint, carpeting, adhesives, furniture and casework with the lowest amount of volatile organic compounds (VOCs), highest recycled content, and low or no formaldehyde shall be used when practicable.

All carpet distributors and/or manufacturers of carpet installed at the University shall have a carpet recycling plan that is approved

Purchasing and Contracting Services.

The use of chlorofluorocarbon and halon-containing refrigerants, solvents, and other products shall be phased out, and new purchases of heating/ventilating/air conditioning, refrigeration, insulation and fire suppression systems shall not contain them.

Landscaping

All landscape renovations, construction, and maintenance performed by internal staff members or contractors providing landscaping services shall employ sustainable landscape management techniques for design, construction, and maintenance whenever possible. This includes, but is not limited to, integrated pest management, drip irrigation, composting, and use of mulch and compost that give preference to those produced from regionally generated plant debris and/or food waste programs.

Landscape structures constructed of recycled content materials are encouraged. The amount of impervious surfaces in the landscape shall be limited, whenever practicable. Permeable substitutes, such as permeable asphalt or pavers, are encouraged for walkways, patios, and

driveways.

Plants should be selected to minimize waste by choosing species that are appropriate to the microclimate. Native and drought-tolerant plants that require no or minimal watering once established should be purchased.

Exceptions

These policies are designed to do the most good for the resources expended. When the cost of following the policies outweighs their benefits, a variance/waiver may be obtained through Procurement and Contracting Services.

The Director of Procurement and Contracting Services or designees has the authority to waive any requirements of this policy.

A brief description of steps the institution has taken to ensure that the purchasing policy, directives, or guidelines are followed:

The University of Arizona encourages employees to purchase items using the AZ BuyWays program that utilizes select vendors. If products are purchased that do not meet the policy, they must be justified using written documentation as per purchasing policy guidelines.

Facilities Management custodial purchasing follows guidelines as stipulated for adherence to the Healthy High Performance Cleaning Program.

Residence Life and the Student Unions each conduct their own custodial purchasing. Purchase of green cleaning products is pursued unless cost is prohibitive.

Does the institution wish to pursue Part 2 of this credit (expenditures on cleaning and janitorial products)?:

Yes

Expenditures on Green Seal and/or UL Environment (EcoLogo) certified cleaning and janitorial products:

206,647 US/Canadian \$

Total expenditures on cleaning and janitorial products:

725,460.71 US/Canadian \$

Has the institution's main cleaning or housekeeping department(s) and/or contractor(s) adopted a Green Seal or ISSA certified low-impact, ecological ("green") cleaning program?:

Yes

A brief description of the institution's low-impact, ecological cleaning program:

The University of Arizona Facilities Management has policies that go beyond being Green Guard certified and compliant.

A copy of the sections of the cleaning contract(s) that reference certified green products:

The sections of the cleaning contract(s) that reference certified green products:

The website URL where information about the institution's green cleaning initiatives is available:

http://www.pacs.arizona.edu/manual_page04#Green_Purchasing

Office Paper Purchasing

Responsible Party

Benjamin Champion
Director
Office of Sustainability

Criteria

Part 1

Institution has an institution-wide stated preference to purchase office paper that has recycled content, is certified by the Forest Stewardship Council (FSC), and/or is certified to meet similar multi-criteria sustainability standards for paper. This can take the form of purchasing policies, guidelines, or directives.

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.

Part 2

Institution purchases office paper with post-consumer recycled, agricultural residue, and/or FSC certified content.

Submission Note:

Data represents the 2012 UA AASHE STARS submission. A detailed update is planned for the next full UA STARS submission in late 2015.

"---" indicates that no data was submitted for this field

Does the institution have an institution-wide stated preference to purchase office paper that has recycled content and/or is certified to meet multi-criteria sustainability standards for paper?:

Yes

A copy of the paper purchasing policy, directive or guidelines:

The paper purchasing policy, directive or guidelines:

Policy Title: Green Purchasing

Policy Number: 4.16

Effective: February 6, 2012

The University of Arizona is committed to the stewardship of the environment and to reducing the University's dependence on non-renewable energy. These "Green Purchasing" policies and procedures support the University's commitment to sustainability.

The goal of this policy is to reduce the adverse environmental impact of our purchasing decisions by buying goods and services from [Campus Sustainability Data Collector](#) | [AASHE](#)

manufacturers and vendors who share our commitment to the environment. Green purchasing is the method whereby environmental and social considerations are given similar weight to the price, availability, and performance criteria that colleges and universities use to make purchasing decisions. Green purchasing is also known as "environmentally preferred purchasing (EPP), green procurement, affirmative procurement, eco-procurement, and environmentally responsible purchasing", particularly within the US Federal Government Agencies. Green purchasing minimizes negative environmental and social effects through the use of environmentally friendly products. The Director of Procurement and Contracting Services has determined that transactions not exceeding \$5,000 are impracticable to monitor for compliance with this policy. Departments are encouraged to make every effort to comply with this policy when making purchases.

The aim of this environmental purchasing strategy is to develop policies consistent with these Principles:

Minimize the consumption of non-replaceable natural resources by reviewing current and proposed future usage and evaluating the pros and cons of alternatives.

Seek alternatives to products and processes that are detrimental to the environment by using more "environmentally friendly" products and processes.

Minimize waste, including: any packaging, waste produced by the product (or service) in questions, and waste generated by the eventual disposal of the product.

Maximize the reuse and recycling of materials.

Stimulate demand for "environmentally friendly" products by letting manufacturers and suppliers know environmental performance we expect in products.

Energy

Desktop computers, notebooks, and monitors purchased should meet all Electronic Product Environmental Assessment Tool (EPEAT) environmental criteria designated as "gold" as contained in the IEEE 1680 Standard for the Environmental Assessment of Personal Computer Products.

Copiers and printers purchased should be compatible with the use of recycled content and remanufactured products.

All electrical products purchased by UA shall meet the US EPA Energy Star certification when available and practicable. When products with Energy Star labels are not available, products that are in the upper 25 percent of energy efficiency as designated by the Federal Energy Management Program should be used.

When acquiring vehicles, the University shall purchase/lease less polluting alternatives to diesel, such as compressed natural gas, biobased fuels, hybrids, electric batteries, and fuel cells, as available and suitable for the use intended.

When acquiring or replacing inefficient interior or exterior lighting, energy efficient equipment shall be purchased.

Water

Purchase only the most water efficient appliances available. This includes, but is not limited to, high performance fixtures like toilets, low-flow faucets and aerators, and upgraded irrigation systems.

Toxins and Pollutants

Cleaning solvents should be biodegradable, phosphate free, and citrus-based when their use will not compromise quality of service.

Industrial and institutional cleaning products that meet Green Seal certification standards or environmental preferability and performance shall be purchased or required to be used by janitorial contractors.

All surfactants and detergents used shall be readily biodegradable and shall not contain phosphates.

Vacuum cleaners that meet the requirements of the Carpet and Rug Institute's "Green Label Testing Program - Vacuum Cleaner Criteria" (capable of capturing 96 percent of particulates measuring 0.3 microns and operating with a sound level less than 70dba) shall be used by in-house staff and required for janitorial contractors.

Whenever possible, products and equipment should not contain lead or mercury. For products that contain lead or mercury, preference should be given to those products with lower quantities of these metals and to vendors with established lead and mercury recovery programs.

Pest control shall be managed through prevention - physical and mechanical - and through the purchase of environmentally friendly products. As a last resort, use of the least toxic pest control substance is required.

Biobased Products

Vehicle fuels made from non-wood, plant-based contents such as vegetable oils are encouraged.

Paper, paper products, and construction products made from non-wood, plant-based contents such as agricultural crops and residues are

encouraged.

Recycling

Thirty percent postconsumer waste recycled paper with a brightness factor of 88 for all applications shall be the standard when the price is comparable, quality of service is not compromised nor the health and safety of employees prejudiced.

When specifying asphalt concrete, aggregate base or Portland Cement concrete for road construction projects, recycled, reusable, or reground materials shall be used when practicable.

The use of reclaimed stone and brick and the use of secondary or recycled aggregates is encouraged.

Transportation products, including signs, cones, parking stops, delineators, channelizers, and barricades shall contain the highest postconsumer content practicable.

Products that are durable, long lasting, reusable, or refillable are preferred whenever feasible.

Packaging

Packaging that is reusable, recyclable, or compostable is preferred, when suitable uses and programs exist, as is eliminating packaging or using the minimum amount necessary for product protection to the greatest extent practicable.

Green Building

Green purchasing concepts shall be integrated into architectural designs, final construction documents, and the final construction of all University buildings and renovations of property or facilities owned by the University. All buildings and renovations undertaken by the University shall follow green building practices for design, construction, and operations, where appropriate, as described in the LEED Rating System.

When maintaining buildings, products such as paint, carpeting, adhesives, furniture and casework with the lowest amount of volatile organic compounds (VOCs), highest recycled content, and low or no formaldehyde shall be used when practicable.

All carpet distributors and/or manufacturers of carpet installed at the University shall have a carpet recycling plan that is approved Purchasing and Contracting Services.

The use of chlorofluorocarbon and halon-containing refrigerants, solvents, and other products shall be phased out, and new purchases of heating/ventilating/air conditioning, refrigeration, insulation and fire suppression systems shall not contain them.

Landscaping

All landscape renovations, construction, and maintenance performed by internal staff members or contractors providing landscaping services shall employ sustainable landscape management techniques for design, construction, and maintenance whenever possible. This includes, but is not limited to, integrated pest management, drip irrigation, composting, and use of mulch and compost that give preference to those produced from regionally generated plant debris and/or food waste programs.

Landscape structures constructed of recycled content materials are encouraged. The amount of impervious surfaces in the landscape shall be limited, whenever practicable. Permeable substitutes, such as permeable asphalt or pavers, are encouraged for walkways, patios, and driveways.

Plants should be selected to minimize waste by choosing species that are appropriate to the microclimate. Native and drought-tolerant plants that require no or minimal watering once established should be purchased.

Exceptions

These policies are designed to do the most good for the resources expended. When the cost of following the policies outweighs their benefits, a variance/waiver may be obtained through Procurement and Contracting Services.

The Director of Procurement and Contracting Services or designees has the authority to waive any requirements of this policy.

A brief description of steps the institution has taken to ensure that the purchasing policy, directives, or guidelines are followed :

The University of Arizona encourages employees to purchase items using the AZ BuyWays program that utilizes select vendors. If products are purchased that do not meet the policy, they must be justified using written documentation as per purchasing policy guidelines.

Does the institution wish to pursue Part 2 of this credit (expenditures on office paper)?:

Yes

Expenditures on office paper with the following levels of post-consumer recycled, agricultural residue, and/or FSC certified content::

	Expenditure Per Level
10-29 percent	34,438.05 <i>US/Canadian \$</i>
30-49 percent	4,503.63 <i>US/Canadian \$</i>
50-69 percent	0 <i>US/Canadian \$</i>
70-89 percent (or FSC Mix label)	0 <i>US/Canadian \$</i>
90-100 percent (or FSC Recycled label)	120.80 <i>US/Canadian \$</i>

Total expenditures on office paper :

183,457.63 *US/Canadian \$*

The website URL where information about the paper purchasing policy, directive, or guidelines is available:

http://www.pacs.arizona.edu/manual_page04#Green_Purchasing

Inclusive and Local Purchasing

Responsible Party

David Bradshaw
Program Coordinator
UA Office of Sustainability

Criteria

Part 1

Institution has an institution-wide stated intent to support disadvantaged businesses, social enterprises, and/or local community-based businesses.

Support could take the form of giving preference during RFP processes, conducting targeted outreach to these businesses about opportunities to work with the institution, and/or other efforts to increase purchases made from such businesses.

Part 2

Institution makes purchases from companies that include disadvantaged businesses, social enterprises and/or local community-based businesses.

Purchases that meet multiple criteria listed above should not be double counted. Food and beverage purchases, which are covered by *OP 6: Food and Beverage Purchasing* and *OP 7: Low Impact Dining*, are not included in this credit.

Submission Note:

As of this writing the UA Office of Sustainability does not have numbers that state the number of local or under-utilized businesses that UA purchasers have used.

"---" indicates that no data was submitted for this field

Does the institution have an institution-wide stated intent to support disadvantaged businesses, social enterprises, and/or local community-based businesses?:

Yes

A copy of the policy, guidelines or directive governing inclusive and local purchasing:

The policy, guidelines or directive governing inclusive and local purchasing:

Through UA Procurement and Contracting Services' Small Business Utilization Program, the UA encourages the selection of minority-owned businesses and women owned-businesses.

The Small Business Utilization Program manager maintains contact with local businesses and helps these businesses apply for UA contracts.

Organizations that the program promotes UA units to reach out to include, but are not limited to:

Tucson Regional Economic Opportunities, Inc.

WWW.treoaz.org

Tucson Hispanic Chamber of Commerce

president@thcc.us

Tucson-Southern Arizona Black Chamber of Commerce

info@tsabcc.com

Grand Canyon Minority Supplier Development Council

office@gcmsdc.org

National Association of Women Business Owners (NAWBO)

info@nawbotucson.org

Central Contractor Registration

<http://www.ccr.gov/>

For further information contact Ernie Webster, Small Business Utilization Program Manager, at 621-2888 or

ewebster@email.arizona.edu

Campus Sustainability Data Collector | AASHE

Does the institution wish to pursue Part 2 of this credit (inclusive and local expenditures)?:

No

The percentage of total purchases from disadvantaged businesses, social enterprises and/or local community-based businesses:

The website URL where information about the institution's inclusive and local purchasing policies and/or program is available:

http://pacs.arizona.edu/supplier_diversity

Life Cycle Cost Analysis

Responsible Party

David Bradshaw

Program Coordinator
UA Office of Sustainability

Criteria

Institution employs Life Cycle Cost Analysis (LCCA) as a matter of policy and practice when evaluating energy- and water-using products and 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.

Submission Note:

While the UA does Life Cycle Assessment research and encourages the use of systems thinking in decision making, we do not have a formal requirement for Life Cycle Assessment to be used in decision making and purchasing at this time.

This credit was marked as **Not Pursuing** so Reporting Fields will not be displayed.

Guidelines for Business Partners

Responsible Party

Benjamin Champion

Director

Office of Sustainability

Criteria

Institution has and acts on policies, guidelines and/or agreements that set expectations about the social and environmental responsibility of its business partners. The policies, guidelines and/or agreements require new and/or existing vendors and contractors and/or franchisees to adhere to:

1) Minimum environmental standards and practices defined by the institution, for example as outlined by the institution's sustainability policies

And/or

2) Minimum standards and practices governing employee wages, benefits, working conditions and rights that are consistent with fundamental International Labor Organization (ILO) conventions.

All enterprises with employees on-site as part of regular campus operations (e.g. contractors and franchisees) and other standing and/or formal business relationships (e.g. regular vendors and contracted services) are included.

Businesses that produce and/or sell licensed articles bearing the institution's trademarked logo ("licensees") are not included. They are covered in *EN 15: Trademark Licensing*.

The credit acknowledges institutional engagement in selecting its business partners and guiding them toward sustainability. Policies, guidelines or practices of the businesses themselves do not count for this credit in the absence of institutional selection criteria and/or guidance. Requiring compliance with existing legislation does not count on its own, but may be included as part of broader requirements that meet the criteria outlined above.

Policies 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.

Submission Note:

These entries reflect submissions from the 2012 AASHE STARS rating for UA. These programs and commitments have not changed in the intervening years and as of March 2015 remain accurate.

"---" indicates that no data was submitted for this field

How many of the institution's business partners are covered by policies, guidelines and/or agreements that require

adherence to minimum environmental standards?:

All

How many of the institution's business partners are covered by policies, guidelines and/or agreements that require adherence to minimum standards governing employee wages, benefits, working conditions and rights?:

All

A copy of the policies, guidelines, and/or agreements with the institution's business partners (or a representative sample):

The policies, guidelines, and/or agreements with the institution's business partners (or a representative sample):

All vendors must comply with the University of Arizona's code of ethics, provided below. While not explicit in its environmental or labor related aspects, the code of ethics does state that vendors making decisions on behalf of the University of Arizona should do so with University of Arizona interests and policies in mind.

Code of Ethics

The nature of purchasing functions makes it critical that all players in the process remain independent, free of obligation or suspicion, and completely fair and impartial. Maintaining the integrity and credibility of a purchasing program requires a clear set of guidelines, rules and responsibilities to govern the behavior of purchasing employees. Credibility and public confidence are vital throughout the purchasing and contracting system. Any erosion of honesty, integrity or openness tends to be more injurious to purchasing than to most other public programs. The shadow of doubt can be as harmful as the conduct itself. It is with this in mind that the following code is set forth. This document defines the ethical standards of conduct required of the University of Arizona Procurement and Contracting Services employees, suppliers, potential suppliers and employees of other agencies when acting under the authority delegated by the University of Arizona.

To give first consideration to objectives and policies of the University.

To purchase without prejudice, seeking to obtain maximum value for each dollar expended on behalf of the University.

To conduct ourselves with fairness and dignity and to demand honesty and truth in the purchasing process.

Demand honesty in sales representation whether offered through the medium of a verbal or written statement, an advertisement, or a sample of the product.

Strive to continually increase competition in supplier selection and endeavor to prevent any collusive activities among suppliers.

Avoid soliciting or accepting money, loans, credits, gifts, entertainment, favors, or services from present or potential suppliers that might influence, or appear to influence supply management decisions.

Handle confidential or proprietary information with due care and proper consideration. Receive consent of originator of confidential information or proprietary ideas and designs before using them for competitive purchasing purposes.

To honor our obligations and require that obligations to the University be honored.

Promote positive supplier relations through courtesy and impartiality. Conduct business with potential and current suppliers in an atmosphere of good faith, devoid of intentional misrepresentation.

To grant all competitive suppliers equal consideration insofar as state or federal statute and University policy permit.

Foster fair, ethical and legal trade practices.

Encourage support of Small Businesses whenever possible.

Make every reasonable effort to negotiate an equitable and mutually agreeable settlement of any controversy with suppliers; and/or be willing to submit any major controversies to arbitration or other third party review, insofar as to the established policies of the University permit.

Cooperate with trade, industry, professional associations, governmental and private agencies for the purpose of promoting and developing sound business practices.

A brief description of programs and strategies institution has implemented to ensure that the guidelines are followed, including a brief description of instances when the guidelines have changed purchasing behavior, if applicable:

The University of Arizona is a member of the Fair Labor Association and the Workers' Rights Consortium as well as the Collegiate Licensing Company. The Collegiate Licensing Company (CLC) and the collegiate institutions represented by CLC (Member Institutions) are each committed to conducting their business affairs in a socially responsible and ethical manner consistent with their respective educational, research and/or service missions, and to protecting and preserving the global environment. UA has adopted a labor code which requires that all Licensees, at a minimum, adhere to the principles set forth in the Code.

In 2009, the University suspended its contract with Russell Athletics after findings regarding improper working conditions surfaced. The University reinstated the contract once Russell Athletics improved working conditions.

The website URL where information about the institution's guidelines for its business partners is available:

<http://www.licensing.arizona.edu/pdf/LaborCodeofConduct.pdf>

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 storm water. Institutions may realize cost savings and help support local economies by reducing their dependency on petroleum-based fuels for transportation.

Credit
Campus Fleet
Student Commute Modal Split
Employee Commute Modal Split
Support for Sustainable Transportation

Responsible Party

Benjamin Champion
Director
Office of Sustainability

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
- 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 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.

Submission Note:

This information is from the 2012 UA AASHE STARS Report. Updated data will be developed later in 2015 for our next full STARS submission.

"---" indicates that no data was submitted for this field

Total number of vehicles in the institution's fleet :

1,231

Number of vehicles in the institution's fleet that are::

	Number of Vehicles
Gasoline-electric, non-plug-in hybrid	10
Diesel-electric, non-plug-in hybrid	0
Plug-in hybrid	0
100 percent electric	154
Fueled with compressed natural gas (CNG)	0
Hydrogen fueled	0
Fueled with B20 or higher biofuel for more than 4 months of the year	13
Fueled with locally produced, low-level (e.g. B5) biofuel for more than 4 months of the year	0

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 institution's support for alternative fuel and power technology is available:

Student Commute Modal Split

Responsible Party

Benjamin Champion

Director

Office of Sustainability

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.

Submission Note:

These figures have been updated from the UA AASHE STARS Report submitted in February 2012 and use the assumptions from that document to estimate based on current student populations at UA. Specifically for this credit, the information comes from a travel study conducted by the Pima Association of Governments for the UA in 2009. For calculations that involved data not found in the study, US Census data and UA population data were used to create estimates. The UA plans to perform a survey of students in 2015 to provide more current assessment of student commuting patterns for our next STARS submission.

"---" indicates that no data was submitted for this field

Total percentage of students that use more sustainable commuting options:

62.47

The percentage of students that use each of the following modes as their primary means of transportation to get to and from campus::

	Percentage (0-100)
Commute with only the driver in the vehicle (excluding motorcycles and scooters)	33.10
Walk, bicycle, or use other non-motorized means	48.50
Vanpool or carpool	5.50
Take a campus shuttle or public transportation	13

A brief description of the method(s) used to gather data about student commuting:

The information comes from a travel study conducted by the Pima Association of Governments for the UA in 2009. For calculations that involved data not found in the study, US Census data and UA population data were used to create estimates.

The website URL where information about sustainable transportation for students is available:

Employee Commute Modal Split

Responsible Party

Benjamin Champion

Director

Office of Sustainability

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.

Submission Note:

These figures reflect data collected in Fall 2014 by the Pima Association of Governments throughout Tucson, with a subset of data provided to the UA based on those who reported being employees of UA. The Pima Association of Governments also provides comparison data to previous years of their surveys, noting a substantial shift over time toward more sustainable forms of commuting for UA employees. These data are available upon request.

"---" indicates that no data was submitted for this field

Total percentage of the institution's employees that use more sustainable commuting options:

38.70

The percentage of the institution's employees that use each of the following modes as their primary means of transportation to and from campus::

	Percentage (0-100)
Commute with only the driver in the vehicle (excluding motorcycles and scooters)	61.30
Walk, bicycle, or use other non-motorized means	19.50
Vanpool or carpool	9.70
Take a campus shuttle or public transportation	6

Use a motorcycle, scooter or moped	1
Telecommute for 50 percent or more of their regular work hours	2.50

A brief description of the method(s) used to gather data about employee commuting:

The website URL where information about sustainable transportation for employees is available:

<https://parking.arizona.edu/transportation/>

Support for Sustainable Transportation

Responsible Party

Benjamin Champion

Director

Office of Sustainability

Criteria

Part 1

The institution demonstrates its support for active (i.e. non-motorized) transportation on campus in one or more of the following ways:

Option A: 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) within 50 ft (15 m) of all occupied, non-residential buildings and makes long-term bicycle storage available within 330 ft (100 m) of all residence halls (if applicable).
- Has a “complete streets” or bicycle accommodation policy (or adheres to a local community policy) and/or has a continuous network of dedicated bicycle and pedestrian paths and lanes that connects all occupied buildings and at least one inter-modal transportation node (i.e. transit stop or station)

And/or

- Has a bicycle-sharing program or participates in a local bicycle-sharing program

Option B: Institution is certified as a Bicycle Friendly University (at any level) by the League of American Bicyclists (U.S.) or under a similar third party certification for non-motorized transportation.

Part 2

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:

- 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 for employees, either as a matter of policy or as standard practice
- Has incentives or programs to encourage employees to live close to campus

- Other strategies

Submission Note:

This information is based off of the UA AASHE STARS Report submitted to AASHE in February 2012, but has been double-checked for current accuracy, and in some cases updated. These programs have all been successful and continue to support shifts toward more sustainable commuting behavior among our employees and students.

"---" indicates that no data was submitted for this field

Does the institution provide secure bicycle storage (not including office space), shower facilities, and lockers for bicycle commuters?:

Yes

A brief description of the facilities for bicycle commuters:

Below is a list and brief description of the bicyclist facilities available at the University of Arizona:

1. Shower and locker facilities on campus available to employees who bicycle: Campus Recreation Center, USB Building, Bear Down Gym. The UA hospital also has shower and locker facilities available for employees. With our outstanding climate, indoor bicycle storage facilities are not as critical as in those areas where adverse climate would require indoor bicycle parking.
2. 214 high security private bike lockers along with Residence Life's 20 lockers provide a total 234 on campus bicycle lockers. University Medical Center has an additional 100 bike locker spaces.
3. 210 pin number access enclosed parking spaces in 5 parking garages. Several departments have gated bike enclosures on campus that amount to an additional 80 spaces.
4. A bike valet area is available for cyclists wishing to park in a staffed area. There are 150 spaces available Monday through Friday during business hours.

Does the institution provide short-term bicycle parking (e.g. racks) within 50 ft (15 m) of all occupied, non-residential buildings and make long-term bicycle storage available within 330 ft (100 m) of all residence halls (if applicable)?:

Yes

A brief description of the bicycle parking and storage facilities:

There are over 11,000 bicycle parking spots on campus, located in front or behind the majority of buildings on campus. While long term storage is not always available within 100m of all of the residence halls, most halls have an enclosed courtyard area that serves as a long term storage area. Students and employees may rent a bike locker should they choose to do so.

Does the institution have a “complete streets” or bicycle accommodation policy (or adhere to a local community policy) and/or have a continuous network of dedicated bicycle and pedestrian paths and lanes?:

Yes

A brief description of the bicycle/pedestrian policy and/or network:

The UA has a published Bicycle and Pedestrian plan that is used for developing effective bicycle routes that align with city and county bicycle paths.

The plan can be found at

<http://parking.arizona.edu/alternative/documents/UAAreaBikePedPlanFinalAugust2012.pdf>

Does the institution have a bicycle-sharing program or participate in a local bicycle-sharing program?:

Yes

A brief description of the bicycle sharing program:

Cat Wheels is a University of Arizona Parking and Transportation Services initiative designed to give students and employees free and easy access to bicycle transportation on the University's campus. After the registration process, checking out a Cat Wheels Bike is as simple as going to one of several parking garages where the bikes are stored. A bike may be used for 24 hours after which the bike must be returned.

Is the institution certified as a Bicycle Friendly University by the League of American Bicyclists (U.S.) or under a similar third party certification covering non-motorized transportation?:

Yes

A brief description of the certification, including date certified and level:

The University of Arizona earned a Silver Rating from the League of American Bicyclists in 2011.

Does the institution offer free or reduced price transit passes and/or operate a free campus shuttle for commuters?:

Yes

A brief description of the mass transit program(s), (s), including availability, participation levels, and specifics about discounts or subsidies offered (including pre-tax options):

UA Parking and Transportation offers up to a 50% discount on bus passes to students and faculty in cooperation with SunTran and also operates a free on campus shuttle (called Cat Tran) with multiple routes.

Does the institution offer a guaranteed return trip (GRT) program to regular users of alternative modes of transportation?:

Yes

A brief description of the GRT program:

University of Arizona Parking & Transportation Services (PTS) offers a free emergency ride home program for University of Arizona employees and students who are alternative transportation users.

The emergency ride home program is designed to encourage people to use our campus alternative transportation programs, and still have the ability to get home if an emergency arises.

Does the institution participate in a car/vanpool or ride sharing program and/or offer reduced parking fees or preferential parking for car/vanpoolers?:

Yes

A brief description of the carpool/vanpool program:

The University of Arizona participates in the Sun Rideshare program. This program, a service run by Pima Association of Governments, is a free and voluntary carpool matching service for commuters and employers in Pima County. The program provides interested applicants with a "matchlist" of other commuters who live and work near them and also want to carpool. Commuters set up their own carpools to fit their particular commuting needs.

Does the institution participate in a car sharing program, such as a commercial car-sharing program, one administered by the institution, or one administered by a regional organization?:

Yes

A brief description of the car sharing program:

The University of Arizona's Car Sharing program is contracted through Hertz rental company. The service is an hourly rate rental car. The car models available for rental are the Toyota Prius, Ford Escape, and BMW Mini. Rental rates start at \$8.50 per hour and day rental option is available. The program gives students and faculty the opportunity to use nonmotorized transportation to get to and around campus, but still have the convenience of motorized transportation for longer trips away from camp at affordable rates.

Does the institution have one or more Level 2 or Level 3 electric vehicle recharging stations that are accessible to student and employee commuters?:

Yes

A brief description of the electric vehicle recharging stations:

The University of Arizona has several EV recharging stations on campus, two of which are located at the sixth street garage. These stations were installed when the UA brought a Nissan Leaf into the UA Motorpool Fleet.

Does the institution offer a telecommuting program for employees as a matter of policy or as standard practice?:

Yes

A brief description of the telecommuting program:

Telecommuting, know as Telework at The University of Arizona, is part of a larger program of Flexible Work arrangement options available to employees. The program is set up to be responsive to the employee. An employee submits a request to telework to his or her manager and the request is evaluated based upon the nature of the job and the ability of the employee to work well without direct supervision.

Does the institution offer a condensed work week option for employees as a matter of policy or as standard practice?:

Yes

A brief description of the condensed work week program:

The University of Arizona allows for employees to request a condensed work week schedule as part of its flexible work arrangement options. Employees who request for a condensed work week schedule are required to describe the proposed schedule in detail; explain how work will be allocated; state any necessary changes to current office or departmental procedures; request any needed additional equipment; and create an evaluation plan for the arrangement.

Does the institution have incentives or programs to encourage employees to live close to campus?:

No

A brief description of the incentives or programs to encourage employees to live close to campus:

Does the institution have other incentives or programs to encourage more sustainable modes of transportation and reduce the impact of student and employee commuting?:

Yes

A brief description of other sustainable transportation initiatives and programs:

UA contributed financially and in terms of planning for the new modern streetcar system that was built over the past few years in Tucson and connects campus to downtown Tucson (2.5 miles apart). The streetcar system became operational in August 2014 and usage rates are greater than was expected. This is enabling students and employees who live downtown to have a highly accessible form of accessing campus that does not require driving a car. It also enables all campus occupants and visitors to travel between downtown and campus without using a car, for meetings, lunch, or whatever the purpose.

The website URL where information about the institution's sustainable transportation program(s) is available:

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, such as trees and metals. It generally takes less energy and water to make a product with recycled material than with virgin resources. Reducing waste generation 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. Waste reduction and 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.

Credit
Waste Minimization
Waste Diversion
Construction and Demolition Waste Diversion
Hazardous Waste Management

Waste Minimization

Responsible Party

Benjamin Champion

Director

Office of Sustainability

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 0.45 tons (0.41 tonnes) per weighted campus user.

This credit includes on-campus dining services operated by the institution or the institution's primary on-site contractor.

Total waste generation includes all materials that the institution discards, intends to discard or is required to discard (e.g. materials recycled, composted, donated, re-sold and disposed of as trash) except construction, demolition, electronic, hazardous, special (e.g. coal ash), universal and non-regulated chemical waste, which are covered in *OP 24: Construction and Demolition Waste Diversion* and *OP 25: Hazardous Waste Management*.

Submission Note:

The descriptive content in this submission reflects the information found in the 2012 AASHE STARS Report as submitted in February 2012. These policies and programs are still current. However, the waste amounts and weighted campus user data have been updated to reflect FY14 at UA so as to be more current. The UA's next report will be submitted in late 2015 or early 2016.

Please note that for the baseline year data does not exist for the amount of material reused, donated, etc., and current data for FY14 has not been obtained in time for this submission. UA has an active program for reuse of surplus materials, so the submission is not accurate in this regard.

"---" indicates that no data was submitted for this field

Waste generated::

	Performance Year	Baseline Year
Materials recycled	1,709.71 Tons	379.16 Tons

Materials composted	200.03 <i>Tons</i>	0 <i>Tons</i>
Materials reused, donated or re-sold	0 <i>Tons</i>	0 <i>Tons</i>
Materials disposed in a solid waste landfill or incinerator	3,119.83 <i>Tons</i>	5,988.30 <i>Tons</i>

Figures needed to determine "Weighted Campus Users"::

	Performance Year	Baseline Year
Number of residential students	6,189	6,084
Number of residential employees	0	0
Number of in-patient hospital beds	0	0
Full-time equivalent enrollment	40,791	35,743
Full-time equivalent of employees	12,291	11,842
Full-time equivalent of distance education students	0	0

Start and end dates of the performance year and baseline year (or three-year periods):

	Start Date	End Date
Performance Year	July 1, 2013	June 30, 2014
Baseline Year	July 1, 2004	June 30, 2005

A brief description of when and why the waste generation baseline was adopted:

A brief description of any (non-food) waste audits employed by the institution:

A brief description of any institutional procurement policies designed to prevent waste:

A brief description of any surplus department or formal office supplies exchange program that facilitates reuse of materials:

The Surplus Property Office (SPO) at the University of Arizona is responsible for redistributing materials such as furniture, computers, and vehicles to other departments on campus. When departments are finished with their materials SPO picks up the property and stores it in a warehouse near campus and catalogs the items online. The items can be purchased by other departments with delivery of the item to the department being free. If items are not reused by another department, the items are disposed to the public via auction to the public every second and fourth Tuesday of every month.

A brief description of the institution's efforts to make materials available online by default rather than printing them:

The University of Arizona is pushing for greater use of digitization of materials produced by departments in order to be more efficient and to reduce financial costs incurred through the printing of materials. While some items are printed, the majority of documents like course catalogs, schedules and directories are fully digitized. The new UAccess software platform has integrated most of these documents into one online site.

A brief description of any limits on paper and ink consumption employed by the institution:

Printing is limited through financial incentive in that printing on campus is not free. In most labs the black and white printing cost is 10 cents per page and color can be 20 cents to \$1 in some labs. Additionally, students are encouraged to use double sided printing.

A brief description of any programs employed by the institution to reduce residence hall move-in/move-out waste:

At the end of every semester, the Residence Life Recycling and Sustainability Program partners with Tucson community non-profit organizations to set up collection bins in residence halls and at La Aldea Graduate Housing. The program encourages residents to donate unwanted items that are in usable to condition to community organizations.

Spring 2010 Stats

Total collected: 29.095 tons (58,190 lbs)

Salvation Army – 52,600 lbs

Community Food Bank – 5,590 lbs (4,367 meals)

Sonoran Center for Leadership Development – 1,431 books

Spring 2009 Stats

Total collected: 28.555 tons (57,110 lbs)

Salvation Army - 52,705 lbs.

Community Food Bank - 4,405 lbs. (3,524 meals)

Spring 2007 Stats

Total collected: 20.081 tons (40,162 lbs.)

Miscellaneous items including over 100 microwaves

Spring 2006 Stats

Total Collected: 16.315 tons (32,629 lbs.)

World Care/Tools for Schools - 7,122 lbs. Included household items, electrical appliances, books and school supplies, clothing, first-aid, food, printers, computer monitors etc

Community Food Bank - 3,627 lbs. of non-perishable food

Salvation Army - 21,880 lbs. Included clothing, food, bric-brac, TV, computers, stereos, microwaves, small appliances, plastic storage containers, sofas etc

Email

recycling@life.arizona.edu

if you have questions.

A brief description of any other (non-food) waste minimization strategies employed by the institution:

A brief description of any food waste audits employed by the institution:

A brief description of any programs and/or practices to track and reduce pre-consumer food waste in the form of kitchen food waste, prep waste and spoilage:

A brief description of programs and/or practices to track and reduce post-consumer food waste:

The University of Arizona currently has several restaurants that feature trayless dining: Core, Sabor, Chick-fil-A, On Deck Deli, IQ Fresh, Redington, The Mesa Room and the Cellar Bistro.

The University of Arizona implements trays in certain retail areas for disability accessibility, as well for functionality.

Additionally, all University of Arizona dining options are priced a la carte or as plate deals thus encouraging patrons to purchase only what they want to eat. This financial incentive helps to reduce food waste generated at the University of Arizona.

A brief description of the institution's provision of reusable and/or third party certified compostable to-go containers for to-go food and beverage items (in conjunction with a composting program):

A brief description of the institution's provision of reusable service ware for “dine in” meals and reusable and/or

third party certified compostable service ware for to-go meals (in conjunction with a composting program):

A brief description of any discounts offered to customers who use reusable containers (e.g. mugs) instead of disposable or compostable containers in to-go food service operations:

Reusable 32 ounce reusable mugs are typically given out to incoming freshman and to Residence Life staff, however the mugs can be purchased for \$3.29 plus tax at any of UA's dining areas. Using the reusable mug reduces the cost of a drink by a significant amount. For instance, if one purchases a 32oz. fountain drink without the mug the cost is \$1.69, but if a customer uses the mug the cost is only \$0.79, a 90 cent savings. If a patron purchases a hot drink or coffee there are similar savings in that purchase of a 32oz coffee would be greater than \$2.30 plus tax without the mug, however with the mug the cost is only \$1.19 plus tax. An average discount per ounce was determined for the following field.

A brief description of other dining services waste minimization programs and initiatives:

The website URL where information about the institution's waste minimization initiatives is available:

http://rs.acupcc.org/site_media/uploads/cap/967-cap_1.pdf

Waste Diversion

Responsible Party

Benjamin Champion

Director

Office of Sustainability

Criteria

Institution diverts materials from the landfill or incinerator by recycling, composting, reusing, donating, or re-selling.

This credit includes on-campus dining services operated by the institution or the institution's primary on-site contractor.

This credit does not include construction, demolition, electronic, hazardous, special (e.g. coal ash), universal and non-regulated chemical waste, which are covered in *OP 24: Construction and Demolition Waste Diversion* and *OP 25: Hazardous Waste Management*.

Submission Note:

These data are up-to-date utilizing end of FY14 data.

"---" indicates that no data was submitted for this field

Materials diverted from the solid waste landfill or incinerator:

1,709.71 Tons

Materials disposed in a solid waste landfill or incinerator :

3,119.83 Tons

A brief description of programs, policies, infrastructure investments, outreach efforts, and/or other factors that contributed to the diversion rate, including efforts made during the previous three years:

The University of Arizona is actively reducing the generation of waste on campus through various measures. Facilities Management has improved its recycling programs from recycling 6% of waste generated in 2005 to recycling 30% as of 2010. Donation programs run by Residence Life at the end of the year have increased the amount of diverted waste generated by residents. Donation programs run by student groups on campus also positively impact the diversion rate although the amount is not covered in current UA diversion rate figures since a method of collecting this data from student groups has not been implemented.

A brief description of any food donation programs employed by the institution:

Leftover or surplus food is donated to the local Salvation Army in Tucson.

A brief description of any pre-consumer food waste composting program employed by the institution:

Preparation material food waste is collected by Dining Services and is composted by students at the UA Farm as a part of Students for Sustainability's Compost Cats programs.

A brief description of any post-consumer food waste composting program employed by the institution:

The Student Unions and local restaurants around campus work with the Compost Cats Program to collect post-consumer food waste. The waste is then taken to the UA Agricultural Center where students manage the UA's compostable waste to create a market viable grade compost for use on campus and, eventually, the community.

Does the institution include the following materials in its waste diversion efforts?:

	Yes or No
Paper, plastics, glass, metals, and other recyclable containers	Yes
Food donations	Yes
Food for animals	Yes
Food composting	Yes
Cooking oil	Yes
Plant materials composting	Yes
Animal bedding composting	Yes
Batteries	Yes
Light bulbs	Yes
Toner/ink-jet cartridges	Yes
White goods (i.e. appliances)	Yes
Laboratory equipment	Yes

Furniture	Yes
Residence hall move-in/move-out waste	Yes
Scrap metal	Yes
Pallets	Yes
Motor oil	Yes
Tires	Yes

Other materials that the institution includes in its waste diversion efforts:

Construction and Demolition Waste Diversion

Responsible Party

Benjamin Champion
Director
Office of Sustainability

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.

Submission Note:

Figures for this submission reflect the construction and demolition waste information in our annual waste data for FY14.

In the next full STARS submission in late 2015, UA will report on construction and demolition waste since 2012 for projects that were LEED certified, and thus carefully tracked their waste amounts.

"---" indicates that no data was submitted for this field

Construction and demolition materials recycled, donated, or otherwise recovered:

99.23 Tons

Construction and demolition materials landfilled or incinerated :

264.13 Tons

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:

Through the UA Planning, Design, and Construction's Design and Specifications Standards (DSS) document all new construction and demolition must follow explicit processes and procedures to reduce the amount of materials landfilled or incinerated.

Please view the DSS at

<http://www.pdc.arizona.edu/workwithua/dss/>

Hazardous Waste Management

Responsible Party

Benjamin Champion
Director
Office of Sustainability

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 takes measures to ensure that the electronic waste is recycled responsibly, for example by using a recycler certified under the e-Stewards and/or R2 standards.

Submission Note:

This is from the UA AASHE STARS Report submitted in 2012. These programs and policies remain in place as of March 2015.

"---" indicates that no data was submitted for this field

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?:

Yes

A brief description of steps taken to reduce hazardous, special (e.g. coal ash), universal, and non-regulated chemical waste:

The University of Arizona, through its Risk Management and Safety unit reduces hazardous, universal and non-regulated chemical waste in several ways. The first is that Risk Management posts clear disposal procedures on its website accounting for hazardous and nonhazardous materials.

Through the UA Surplus Property Office, older electrical items are sold to the public or transferred within the University for reuse as opposed to dumping the equipment in the trash.

A brief description of how the institution safely disposes of hazardous, universal, and non-regulated chemical waste:

Risk Management and Safety have created several systems for dealing with waste generated by the UA community. First is that hazardous material both chemical and biological are disposed of in special bins across campus. These bins are then periodically taken away and replaced with new clean bins. The procedure states that employees or responsible individuals must write the name of the substance that is being discarded so that it is disposed of correctly. Secondly, employees are told to contact Risk Management when they need chemicals or glass items disposed of so that Risk Management can take the waste away as soon as possible.

The chemicals and substances that Risk Management and Safety is in charge of, but is not limited to, are ethidium bromide, heavy metals, glass, biological waste, control substances, and sharp objects.

A brief description of any significant hazardous material release incidents during the previous three years, including volume, impact and response/remediation:

No significant breaches that would have occurred during the 2012 data collection period.

A brief description of any inventory system employed by the institution to facilitate the reuse or redistribution of laboratory chemicals:

The department of Risk Management and Safety (RMS) manages a chemical redistribution clearinghouse for UA laboratories and researchers. The program is a first come, first serve system in which interested parties request a needed chemical and RMS delivers it to the party free of charge.

Does the institution have or participate in a program to responsibly recycle, reuse, and/or refurbish all electronic waste generated by the institution?:

Yes

Does the institution have or participate in a program to responsibly recycle, reuse, and/or refurbish electronic waste generated by students?:

Yes

A brief description of the electronic waste recycling program(s):

Electronic waste generated by the University of Arizona is handled by the Surplus Property Office. The Surplus Property Office sells equipment no longer being used by one department or unit to another either in whole or for parts. If the item is not sold within the University, items are put to auction to the public.

A brief description of steps taken to ensure that e-waste is recycled responsibly, workers' basic safety is protected, and environmental standards are met:

The Surplus Property Office does not dispose of electronics, but instead fosters for their reuse either within the University or the public. The Surplus Property Office sells the items to other departments or puts them up for auction to the public.

For more information, please visit the Surplus Property Office Program information website at the link below.

http://pacs.arizona.edu/surplus_department_main

The website URL where information about the institution's hazardous and electronic-waste recycling programs is available:

<http://risk.arizona.edu/environmentalcompliance/index.shtml>

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 and wastewater management also reduce the need for effluent discharge into local surface water supplies, which helps improve the health of local water ecosystems.

Credit
Water Use
Rainwater Management
Wastewater Management

Water Use

Responsible Party

Benjamin Champion
Director
Office of Sustainability

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.

Submission Note:

Data for Water Consumption figures was provided by Facilities Management. Water consumption use is reported in calendar years, not academic or fiscal years.

To fit STARS 2.0, this data was amended using the figures from the Water Data collected for the AASHE STARS Report submitted by the UA in 2012.

Water recycled within the University is based off of the Chilled Water Production systems readings for the performance year of the original report.

A comprehensive update to this data is planned for late 2015.

"---" indicates that no data was submitted for this field

Level of water risk for the institution's main campus:

High

Total water use::

	Performance Year	Baseline Year
Total water use	603,169,000 <i>Gallons</i>	524,205,614 <i>Gallons</i>

Potable water use::

	Performance Year	Baseline Year
Potable water use	543,398,000 <i>Gallons</i>	439,745,000 <i>Gallons</i>

Figures needed to determine "Weighted Campus Users"::

	Performance Year	Baseline Year
Number of residential students	6,189	5,619
Number of residential employees	0	0
Number of in-patient hospital beds	487	487
Full-time equivalent enrollment	38,076	34,689
Full-time equivalent of employees	11,834	11,616
Full-time equivalent of distance education students	3,807	3,468

Gross floor area of building space::

	Performance Year	Baseline Year
Gross floor area	14,160,561 <i>Square Feet</i>	10,154,673 <i>Square Feet</i>

Area of vegetated grounds::

	Performance Year	Baseline Year
Vegetated grounds	131 <i>Acres</i>	125 <i>Acres</i>

Start and end dates of the performance year and baseline year (or three-year periods):

	Start Date	End Date
Performance Year	July 1, 2009	June 30, 2010

Baseline Year	July 1, 2004	July 30, 2005
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A brief description of when and why the water use baseline was adopted:

Water recycled/reused on campus, performance year:

99,229,906.54 Gallons

Recycled/reused water withdrawn from off-campus sources, performance year:

59,772,000 Gallons

A brief description of any water recovery and reuse systems employed by the institution:

In 2003, the University of Arizona began using reclaimed water for the watering of sports fields and lawns.

Please contact Facilities Management for more information.

<http://uanews.org/printview/28754>

A brief description of any water metering and management systems employed by the institution:

The University of Arizona has several buildings metered for potable water consumption. Information for three metered buildings is available for review for FY 09-10, showing the utility and water consumption for a research building, a public area building and a dorm. To access this information please contact the Office of Sustainability at 621-8050.

A brief description of any building retrofit practices employed by the institution, e.g. to install high efficiency plumbing fixtures and fittings:

A brief description of any policies or programs employed by the institution to replace appliances, equipment and systems with water-efficient alternatives:

A brief description of any water-efficient landscape design practices employed by the institution (e.g. xeriscaping):

The University of Arizona Campus Arboretum maintains plant selection and plant care practices appropriate for the desert southwest that minimize inputs (water, labor, chemical, material replacement etc) and conserve resources.

The UA Campus Arboretum Collections Policy and the Tree Care Plan directs the focus of plant selection and care on trees suited to arid or semi-arid conditions typical of the desert southwest or be low water use plants listed by the Arizona Department of Water Resources. Trees are also required to be mulched to cool soil and further reduce evaporation and minimize irrigation needs.

A brief description of any weather-informed irrigation technologies employed by the institution:

Tree workers and Area Crews are responsible for alerting Irrigation staff of irrigation adjustments needed. Watering guidelines and seasonal notes are on file with Facilities Management/Grounds Services.

Irrigation scheduling (drip and lawn sprinkling) on the University of Arizona campus is managed by a CALSENSE “Smart Controller” computer system. Water volume and scheduling respond to historical and actual evapo-transpiration rates on campus, as measured by AZMET weather stations and soil moisture sensors. The computer can respond to rain events, or lack of them, in a 24 hour period. The Irrigation Team is responsible for all scheduling, repairs, and adjustments.

A brief description of other water conservation and efficiency strategies employed by the institution:

The website URL where information about the institution’s water conservation and efficiency initiatives is available:

Responsible Party

Benjamin Champion

Director

Office of Sustainability

Criteria

Part 1

Institution uses Low Impact Development (LID) practices as a matter of policy or standard practice to reduce rainwater/stormwater runoff volume and improve outgoing water quality for new construction, major renovation, and other projects that increase paved surface area on campus or otherwise significantly change the campus grounds.

The policy, plan, and/or strategies cover the entire campus. While the specific strategies or practices adopted may vary depending on project type and location, this credit is reserved for institutions that mitigate rainwater runoff impacts consistently during new construction. Implementing a strategy or strategies for only one new development project is not sufficient for Part 1 of this credit.

Part 2

Institution has adopted a rainwater/stormwater management policy, plan, and/or strategies that mitigate the rainwater runoff impacts of ongoing campus operations and treat rainwater as a resource rather than as a waste product.

The policy, plan, and/or strategies address both the quantity and quality (or contamination level) of rainwater runoff through the use of green infrastructure. Though specific practices adopted may vary across the campus, the policy, plan, and/or strategies cover the entire institution. Implementing strategies for only one building or area of campus is not sufficient for Part 2 of this credit.

Policies adopted by entities of which the institution is part (e.g. state government or the university system) may count for both parts of this credit as long as the policies apply to and are followed by the institution.

Submission Note:

These entries reflect data from the 2012 AASHE STARS submission for UA, and as of March 2015 remain accurate. Additional content will be developed in areas with no entries for the next full UA STARS submission in late 2015.

"---" indicates that no data was submitted for this field

Does the institution use Low Impact Development (LID) practices as a matter of policy or standard practice to reduce rainwater/stormwater runoff volume and improve outgoing water quality for new construction, major renovation, and other projects?:

Yes

A brief description of the institution's Low Impact Development (LID) practices:

With the continuing development of the campus, the University strives to recognize the long-term inherent value of water by conserving, harvesting, capturing, and reusing it. According to section C-9 of the UA Design Specifications and Standards, all projects must account for surface water in their design. As quoted from section C-9:

"Within a project's design process, surface water should be an influence on integrated site design promoting proactive solutions that are consistent with or exceed regulatory standards. Given current limited storm sewer and land capacities, combined with a historic reliance on existing streets for surface water conveyance, some of the mitigation of past and future surface water issues at the University of Arizona should occur on a project by project basis. In the interest of fulfilling this intent, two types of design criteria are noted below. The General Surface Water Guidelines address issues applicable to all projects while the Specific Features Guidelines inform the design intent of specific surface water elements."

To read the full policy please visit:

<http://pdc.arizona.edu/workwithua/dss/rev6/00000%20C-9%20Tab.pdf>

Has the institution adopted a rainwater/stormwater management policy, plan, or strategies that mitigate the rainwater runoff impacts of ongoing campus operations through the use of green infrastructure? :

Yes

A brief description of the institution's rainwater/stormwater management policy, plan, and/or strategies for ongoing campus operations:

The University of Arizona has a formal Stormwater Management Plan (SWMP) promoting best practices in six areas. The six areas that the University of Arizona focuses are:

- Public Education and Outreach
- Public Participation and Involvement
- Illicit Discharge Detection and Elimination
- Construction Site Runoff Control
- Post Construction Runoff Control
- Pollution Prevention and Good Housekeeping

Additionally, Risk Management and Safety provides web delivered training for employees to inform employees how the SWMP relates to everyday job responsibilities.

The full SWMP is available on Risk Management and Safety's website provided below.

A brief description of any rainwater harvesting employed by the institution:

Rainwater harvested directly and stored/used by the institution, performance year:

A brief description of any rainwater filtering systems employed by the institution to treat water prior to release:

A brief description of any living or vegetated roofs on campus:

A brief description of any porous (i.e. permeable) paving employed by the institution:

A brief description of any downspout disconnection employed by the institution:

A brief description of any rain gardens on campus:

A brief description of any stormwater retention and/or detention ponds employed by the institution:

A brief description of any bioswales on campus (vegetated, compost or stone):

A brief description of any other rainwater management technologies or strategies employed by the institution:

The website URL where information about the institution's rainwater management initiatives, plan or policy is available:

<http://risk.arizona.edu/environmentalcompliance/stormwatermanagement.shtml>

Wastewater Management

Responsible Party

David Bradshaw
Program Coordinator
UA Office of Sustainability

Criteria

Institution's wastewater is handled naturally on campus or in the local community. Natural wastewater systems include, but are not limited to, constructed treatment wetlands and Living Machines. To count, wastewater must be treated to secondary or tertiary standards prior to release to water bodies.

This credit recognizes natural handling of the water discharged by the institution. On-site recycling/reuse of greywater and/or blackwater is recognized in *OP 26: Water Use*.

Submission Note:

The UA does have information pertaining to wastewater use, but the 2012 UA AASHE STARS Report and the data that it underlies it do not have this information included. Wastewater will be reported on in the next UA AASHE STARS Report.

This credit was marked as **Not Pursuing** so Reporting Fields will not be displayed.

Planning & Administration

Coordination, Planning & Governance

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 and faculty 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 internal stakeholder engagement in governance are important steps in making sustainability a campus priority and may help advocates implement changes to achieve sustainability goals.

Credit
Sustainability Coordination
Sustainability Planning
Governance

Sustainability Coordination

Responsible Party

Benjamin Champion
Director
Office of Sustainability

Criteria

Institution has at least one sustainability committee, office, and/or officer tasked by the administration or board of trustees to advise on and implement policies and programs related to sustainability on campus. The committee, office, and/or officer focus on sustainability broadly (i.e. not just one sustainability issue, such as climate change) and cover 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 just one department or school within the institution does not count for this credit in the absence of institution-wide coordination.

Submission Note:

This content is up-to-date as of March 2015.

"---" indicates that no data was submitted for this field

Does the institution have at least one sustainability committee, office, and/or officer that focuses on sustainability broadly and covers the entire institution?:

Yes

A brief description of the activities and substantive accomplishments of the committee(s), office(s), and/or officer(s) during the previous three years:

The University of Arizona President's Advisory Council on Environmental Sustainability, the University of Arizona Office of Sustainability, in conjunction with campus partners such as the Institute of the Environment, UA Green Fund, and academic and research units have:

1. Developed a Climate Action Plan 2012
2. Earned a Gold STARS rating in 2012
3. Joined the Billion Dollar Green Challenge to establish a Revolving Loan Fund at the UA
4. Secured outside grants and funding to hire faculty that teach and research sustainability and environmental subjects.

Does the institution have at least one sustainability committee?:

Yes

The charter or mission statement of the committee(s) or a brief description of each committee's purview and activities:

The Presidents Advisory Council on Environmental Sustainability was established in October 2010 as part of a larger reorganization of UA Campus Sustainability. The Council provides comprehensive guidance and advice to the President on high-level issues regarding the University of Arizona's leadership in environmental sustainability as it pertains to campus design, student engagement, operations, education, research, and outreach.

The Council is also responsible for the following:

- Identifying university-wide sustainability priorities, and establishing short and long-term goals and working groups to accomplish goals.
- Working with a separate UA Green Fund Committee to align the Committee's project funding decisions with the university-wide sustainability priorities identified by the Council.
- Advising a university-wide Office of Sustainability to execute and successfully accomplish projects and programs aligned with the priorities and short- and long-term goals identified by the Council.
- Gathering information and feedback from the University community

Members of each committee, including affiliations and role (e.g. staff, student, or faculty):

Co-Chairs

Robert Smith, Senior Associate Vice President, Business Affairs

Jan Cervelli, Dean, College of Architecture + Planning + Landscape Architecture

Administration Representatives

Barbara Bryson, Vice President, Executive Office of the President, Strategic Planning and Analysis

Kendal Washington White, Assistant Vice President, Dean of Students, Student Affairs

Tannya Renee Gaxiola, Assistant Vice President, Community Relations

Ben Champion, Director, UA Office of Sustainability

Academic Unit Representatives

Joaquin Ruiz, Vice President, College of Science, Innovation and Strategy

Jonathan Overpeck, Co-Director, Institute of the Environment

Jim Buizer, Deputy Director, Institute of the Environment, Climate Adaptation and International Development

Jeff Goldberg, Dean, College of Engineering

Student Representatives

Emily Besich, Graduate Professional Student Council

Michael Finnegan, Associated Students of the University of Arizona

Val Rountree, UA Green Fund Committee

Employee Representatives

Jackie Moxley, Director, Water Sustainability Program

Sabrina Helm, Associate Professor, Family & Consumer Sciences

Bill Davidson, Public Information and Marketing Manager, UA Parking Transportation Services

Community Representatives

John Wesley Miller, Owner, John Wesley Miller Companies
Gina Murphy-Darling, Chief Executive Officer, Mrs. Green's World

The website URL where information about the sustainability committee(s) is available:

<http://sustainability.arizona.edu/partners-in-sustainability>

Does the institution have at least one sustainability office that includes more than 1 full-time equivalent (FTE) employee?:

Yes

A brief description of each sustainability office:

The UA Office of Sustainability coordinates environmental sustainability programs, initiatives, and communication across the university, working with students, faculty, and staff to ensure that the UA continues to be a leader in sustainability among its peers.

Full-time equivalent (FTE) of people employed in the sustainability office(s):

4

The website URL where information about the sustainability office(s) is available:

<http://sustainability.arizona.edu/>

Does the institution have at least one sustainability officer?:

Yes

Name and title of each sustainability officer:

Ben Champion, Director; Julia Rudnick, Coordinator Campus Sustainability Programs

A brief description of each sustainability officer position:

The Director of the Office of Sustainability is responsible for strategically identifying, assessing, aligning, and expanding projects and initiatives that make the UA a more sustainable institution. The Director oversees and drives several key projects and initiatives with partners across the UA, and advises the UA Green Fund Committee.

The Coordinator of Campus Sustainability Programs is responsible for managing the day to day operations of the UA Green Fund, develop partnerships with units across campus, and manages the daily operations of the Office of Sustainability.

The website URL where information about the sustainability officer(s) is available:

<http://sustainability.arizona.edu/>

Responsible Party

Benjamin Champion

Director

Office of Sustainability

Criteria

Institution has current and formal plans to advance sustainability. The plan(s) cover one or more of the following areas:

- Curriculum
- Research (or other scholarship appropriate for the institution)
- Campus Engagement
- Public Engagement
- Air & Climate
- Buildings
- Dining Services/Food
- Energy
- Grounds
- Purchasing
- Transportation
- Waste
- Water
- Diversity & Affordability
- Health, Wellbeing & Work
- Investment
- Other

The plan(s) may include measurable objectives with corresponding strategies and timeframes to achieve the objectives.

The criteria may be met by any combination of formally adopted 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.

Submission Note:

The University of Arizona incorporates sustainability into its strategic plan and comprehensive campus plans. As of this writing, a separate sustainability plan is currently under development that will focus more closely on the education aspects of sustainability in addition to physical aspects covered in the Comprehensive Campus Plan and Strategic Plans as well as other guiding documents on campus. Furthermore, additional metrics are to be introduced.

"---" indicates that no data was submitted for this field

Does the institution have current and formal plans to advance sustainability in the following areas? Do the plans include measurable objectives?:

	Current and Formal Plans (Yes or No)	Measurable Objectives (Yes or No)
Curriculum	Yes	Yes
Research (or other scholarship)	Yes	Yes
Campus Engagement	Yes	Yes
Public Engagement	Yes	Yes
Air and Climate	Yes	Yes
Buildings	Yes	Yes
Dining Services/Food	Yes	Yes
Energy	Yes	Yes
Grounds	Yes	Yes
Purchasing	Yes	Yes
Transportation	Yes	Yes
Waste	Yes	Yes
Water	Yes	Yes
Diversity and Affordability	Yes	Yes

Health, Wellbeing and Work	Yes	Yes
Investment	No	No
Other	No	No

A brief description of the plan(s) to advance sustainability in Curriculum:

The University of Arizona identifies interdisciplinarity and sustainability as a core value in the Strategic Plan. This value is pursued through the curriculum as well as research interests.

The measurable objectives, strategies and timeframes included in the Curriculum plan(s):

University of Arizona faculty and staff work to incorporate interdisciplinarity and sustainability into coursework as appropriate. The UA Institute of the Environment tracks degrees and courses that cover environment and sustainability through the Green Course Guide and the Environment and Sustainability Portal.

Accountable parties, offices or departments for the Curriculum plan(s):

University academic units, the Office of Sustainability and the Institute of the Environment

A brief description of the plan(s) to advance sustainability in Research (or other scholarship):

The University of Arizona identifies interdisciplinarity and sustainability as a core value in the Strategic Plan. This value is pursued through research and scholarly pursuits. Additionally, the Office Senior Vice President for Research states that the University excels in many areas, but in particular the University excels in environmental sustainability, space science exploration, bioscience, information technology, and connections that people have to place (land, nation, culture, etc.)

The measurable objectives, strategies and timeframes included in the Research plan(s):

The University measures success through the amount of research dollars awarded to UA researchers in sustainability fields as well as through the research conducted on campus.

Accountable parties, offices or departments for the Research plan(s):

Office of the Senior Vice President for Research, Institute of the Environment

A brief description of the plan(s) to advance Campus Engagement around sustainability:

The University of Arizona Strategic Plan states a goal of 100% student engagement, and sustainability is one of six core competencies for engagement that has been identified as part of its 100% Engagement initiative.

The measurable objectives, strategies and timeframes included in the Campus Engagement plan:

The University will track the way students are engaged across campus and programs. One program, the UA Green Fund, actively tracks how students are involved with funded projects. The Office of Sustainability also keeps track of how students are engaged in sustainability projects and initiatives. The university is developing policies to categorize student engagement experiences by type of engagement competency under the UA 100% Engagement initiative, and sustainability is one of six competencies for the initiative.

Accountable parties, offices or departments for the Campus Engagement plan(s):

All University units are to track student engagement; however the Office of Sustainability will work with academic, research, business and student affairs department to track how students are engaged in sustainability initiatives. Similar efforts will be made to gauge employee engagement.

A brief description of the plan(s) to advance Public Engagement around sustainability:

Three of the University of Arizona's strategic priorities involve public engagement: Innovation, Partnership, and Synergy. The University has stated a value for interdisciplinary and sustainability work. Through the three strategic priorities and the University's land grant mission the University of Arizona will advance public engagement around sustainability.

The measurable objectives, strategies and timeframes included in the Public Engagement plan(s):

The UA is going to increase institutional capacity for interdisciplinary research and education. This will be measured through the number of public talks and lecture series offered by the University, the number of public-private partnerships the University is maintaining and creating and through the number of programs being offered through the Arizona Cooperative Extension that advance sustainability principle.

Accountable parties, offices or departments for the Public Engagement plan(s):

The University of Arizona Office of Sustainability will work with on campus units and the President's Advisory Council on Environmental Sustainability to track these metrics.

A brief description of the plan(s) to advance sustainability in Air and Climate:

The University of Arizona has a formal Climate Action Plan which can be found online at

www.sustainability.arizona.edu

under the Campus Sustainability tab. The plan outlines what has been done at the University, what standard operating procedures continue to reduce and/or work to mitigate emissions, and outlines several ways the University plans to further reduce greenhouse emissions.

The measurable objectives, strategies and timeframes included in the Air and Climate plan(s):

The University of Arizona has committed to being carbon neutral by 2050 and is currently determining achievable goals for 2020. The primary ways the University plans to become carbon neutral is through leading by example and growing partnerships in the local community and the Southwest region. In particular the University is committed to focusing on innovative strategies, designs and policies; adopting proven technologies; and engaging all employees and students in energy efficiency initiatives.

The primary area the UA will reduce its greenhouse gas emissions will largely focus on energy efficiency on campus.

Accountable parties, offices or departments for the Air and Climate plan(s):

The University of Arizona Climate Action Plan is produced by multiple stakeholders from across the University. Updates to the plan will be made by a committee of the stakeholders as needed.

A brief description of the plan(s) to advance sustainability in Buildings:

The University of Arizona is committed to advancing sustainability in the built environment. The Comprehensive Campus Plan as well as the University of Arizona Design Specification and Standards, the UA has clear guidelines for the development and management of campus. Topics covered in the Comprehensive Campus Plan related specifically to buildings focus on continuing to maintain high or improve upon indoor air quality, advance LEED principles in existing structures and new construction, and greening the campus infrastructure be it through energy efficiency improvements, renewable energy or water conservation.

The Design Specification and Standards codifies guidelines for all new construction at the University of Arizona. The document covers water conservation designs, energy efficiency, access, and states that all new building projects meet LEED Silver requirements. See section C-13 for specific details pertaining to Campus Sustainability related to environmental sustainability.

The measurable objectives, strategies and timeframes included in the Buildings plan(s):

Objectives and strategies outlined in the Comprehensive Campus Plan and the Design Specification and Standards utilize an approach focused on institutionalization of sustainability into standard operating procedure. Metrics that are used for are compliance to the standards, number of certified LEED Buildings on campus as well as number of buildings that meet LEED Silver requirements.

Accountable parties, offices or departments for the Buildings plan(s):

The Comprehensive Campus Plan is updated roughly every five years by a committee consisting of representation from across campus including the President's Office, Student Affairs, the Provost, Business Affairs, Research, Health Affairs, University Relations and more. The Design Specification and Standards are enforced by Planning, Design & Construction.

A brief description of the plan(s) to advance sustainability in Dining Services/Food:

The University of Arizona Smart Moves program is committed to improving sustainability in Dining Services/Food. One of the missions of Smart Moves is to increase the nutritional content of food at the University through both healthier food options and through food options that are locally or sustainably sourced.

The measurable objectives, strategies and timeframes included in the Dining Services/Food plan(s):

Smart Moves has redesigned the campus menu to emphasize nutritional content as well as dietary customs such as gluten-free, vegan and vegetarian. The options available are reviewed and updated periodically.

Additionally, Dining Services is procuring more local food as well as produce created on campus.

Accountable parties, offices or departments for the Dining Services/Food plan(s):

Smart Moves and the Arizona Student Union Dining Services.

A brief description of the plan(s) to advance sustainability in Energy:

The UA Climate Action Plan provides an overview of the standard operating procedures that help manage energy at the University of Arizona, reports on innovative projects University students and employees are doing to reduce the University's energy footprint, and provides an outline of how the University will continue to reduce its energy footprint.

The measurable objectives, strategies and timeframes included in the Energy plan(s):

The steps the University is taking to advance sustainability in Energy is to change energy use behavior on campus, reduce energy demand and increase use of greener energy sources, develop additional solar-energy production capacity, increase on campus energy production, and purchase solar energy produced at the UA Tech Park.

Specific metrics that will help track progress towards advancing sustainability in Energy are the number of students and employees engaged in energy conservation/efficiency programs, adherence to the Responsibility Centered Management budget model, the number of energy-efficient electronics and appliances purchased for campus operations, annual energy demand and how that demand is met, the amount of solar power utilized, the amount of energy produced on campus and the amount of solar energy purchased from the UA Tech Park.

Accountable parties, offices or departments for the Energy plan(s):

The entire University is accountable for meeting the goals of the Climate Action Plan.

A brief description of the plan(s) to advance sustainability in Grounds:

The University of Arizona manages over 390 acres through the use of best practices outlined in documents such as the Comprehensive Campus Plan, the Tree Care Plan, the UA Design Specification and Standards, and the Integrated Pest Management policy.

The measurable objectives, strategies and timeframes included in the Grounds plan(s):

Grounds plans do not have specific timeframes. They are standard operating procedures for the University.

Some metrics that are utilized for the purpose of measuring sustainability in grounds is the amount and use of insecticide or herbicide, adherence to the Design Specification and Standards and adherence to the Tree Care Plan.

Accountable parties, offices or departments for the Grounds plan(s):

Facilities Management, the Campus Arboretum, and Planning Design & Construction, are the main entities that implement Grounds related plans.

A brief description of the plan(s) to advance sustainability in Purchasing:

The University of Arizona is committed to advancing sustainability. In 2012, the University formally adopted a Green Purchasing Policy that gives environmental factors weight in purchasing decisions. The purpose of the policy is to develop policies consistent with these Principles:

1. Minimize the consumption of non-replaceable natural resources by reviewing current and proposed future usage and evaluating the pros and cons of alternatives.
2. Seek alternatives to products and processes that are detrimental to the environment by using more "environmentally friendly" products and processes.
3. Minimize waste, including: any packaging, waste produced by the product (or service) in questions, and waste generated by the eventual disposal of the product.
4. Maximize the reuse and recycling of materials.
5. Stimulate demand for "environmentally friendly" products by letting manufacturers and suppliers know environmental performance we expect in products

The measurable objectives, strategies and timeframes included in the Purchasing plan(s):

Through the University's online procurement system the UA is able to track purchases that meet or do not meet the Green Purchasing Policy. All purchases made that are \$5000 or more are monitored.

The University is implementing an awareness campaign and training initiative to familiarize purchasers on campus with the policy.

Accountable parties, offices or departments for the Purchasing plan(s):

UA Procurement and Contract Services is responsible for monitoring and enforcing the policy, however for purchases lower than \$5000, purchasers are encouraged to follow the policy.

The awareness campaign and training initiative is currently being piloted by the Office of Sustainability with support from the UA Green Fund.

A brief description of the plan(s) to advance sustainability in Transportation:

The University of Arizona is actively advancing sustainability in Transportation. The Comprehensive Campus Plan, the Bicycle and Pedestrian Plan, and mission of the alternative transportation division of UA Parking & Transportation Services all serve to promote more [Campus Sustainability Data Collector](#) | [AASHE](#)

sustainable transportation on campus as well as in the community.

The measurable objectives, strategies and timeframes included in the Transportation plan(s):

The University of Arizona measures progress made towards goals outlined in the Comprehensive Campus Plan, Bicycle & Pedestrian Plan, and the mission of mission of the alternative transportation division of UA Parking & Transportation Services through the adoption of alternative fuel vehicles, implementation of public transit programs, increased bicycle use on campus, increased use of infrastructure for non-motorized vehicles and pedestrians, the use of carpool/rideshare services and the use of rent-a-car services by students on campus in addition to other metrics being developed.

Accountable parties, offices or departments for the Transportation plan(s):

Accountable parties are Parking & Transportation Services, Planning Design & Construction, Campus Planning committee, and the Office of Sustainability.

A brief description of the plan(s) to advance sustainability in Waste:

The University's Climate Action Plan outlines what the current efforts lowering the amount of waste generated by the University as well as the ways the University is actively increasing waste diversion in its operations.

The measurable objectives, strategies and timeframes included in the Waste plan(s):

In addition to engaging students, employees and visitors of the University to recycle, compost, and be more efficient with resources, the Climate Action Plan has two primary goals for the University for the foreseeable future.

The first goal is to Reduce Purchase/Acquisition of Non-Recyclable Materials. This will be pursued through adherence to the Green Purchasing Policy and through the development of materials and trainings for department purchases.

The second goal is to increase waste diversion of materials from the waste stream. This will be met through repurposing of materials on and off campus, increasing composting efforts such as Compost Cats, investing in new recycling bins, and through increased outreach that engages students and employees through multiple channels such as a mobile app to word of mouth and traditional signage. Facilities Management is currently striving to improve waste diversion rates by 10% per year for the next five years as of 2012.

Accountable parties, offices or departments for the Waste plan(s):

Facilities Management, student groups, UA Office of Sustainability

A brief description of the plan(s) to advance sustainability in Water:

The University of Arizona advances sustainability in Water primarily through the Comprehensive Campus Plan and the Design Specification and Standards for new buildings. These documents outline goals and standards for water use and development on campus.

The measurable objectives, strategies and timeframes included in the Water plan(s):

Overall, the University wants to lower its water use through the use of best practices and designs, use of innovative technology, but also through the engagement of employees and students.

The University tracks the amount and cost of purchased water as well as whether it is potable or reclaimed. These figures are used to determine reductions in total water use.

Objectives outlined in the Comprehensive Campus Plan and the Design Specification and Standards are implemented as standard operating procedures.

Accountable parties, offices or departments for the Water plan(s):

Facilities Management, Planning Design & Construction

A brief description of the plan(s) to advance Diversity and Affordability:

The University of Arizona clearly states in its strategic plan that the University will emphasize diversity as part of our institutional culture, at all levels. The strategic encompasses students, faculty, and staff across the university.

As a super land grant institution, the University of Arizona is committed to providing education that is accessible while also cutting edge. The University's strategic plan makes a point to recruit students and employees that come from a wide variety of backgrounds and perspectives in effect better reflecting the demographics of Arizona. Making tuition affordable while also providing merit and need based scholarships is essentially to this goal.

The measurable objectives, strategies and timeframes included in the Diversity and Affordability plan(s):

The University of Arizona will track the use of merit and need based scholarships such as the Arizona Assurance Program. The University will also track student and employee demographics through IPEDS reporting as well as through periodic climate assessments.

The Strategic Plan will be up for review in 2018.

Accountable parties, offices or departments for the Diversity and Affordability plan(s):

The entire University is responsible for implementing the Strategic Plan.

A brief description of the plan(s) to advance sustainability in Health, Wellbeing and Work:

The University of Arizona advances sustainability in Health, Wellbeing and Work through empowerment and support of employees and students. Human Resources and the Life and Work Connections program provide services and programs for employees ranging from healthy living to emergency family care which helps employees better integrate and balance life and work. Additionally, the Campus

Health and Wellness center has programming that overall improves the health of students and employees. The Smart Moves program, a program focused on nutrition, health and food sustainability, helps promote active lifestyles and diets. The missions of these programs are campus-wide in scope and together work to make the University's employees and students happy and healthy.

The measurable objectives, strategies and timeframes included in the Health, Wellbeing and Work plan(s):

The Office of Sustainability will work with Human Resources, Life and Work Connections, Smart Moves, and Campus Health to identify the number of participants in programs related to sustainability and to actively promote greater integration between the health and wellness and overarching sustainability goals.

Accountable parties, offices or departments for the Health, Wellbeing and Work plan(s):

The Office of Sustainability, Human Resources, Life and Work Connections, Smart Moves, and Campus Health are the main parties accountable.

A brief description of the plan(s) to advance sustainability in Investment:

None

The measurable objectives, strategies and timeframes included in the Investment plan(s):

None

Accountable parties, offices or departments for the Investment plan(s):

None

A brief description of the plan(s) to advance sustainability in other areas:

None

The measurable objectives, strategies and timeframes included in the other plan(s):

None

Accountable parties, offices or departments for the other plan(s):

None

The institution's definition of sustainability:

The University of Arizona has a working definition of sustainability. Sustainability is the responsible management and long-term viability of environmental, social, and economic systems such that the needs of future generations can be met.

The definition is not yet formally adopted but incorporates the definitions of sustainability across departments and units on campus.

Does the institution's strategic plan or equivalent guiding document include sustainability at a high level?:

Yes

A brief description of how the institution's strategic plan or equivalent guiding document addresses sustainability:

The University of Arizona's strategic plan values sustainability and interdisciplinarity as a core value that is to be pursued in all aspects of the University mission. Additionally, as a super land grant institution, the University is committed to advancing sustainability practices on campus and out in the community.

The main strategic plan can be found at

www.neversettle.arizona.edu

. Additional sustainability planning efforts can be located online at the University's environment and sustainability portal (

<http://www.portal.environment.arizona.edu/campus-sustainability/all>

) and the UA sustainability website (

<http://sustainability.arizona.edu>

).

The website URL where information about the institution's sustainability planning is available:

<http://sustainability.arizona.edu/>

Governance

Responsible Party

David Bradshaw
Program Coordinator
UA Office of Sustainability

Criteria

Part 1

Institution's students participate in governance in one or more of the following ways:

- A. All enrolled students, regardless of type or status, have an avenue to participate in one or more governance bodies (through direct participation or the election of representatives)
- B. There is at least one student representative on the institution's governing body. To count, student representatives must be elected by their peers or appointed by a representative student body or organization.

And/or

C. Students have a formal role in decision-making in regard to one or more of the following:

- Establishing organizational mission, vision, and/or goals
- Establishing new policies, programs, or initiatives
- Strategic and long-term planning
- Existing or prospective physical resources
- Budgeting, staffing and financial planning
- Communications processes and transparency practices
- Prioritization of programs and projects

Part 2

Institution's staff participate in governance in one or more of the following ways:

- A. All staff members, regardless of type or status, have an avenue to participate in one or more governance bodies (through direct participation or the election of representatives)
- B. There is at least one non-supervisory staff representative on the institution's governing body. To count, staff representatives must be elected by their peers or appointed by a representative staff body or organization.

And/or

C. Non-supervisory staff have a formal role in decision-making in regard to one or more of the areas outlined in Part 1.

Part 3

Institution's faculty participate in governance in one or more of the following ways:

A. All faculty members, regardless of type or status, have an avenue to participate in one or more governance bodies (through direct participation or the election of representatives)

B. There is at least one teaching or research faculty representative on the institution's governing body. To count, faculty representatives must be elected by their peers or appointed by a representative faculty body or organization.

And/or

C. Faculty have a formal role in decision-making in regard to one or more of the areas outlined in Part 1.

Participatory or shared governance bodies, structures and/or mechanisms may be managed by the institution (e.g. committees, councils, senates), by stakeholder groups (e.g. student, faculty and staff committees/organizations), 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.

"---" indicates that no data was submitted for this field

Do all enrolled students, regardless of type or status, have an avenue to participate in one or more governance bodies (through direct participation or the election of representatives)?:

Yes

A brief description of the mechanisms through which students have an avenue to participate in one or more governance bodies:

Students may run for a seat in the Associated Students of the University of Arizona and they may also participate on committees and boards such as the Student Services Fee Board or the UA Green Fund.

Is there at least one student representative on the institution's governing body who was elected by peers or appointed by a representative student body or organization?:

Yes

A brief description of student representation on the governing body, including how the representatives are selected:

The President of the Associated Students of the University of Arizona (ASUA) and the President of the Graduate and Professional Student Council (GPSC) represent the student body for high level governing bodies.

These representatives are selected through an open election on campus. ASUA's President is selected primarily by undergraduate students whereas the GPSC President is selected by graduate and professional students.

Do students have a formal role in decision-making in regard to the following?:

	Yes or No
--	-----------

Establishing organizational mission, vision, and/or goals	Yes
Establishing new policies, programs, or initiatives	Yes
Strategic and long-term planning	Yes
Existing or prospective physical resources	Yes
Budgeting, staffing and financial planning	Yes
Communications processes and transparency practices	Yes
Prioritization of programs and projects	Yes

A brief description of the formal student role in regard to each area indicated, including examples from the previous three years:

Students have the opportunity to sit on institutional steering committees or be represented by representatives of the student government. Examples of the groups that students have a formal role are through various President's Advisory Council, Student Services Fee Advisory Board, and the committee responsible for the development of the UA Strategic Plan.

Do all staff, regardless of type or status, have an avenue to participate in one or more governance bodies (through direct participation or the election of representatives)?:

Yes

A brief description of the mechanisms through which all staff have an avenue to participate in one or more governance bodies:

Classified and Appointed Professionals may participate in their respective employee type committees. The individuals that serve on these committees represent the employee type in higher level administrative bodies.

Is there at least one non-supervisory staff representative on the institution's governing body who was elected by peers or appointed by a representative staff body or organization?:

Yes

A brief description of non-supervisory staff representation on the governing body, including how the representatives are selected:

Yes. Through the Classified and Appointed Professional employee committees the University offers the non-supervisory staff representation on University governing bodies.

Do non-supervisory staff have a formal role in decision-making in regard to the following? :

	Yes or No
Establishing organizational mission, vision, and/or goals	Yes
Establishing new policies, programs, or initiatives	Yes
Strategic and long-term planning	Yes
Existing or prospective physical resources	Yes
Budgeting, staffing and financial planning	Yes
Communications processes and transparency practices	Yes
Prioritization of programs and projects	Yes

A brief description of the formal staff role in regard to each area indicated, including examples from the previous three years:

Through staff and appointed professional committees employees are able to weigh in on the UA Comprehensive Campus Plan, the Strategic Plan, and other guiding principles to that shape the direction the UA's mission and priorities will face.

Do all faculty, regardless of type or status, have an avenue to participate in one or more governance bodies (through direct participation or the election of representatives)?:

Yes

A brief description of the mechanisms through which all faculty (including adjunct faculty) have an avenue to participate in one or more governance bodies:

Through the Faculty Senate, UA faculty have the opportunity to sit on a variety of committees that work to create a good environment for faculty as well as provide faculty consultation on campus wide initiatives, mission, interactions, and more.

Is there at least one teaching or research faculty representative on the institution's governing body who was elected by peers or appointed by a representative faculty body or organization?:

Yes

A brief description of faculty representation on the governing body, including how the representatives are selected:

The University of Arizona practices shared governance with its faculty, appointed personnel, staff, students, and our ultimate governing body, the Arizona Board of Regents. Faculty members share in recommending academic curricula and academic personnel policies, of course, but also in the strategic and financial planning process; and in developing policies and procedures relative to the general operations and development of the University.

Do faculty have a formal role in decision-making in regard to the following?:

	Yes or No
Establishing organizational mission, vision, and/or goals	Yes
Establishing new policies, programs, or initiatives	Yes
Strategic and long-term planning	Yes
Existing or prospective physical resources	Yes
Budgeting, staffing and financial planning	Yes
Communications processes and transparency practices	Yes
Prioritization of programs and projects	Yes

A brief description of the formal faculty role in regard to each area indicated, including examples from the previous three years:

The Faculty Senate through its various committees and ad hoc committees has a role in addressing each of the categories above.

The website URL where information about the institution’s governance structure is available:

<http://facultygovernance.arizona.edu/>

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.

Credit
Diversity and Equity Coordination
Assessing Diversity and Equity
Support for Underrepresented Groups
Support for Future Faculty Diversity
Affordability and Access

Diversity and Equity Coordination

Responsible Party

Benjamin Champion
Director
Office of Sustainability

Criteria

Part 1

Institution has a diversity and equity committee, office and/or officer tasked by the administration or governing body to advise on and implement policies, programs, and trainings related to diversity and equity on campus. The committee, office and/or officer focuses on student and/or employee diversity and equity.

Part 2

Institution makes cultural competence trainings and activities available to all members of one or more of the following groups:

- Students
 - Staff
 - Faculty
 - Administrators
-

"---" indicates that no data was submitted for this field

Does the institution have a diversity and equity committee, office, and/or officer tasked by the administration or governing body to advise on and implement policies, programs, and trainings related to diversity and equity on campus?:

Yes

Does the committee, office and/or officer focus on one or both of the following?:

	Yes or No
Student diversity and equity	Yes
Employee diversity and equity	Yes

A brief description of the diversity and equity committee, office and/or officer, including purview and activities:

Programs for Inclusive Excellence, Office of the President serves as a focal point for campus diversity efforts and collaborates with campus leadership to develop high-quality, high impact strategies to advance inclusive excellence at the University of Arizona, the southwest's premier research institution.

The office's most critical function is to use empirically based research findings and best practices to advise the President on methods to continually embed diversity, equity, and inclusion in the core of University of Arizona's mission; recognizing that only by doing so can the University of Arizona sustain itself over the long-term in a dynamic, interconnected, diverse and global marketplace while also achieving the level of excellence necessary in its teaching, research, and service to become one of the nation's top ten public research institutions.

The full-time equivalent of people employed in the diversity and equity office:

1

The website URL where information about the diversity and equity committee, office and/or officer is available:

<http://www.arizona.edu/diversity>

Does the institution make cultural competence trainings and activities available to all members of the following groups?:

	Yes or No
Students	Yes
Staff	Yes
Faculty	Yes
Administrators	Yes

A brief description of the cultural competence trainings and activities:

The University of Arizona encourages cultural competency in many ways. For faculty and staff there are professional development courses that encourage faculty and staff to support multiple perspectives and promote respect of other cultures.

In addition to professional development, all students and employees may attend the SafeZone training workshops administered by the Center of Lesbian, Gay, Bisexual, Transgender, and Queer Studies. SafeZone training raises awareness to the issues that the LGBTQ community faces and promotes an inclusive atmosphere at the University of Arizona.

Lastly, employees can take university courses through the Qualified Tuition Reduction program allowing employees the opportunity to learn about a multitude of cultures and ideas.

For more information please visit:

http://www.hr.arizona.edu/08_o/development3/

<http://deanofstudents.arizona.edu/safezone>

http://www.hr.arizona.edu/04_cb/qtr/

The website URL where information about the cultural competence trainings is available:

Assessing Diversity and Equity

Responsible Party

David Bradshaw
Program Coordinator
UA Office of Sustainability

Criteria

Institution assesses diversity and equity on campus and uses the results to guide policy, programs, and initiatives. The assessment(s) address one or more of the following areas:

1. **Campus climate**, e.g. through a survey or series of surveys to gather information about the attitudes, perceptions and experiences of campus stakeholders and underrepresented groups
 2. **Student diversity and educational equity**, e.g. through analysis of institutional data on diversity and equity by program and level, comparisons between graduation and retention rates for diverse groups, and comparisons of student diversity to the diversity of the communities being served by the institution
 3. **Employee diversity and employment equity**, e.g. through analysis of institutional data on diversity and equity by job level and classification, and comparisons between broad workforce diversity, faculty diversity, management diversity and the diversity of the communities being served by the institution
 4. **Governance and public engagement**, e.g. by assessing access to and participation in governance on the part of underrepresented groups and women, the centrality of diversity and equity in planning and mission statements, and diversity and equity in public engagement efforts
-

"---" indicates that no data was submitted for this field

Has the institution assessed diversity and equity in terms of campus climate?:

Yes

A brief description of the campus climate assessment(s) :

There are a plethora of studies used for studying diversity and equity policy at the University of Arizona. Campus Climate studies have been administered as have more specific studies for specific groups.

Has the institution assessed student diversity and educational equity?:

Yes

A brief description of the student diversity and educational equity assessment(s):

The University of Arizona periodically reviews that goals of the Diversity Action Plan. So far the Plan has been reviewed twice since it's creation in 2002. Additional assessments are made for specific groups such as Faculty or the LGBTQ community.

Has the institution assessed employee diversity and employment equity?:

Yes

A brief description of the employee diversity and employment equity assessment(s):

Through IPEDS as well as cooperation between the Office of Institutional Equity and Human Resources diversity and employment equity are assessed regularly according the Equal Employment Opportunity Act.

Has the institution assessed diversity and equity in terms of governance and public engagement?:

No

A brief description of the governance and public engagement assessment(s):

As of this submission the UA Office of Sustainability does not know if this type of assessment has been done.

The website URL where information about the assessment(s) is available:

<http://www.arizona.edu/diversity/statistics-reports>

Support for Underrepresented Groups

Responsible Party

David Bradshaw
Program Coordinator
UA Office of Sustainability

Criteria

Part 1

Institution has mentoring, counseling, peer support, academic support, or other programs in place to support underrepresented groups on campus.

This credit excludes programs to help build a diverse faculty throughout higher education, which are covered in *PA 7: Support for Future Faculty Diversity*.

Part 2

Institution has a discrimination response policy, program and/or team (or the equivalent) to respond to and support those who have experienced or witnessed a bias incident, act of discrimination or hate crime.

"---" indicates that no data was submitted for this field

Does the institution have mentoring, counseling, peer support, academic support, or other programs to support underrepresented groups on campus?:

Yes

A brief description of the programs sponsored by the institution to support underrepresented groups:

The University of Arizona is home to a variety of groups and services that support under-represented groups in the student body. Student associations for minorities are available as are organizations that focus on fostering an inclusive community on campus, financial support, research assistance and more. UA is committed to creating an inclusive campus community that promotes success for all students.

For a full listing of programs please visit

<http://www.arizona.edu/diversity/student-resources>

The website URL where more information about the support programs for underrepresented groups is available:

<http://www.arizona.edu/diversity>

Does the institution have a discrimination response policy and/or team (or the equivalent) to respond to and support those who have experienced or witnessed a bias incident, act of discrimination or hate crime?:

Yes

A brief description of the institution's discrimination response policy, program and/or team:

Through the University of Arizona's Office of Institutional Equity the UA's discrimination response policy can be found. It essentially outline equal opportunity in employment as well as nondiscrimination and anti-harassment for all students and employees.

The website URL where more information about the institution's discrimination response policy, program and/or team is available:

<http://equity.arizona.edu/policies>

Does the institution offer housing options to accommodate the special needs of transgender and transitioning students?:

Yes

Does the institution produce a publicly accessible inventory of gender neutral bathrooms on campus?:

Support for Future Faculty Diversity

Responsible Party

David Bradshaw
Program Coordinator
UA Office of Sustainability

Criteria

Institution administers and/or participates in a program or programs to help build a diverse faculty throughout higher education.

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.)
 - Mentoring, 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.
 - Mentoring, financial, and/or other support programs for doctoral and post-doctoral students from underrepresented groups.
-

"---" indicates that no data was submitted for this field

Does the institution administer and/or participate in a program or programs to help build a diverse faculty that meet the criteria for this credit?:

Yes

A brief description of the institution's programs that help increase the diversity of higher education faculty:

The University of Arizona offers a multitude of programs that help increase diversity in higher education faculty by providing scholarships and fellowships to outstanding members of underrepresented groups.

One the programs that serves this purpose is the Knowledge Rivers Fellowship through the School of Information Resources and Library Science that focuses on library and information issues from the perspectives of Hispanics and Native Americans.

Additionally, the UA supports Native Americans wishing to pursue doctorate degrees in education and other fields that can promote their nation's economic development and well-being.

The website URL where more information about the faculty diversity program(s) is available :

<http://www.grad.arizona.edu/diversity/funding>

Affordability and Access

Responsible Party

David Bradshaw

Program Coordinator

UA Office of Sustainability

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 prepare students from low-income backgrounds for higher education (e.g. U.S. federal TRIO programs)
- Scholarships provided specifically for low-income students
- Programs to guide parents of low-income students through the higher education experience
- 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 is accessible and affordable to low-income students as demonstrated by one or more of the following indicators:

- A. The percentage of entering students that are low-income
- B. The graduation/success rate for low-income students
- C. The percentage of student financial need met, on average
- D. The percentage of students graduating with no interest-bearing student loan debt

Submission Note:

The UA Office of Sustainability at this time does not have access to the data required for Part 2 of this credit. Partnerships are being built so that such data can be shared between units on campus in a way that complies with FERPA and other student privacy legislation.

"---" indicates that no data was submitted for this field

Does the institution have policies and programs in place to make it accessible and affordable to low-income students?:

Yes

A brief description of any policies and programs to minimize the cost of attendance for low-income students:

The University of Arizona offers a variety of scholarships to students and helps students find and apply for scholarships. In addition to these services, UA has established the Arizona Assurance Fund. This fund helps Arizona families send children to college without accumulating significant financial debt.

For more information on the Arizona Assurance Fund please visit

<http://financialaid.arizona.edu/assurance>

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For more information on financial services available to underrepresented groups at the University of Arizona please visit

<http://www.arizona.edu/diversity/get-financial-resources>

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A brief description of any programs to equip the institution's faculty and staff to better serve students from low-income backgrounds:

The University of Arizona promotes faculty and staff to create inclusive environments. The Office of the Special Advisor to the President for Diversity and Inclusion maintains a website with resources for creating inclusive classrooms and workplaces. Many of the topics deal with mitigating bias as well as using alternative methods for working with students from different backgrounds.

For more information please visit

<http://www.arizona.edu/diversity/resources-inclusive-classrooms-and-workplaces>

A brief description of any programs to prepare students from low-income backgrounds for higher education:

The University of Arizona provides programming in the community that targets local low-income students for higher education preparation.

Specific programs that the University implements are:

Math Engineering Science Achievement- UA works to increase the number of ethnic minority, low-income, and first-generation college-bound students who are eligible to enter a degree program at a university.

GEAR UP- GEAR UP College coaches work at five Tucson high schools and offer a variety of free programs and services to students and their families. Activities include career exploration opportunities, college knowledge workshops, tutoring, educational field trips, campus visits and tours, summer enrichment activities, Math through Mariachi, and Voices of GEAR UP.

High School Programs- The Summer Engineering Robotics Program, Pharmcamp, and the Summer of Excellence Programs work to provide an opportunity for high school students to experience college culture while promoting academic experience.

Additionally, Project SOAR (Student Outreach, Access, and Resiliency) partners with a local charter school, the Wildcat School, by providing UA students who act as mentors to the students and emissaries for the university.

A brief description of the institution's scholarships for low-income students:

There are a wide variety of scholarships available to students of the University of Arizona. Please contact financial services to learn more about scholarships.

A brief description of any programs to guide parents of low-income students through the higher education experience:

The University of Arizona recognizes the importance that parents have in students' college experience and helps instruct parents for this the period of their child's life through the College Academy for Parents (CAP).

CAP is a program designed specifically for elementary parents to assist them in guiding their young children toward a university education. There are many steps to take to ensure a child is ready for college, and CAP guides parents through everything from college admissions and financial aid to academic preparation and parent engagement. By the end of the program parents are well prepared to guide your student through to middle school, high school and beyond.

For more information please visit

<http://eao.arizona.edu/cap/information>

A brief description of any targeted outreach to recruit students from low-income backgrounds:

The Office of Admissions has targeted outreach to local high schools. While visits to all local high schools are scheduled, schools that have higher numbers of under-represented groups and low-income students receive greater attention. In addition to visits, the Office of Admissions conducts phone campaigns to low-income households to recruit students to attend the University of Arizona. First generation college students and low income students are the targeted groups for these efforts.

For more information please visit the Office of Admissions website (

<http://www.admissions.arizona.edu>

) or call 520-621-3237

A brief description of other admissions policies or programs to make the institution accessible and affordable to low-income students:

A brief description of other financial aid policies or programs to make the institution accessible and affordable to low-income students:

A brief description of other policies and programs to make the institution accessible and affordable to low-income students not covered above:

Does the institution have policies and programs in place to support non-traditional students?:

Yes

A brief description of any scholarships provided specifically for part-time students:

Through the Office of Financial Aid as well as Scholarship Universe part-time student locate scholarships. Scholarships vary in size and amount.

A brief description of any onsite child care facilities, partnerships with local facilities, and/or subsidies or financial support to help meet the child care needs of students:

The University of Arizona partners with First Things First a local program that provides Child Care Scholarships. Additionally the University offers a Childcare and Housing Subsidy program as well as a Sick Child and Emergency Back-up Care program to students and employees so that class or work need not be missed.

A brief description of other policies and programs to support non-traditional students:

The UA Life and Work Connections offers many programs to help nontraditional students, especially those with children or care giving responsibilities. Another program that helps non traditional students is the Veterans Education and Transition Services program. The program works with veterans to ensure that they adjust civilian and university life smoothly and that they receive the attention and support they need to succeed.

Does the institution wish to pursue Part 2 of this credit (accessibility and affordability indicators)?:

No

Indicators that the institution is accessible and affordable to low-income students::

	Percentage (0-100)
The percentage of entering students that are low-income	---

The graduation/success rate for low-income students	---
The percentage of student financial need met, on average	---
The percentage of students graduating with no interest-bearing student loan debt	---

The percentage of students that participate in or directly benefit from the institution's policies and programs to support low-income and non-traditional students:

The website URL where information about the institution's affordability and access programs is available:

Health, 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 making fair and responsible investments in its human capital. Such investments include offering benefits, wages, and other assistance that serve to respectfully and ethically compensate workers and acting to protect and positively affect the health, safety and wellbeing of the campus community. Investment in human resources is integral to the achievement of a healthy and sustainable balance between human capital, natural capital, and financial capital.

Credit
Employee Compensation
Assessing Employee Satisfaction
Wellness Program
Workplace Health and Safety

Employee Compensation

Responsible Party

David Bradshaw
Program Coordinator
UA Office of Sustainability

Criteria

Part 1

Institution's employees and/or the employees of its on-site contractors are covered by sustainable compensation standards, guidelines, or policies and/or collective bargaining agreements.

A sustainable compensation (or "living wage") standard, guideline or policy is one that addresses wages and benefits in terms of the ability of employees to meet basic needs. For example, a sustainable compensation policy may index hourly wages to a poverty guideline or to local cost-of-living indicators. A labor market survey, salary survey or similar assessment may be used in conjunction with a basic needs/cost-of-living approach, but is not sufficient on its own to count as a sustainable compensation policy.

Part 2

Institution's employees and/or the employees of its on-site contractors receive sustainable compensation.

To earn points for Part 2 of this credit, an institution must assess employee compensation against one or more of the following:

1. A sustainable compensation standard developed or adopted by a committee with multi-stakeholder representation (i.e. its membership includes faculty, staff, and students and may include Human Resources administrators or other parties). The standard need not be formally adopted by the institution.
2. A sustainable compensation standard that is in use in the institution's locality. The standard may be formal (e.g. a "living wage" ordinance covering public employees) or informal (e.g. a standard adopted by a local, regional or national campaign).
3. An appropriate poverty guideline, threshold or low-income cut-off for a family of four.

For institutions that elect to assess compensation against a poverty guideline, threshold or low-income cut-off, sustainable compensation is defined as wages equivalent to 120 percent of the poverty guideline for a family of four. An institution may offset up to 20 percent of the wage criteria with employer-paid benefits that address basic needs (e.g. healthcare and retirement contributions).

Both parts of this credit are based on the total number of employees working on campus as part of regular and ongoing campus operations, which includes:

- Staff and faculty, i.e. all regular full-time, regular part-time and temporary (or non-regular) employees, including adjunct faculty and graduate student employees (e.g. teaching and research assistants). Institutions may choose to include or omit undergraduate student workers.
- Employees of contractors that work on-site as part of regular and ongoing campus operations. Such contractors may include, but are not limited to, providers of dining/catering, cleaning/janitorial, maintenance, groundskeeping, transportation, and retail services.

Construction and demolition crews and other temporary contracted employees may be excluded.

Submission Note:

The UA Office of Sustainability chooses to not pursue part two of this credit since more data collection is needed to adequately answer the questions fully.

Information for contractors is not available. Contractors are expected to abide by Arizona Board Of Regents standards.

"---" indicates that no data was submitted for this field

Number of employees:

14,834

Number of staff and faculty covered by sustainable compensation standards, guidelines, or policies; and/or collective bargaining agreements:

14,834

Does the institution have employees of contractors working on-site as part of regular and ongoing campus operations?:

No

Number of employees of contractors working on campus:

Number of employees of contractors covered by sustainable compensation standards, guidelines, or policies and/or collective bargaining agreements:

0

A brief description of the sustainable compensation standards, guidelines, or policies; and/or collective bargaining agreements covering staff, faculty and/or employees of contractors:

The sustainable compensation that the University of Arizona is compliant with Arizona law. Students earn Arizona minimum wage and classified staff earn a wage higher than minimum wage dependent on experience. Health benefit cover most primary care services and offer prescription discounts. The health benefits may vary based on the classification of employee, but in all cases dental is offered as is a basic life insurance policy.

Does the institution wish to pursue Part 2 of this credit (assessing employee compensation)?:

No

Number of staff and faculty that receive sustainable compensation:

Number of employees of contractors that receive sustainable compensation:

0

A brief description of the standard(s) against which compensation was assessed:

A brief description of the compensation (wages and benefits) provided to the institution's lowest paid regular, full-time employees:

A brief description of the compensation (wages and benefits) provided to the institution's lowest paid regular, part-time employees:

A brief description of the compensation (wages and benefits) provided to the institution's lowest paid temporary (non-regular) staff:

A brief description of the compensation (wages and benefits) provided to the institution's lowest paid temporary (non-regular, adjunct or contingent) faculty:

A brief description of the compensation (wages and benefits) provided to the institution's lowest paid student employees (graduate and/or undergraduate, as applicable):

The local legal minimum hourly wage for regular employees:

Does the institution have an on-site child care facility, partner with a local facility, and/or provide subsidies or financial support to help meet the child care needs of faculty and staff?:

Yes

Does the institution offer a socially responsible investment option for retirement plans?:

Yes

The website URL where information about the institution's sustainable compensation policies and practices is available:

http://www.hr.arizona.edu/compensation_policies

Assessing Employee Satisfaction

Responsible Party

David Bradshaw

Program Coordinator
UA Office of Sustainability

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.

Submission Note:

The University of Arizona committed a campus wide Faculty Survey in 2006 using the COACE framework. Results of this survey can be found at

<http://oirps.arizona.edu/UACOACHEFacultySurvey.asp>

This credit was marked as **Not Pursuing** so Reporting Fields will not be displayed.

Wellness Program

Responsible Party

David Bradshaw
Program Coordinator
UA Office of Sustainability

Criteria

Institution has a wellness and/or employee assistance program that makes available counseling, referral, and wellbeing services to all members of any of the following groups:

- Students
 - Staff
 - Faculty
-

"---" indicates that no data was submitted for this field

Does the institution make counseling, referral, and wellbeing services available to all members of the following groups?:

	Yes or No
Students	Yes
Staff	Yes
Faculty	Yes

A brief description of the institution's wellness and/or employee assistance program(s):

The University of Arizona has a very robust worksite wellness program that includes fitness and nutrition consultations; health screenings; CPR Training; Wellness newsletter; flu shots; walking paths and programs; lactation support; smoking cessation; strength training; and free classes on nutrition, exercise, disease prevention, and family/life cycle topics. UA Life and Work Connections offers Employee Assistance Counseling to faculty and staff.

For a list of current classes please visit:

http://lifework.arizona.edu/wsw/prentations_and_classes

The majority of these wellness programs are also offered to students, particularly through the UA Campus Health Service, a partner of the UA Life and Work Connections program. More information about campus health programs at

www.health.arizona.edu

The website URL where information about the institution's wellness program(s) is available:

<http://lifework.arizona.edu/>

Workplace Health and Safety

Criteria

Part 1

Institution has reduced its total number of reportable workplace injuries and occupational disease cases per full-time equivalent (FTE) employee compared to a baseline.

Part 2

Institution has fewer than 5 reportable 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-reportable 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 *Sampling and Data Standards*, below, for further guidance on reporting injuries and disease cases.

Submission Note:

The University of Arizona Office of Sustainability does not have data for this credit at this time; however we hope to have data to meet the needs of this credit for the next AASHE STARS Report submission sometime in 2015 and 2016.

This credit was marked as **Not Pursuing** so Reporting Fields will not be displayed.

Investment

This subcategory seeks to recognize institutions that make investment decisions that promote sustainability. Most institutions invest some of their assets in order to generate income. Together, colleges and universities invest hundreds of billions of dollars. Schools with transparent and democratic investment processes promote accountability and engagement by the campus and community. Furthermore, institutions can support sustainability by investing in companies and funds that, in addition to providing a strong rate of return, are committed to social and environmental responsibility. Investing in these industries also supports the development of sustainable products and services. Finally, campuses can engage with the businesses in which they are invested in order to promote sustainable practices.

Throughout this subcategory, the term “sustainable investment” is inclusive of socially responsible, environmentally responsible, ethical, impact, and mission-related investment.

Credit
Committee on Investor Responsibility
Sustainable Investment
Investment Disclosure

Committee on Investor Responsibility

Responsible Party

Benjamin Champion

Director

Office of Sustainability

Criteria

Institution has a formally established and active committee on investor responsibility (CIR) or similar body that makes recommendations to fund decision-makers on socially and environmentally responsible investment opportunities across asset classes, including proxy voting. The body has multi-stakeholder representation, which means its membership includes faculty, staff, and students and may 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 agenda.

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.

Submission Note:

This information is up-to-date as of March 2015

"---" indicates that no data was submitted for this field

Does the institution have a formally established and active committee on investor responsibility (CIR) or similar body that has multi-stakeholder representation and otherwise meets the criteria for this credit?:

No

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:

The University of Arizona does not have a CIR specifically tasked to environmental concerns.

Members of the CIR, including affiliations and role (e.g. student, faculty, alumni):

None

Examples of CIR actions during the previous three years:

Campus Sustainability Data Collector | AASHE

The website URL where information about the CIR is available:

Responsible Party

Benjamin Champion

Director

Office of Sustainability

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

Submission Note:

Numbers on total endowment size and links to UA Foundation reports are up-to-date as of Fall 2014. Numbers on amounts of sustainable investments are older data and have not been verified as Fall 2014 conditions. Similarly, descriptions of sustainability investments in the endowment portfolio reflect previous conditions and may not reflect current investment vehicles.

"---" indicates that no data was submitted for this field

Total value of the investment pool:

665,400,000 US/Canadian \$

Value of holdings in each of the following categories::

	Value of Holdings
Sustainable industries (e.g. renewable energy or sustainable forestry)	5,209,271 US/Canadian \$
Businesses selected for exemplary sustainability performance (e.g. using criteria specified in a sustainable investment policy)	0 US/Canadian \$
Sustainability investment funds (e.g. a renewable energy or impact investment fund)	1,931,705 US/Canadian \$
Community development financial institutions (CDFIs) or the equivalent	0 US/Canadian \$
Socially responsible mutual funds with positive screens (or the equivalent)	0 US/Canadian \$
Green revolving loan funds that are funded from the endowment	---

A brief description of the companies, funds, and/or institutions referenced above:

The Leuthold Global Clean Technology Fund will generally invest in four clean technology groups including: “Alternative Energy,” “Resource Conservation,” “Clean Water,” and “Clean Environment.” Securities are selected based on their expectations for long-term capital appreciation. The Fund may invest in companies of all sizes and industries as well as in “growth” stocks and “value” stocks.

Equity securities are selected on a company-by-company basis primarily through the use of fundamental analysis. The Fund attempts to identify companies for possible investment by analyzing their valuations and growth prospects based on an understanding of their leadership potential, proprietary and technological advantages, financial condition, sales and earnings growth potential, and economic, political and regulatory environment.

The Fund will normally invest at least 40% of its asset in securities from international markets

Technology Partners is an investment company that invests solely in Cleantech, specifically in energy, water, and advanced-materials companies; and Life Sciences, specifically neuromedicine, cost-effective medicine, and consumer medicine.

GMO Renewable Resources is arm of GMO LLC. The Renewable Resources are focus primarily on the timber market. GMO’s Renewable Resources Division launched the Long Horizons Forestry strategy, which invests in non-traditional species with a 15- to 20-year time horizon.

Does the institution have a publicly available sustainable investment policy?:

No

A copy of the sustainable investment policy:

The sustainable investment policy:

Does the institution use its sustainable investment policy to select and guide investment managers?:

A brief description of how the policy is applied, including recent examples:

Does the institution's sustainable investment policy include negative screens?:

No

A brief description of the negative screens and how they have been implemented:

Approximate percentage of the endowment that the negative screens apply to:

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?:

No

A copy of the proxy voting guidelines or proxy record:

A brief description of how managers are adhering to proxy voting guidelines:

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?:

No

Examples of how the institution has engaged with corporations in its portfolio about sustainability issues during the previous three years:

The UA Foundation and the Office of Investments do not participate directly in proxy voting. 95% of assets are held in mutual funds or limited liability companies (LLC). The managers of the mutual funds or LLCs are given the authority to vote on behalf of the University of Arizona. Examples of funds that would likely vote in shareholder advocacy as described for this credit are Leuthold Global Clean Technology Fund, Technology Partners Fund, and GMO Renewable Resources.

Does the institution engage in policy advocacy by participating in investor networks and/or engaging in inter-organizational collaborations to share best practices?:

No

A brief description of the investor networks and/or collaborations:

The website URL where information about the institution's sustainable investment efforts is available:

http://www.uafoundation.org/about/presidents_office/financial_services/financial.shtml

Investment Disclosure

Responsible Party

Benjamin Champion

Director

Office of Sustainability

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.

Submission Note:

The University of Arizona works within Arizona State Law to manage its endowment. As per regulation, federal 990 statements are submitted annually. Additionally, reading the UA Endowment Report sheds light on the composition of and the investment strategies used for the endowment. The current report can be found at http://uafoundation.org/about/presidents_office/financial_services/endowment_reports.shtml

This content is up-to-date as of March 2015.

"---" indicates that no data was submitted for this field

Does the institution make a snapshot of its investment holdings available to the public?:

Yes

The percentage of the total investment pool included in the snapshot of investment holdings:

100

A copy of the investment holdings snapshot:

The website URL where the holdings snapshot is publicly available:

http://uafoundation.org/about/presidents_office/financial_services/990s_statements.shtml

Innovation

Innovation

These credits recognize institutions that are seeking innovative solutions to sustainability challenges and demonstrating sustainability leadership in ways that are not otherwise captured by STARS.

Credit
Innovation 1
Innovation 2
Innovation 3
Innovation 4

Responsible Party

Benjamin Champion

Director

Office of Sustainability

Criteria

1. Innovation credits are reserved for new, extraordinary, unique, ground-breaking, or uncommon outcomes, policies, and practices that greatly exceed the highest criterion of an existing STARS credit or are not covered by an existing STARS credit.
2. In general, innovation credits should have roughly similar impacts or be on the same scale as other STARS credits.
3. Outcomes, policies, and practices that are innovative for the institution's region or institution type are eligible for innovation credits.
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Submission Note:

This is based off of the 2012 AASHE STARS Report submitted by the University of Arizona and is still recognized as an innovative accomplishment of UA as part of the first LEED platinum university recreational center in the country.

"---" indicates that no data was submitted for this field

Title or keywords related to the innovative policy, practice, program, or outcome:

Solar Thermal Array and Rec Center

A brief description of the innovative policy, practice, program, or outcome :

Atop the University of Arizona’s Student Recreation Center sit 346 solar thermal collectors. They aren’t solar panels, which convert solar energy into electric power. Instead, this Solar Thermal Array turns heat into chill—no small feat in a desert town like Tucson.

Within the solar thermal collectors are 5,336 argon-filled vacuum tubes that collect heat energy from the sun to drive an absorption chilling system that cools the 55,500-square foot facility. While using heat for cooling purposes may seem counterintuitive, unlike a refrigerator or an air conditioner, which draws its energy from electric power, an absorption cooler transforms heat into productive energy. Specifically, a water-glycol mix heated by the sun is pumped through the absorption cooler, producing chilled water that is fed into the University’s main chilled water loop, thus cooling campus buildings.

A byproduct of the cooling system is heat energy, which, in many similar systems, is released in an adjacent cooling tower. But at UA’s Recreation Center, the excess heat energy produced by the system is cycled under the Recreation Center pool, heating its 55,000 gallons of water and closing the solar loop.

This innovative system is the first of its kind in the nation, as no other campus in the U.S. uses solar energy to power both heating and cooling operations.

Maintaining 55,000 gallons of water at a comfortable and consistent temperature would otherwise require a significant amount of natural gas; however, by utilizing the byproducts of the absorption cooling processes, the Recreation Center is able to replace a third of the energy needed to heat the pool.

The energy collected by these 346 solar thermal collectors harvests an estimated annual equivalent of 1.9 million kilowatt hours of electricity, thus reducing greenhouse gas emissions by 1,317 metric tons a year.

A brief description of any positive measurable outcomes associated with the innovation (if not reported above):

A letter of affirmation from an individual with relevant expertise:

[STARS Rec Center Solar Letter.pdf](#)

Which of the following STARS subcategories does the innovation most closely relate to? (Select all that apply up to a maximum of 5):

	Yes or No

Curriculum	No
Research	No
Campus Engagement	No
Public Engagement	No
Air & Climate	No
Buildings	Yes
Dining Services	No
Energy	Yes
Grounds	No
Purchasing	No
Transportation	No
Waste	No
Water	No
Coordination, Planning & Governance	No
Diversity & Affordability	No
Health, Wellbeing & Work	No
Investment	No

Other topic(s) that the innovation relates to that are not listed above:

The website URL where information about the innovation is available :

Responsible Party

Benjamin Champion

Director

Office of Sustainability

Criteria

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Submission Note:

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Title or keywords related to the innovative policy, practice, program, or outcome:

Solar Test Yard

A brief description of the innovative policy, practice, program, or outcome:

Before you buy a car, you test drive it—you ask about performance and durability and efficiency. The same idea drives research at the UA TEP Solar Photovoltaic Test Yard, where students and faculty at University of Arizona's Research Institute for Solar Energy (AzRISE) are monitoring different photovoltaic systems to evaluate how they perform in the field.

The Solar Panel Test Yard, the largest of only a dozen in the nation, includes over 600 photovoltaic modules from 20 different manufacturers. Faculty and students work together to measure how different weather conditions, air temperatures, panel placement, and quality and direction of sunlight impact the energy yields of each type of photovoltaic system—and how such systems hold up to the test of time.

While solar cell technology continues to improve in the laboratory, one of the big challenges for solar panels is that they're still very expensive. Which panel makes the most power per cost? The most watts per dollar?

These are key questions not only for utility companies planning to invest in large-scale solar projects, but also for homeowners considering installing solar panels on their roofs.

In 2009, Tucson Electric Power was planning to shut down the test yard because they didn't have the staff to maintain it. Faculty at AzRISE recognized the opportunity for the university to not only engage students in a real-world analysis of grid-tied photovoltaic technology, but also help address the challenges and opportunities for wide-scale implantation of solar energy. Although TEP continues to own the test site—which daily contributes about 90 kilowatts of power to the grid—it is entirely operated and run by UA students and faculty.

In addition to assessing new solar energy technology, a major component of the test yard's mission is to educate the public about photovoltaic systems. The UA TEP Solar Test Yard is the only such yard in the nation open to the public. Since 2009, the yard has had over 2,000 visitors, and given public lectures to over 6,000 people. Additionally, all data collected at the test yard is free and available online.

This unique intersection between academic research, business interest, and public education at the UA TEP Solar Test Yard allows a wide range of interests to work together to solve some of the key problems in wide-scale implementation of solar technology in Arizona.

A brief description of any positive measurable outcomes associated with the innovation (if not reported above):

A letter of affirmation from an individual with relevant expertise:

[STARS Solar Test Yard.pdf](#)

Which of the following STARS subcategories does the innovation most closely relate to? (Select all that apply up to a maximum of five):

	Yes or No
Curriculum	No
Research	Yes
Campus Engagement	No
Public Engagement	Yes
Air & Climate	No
Buildings	No
Dining Services	No
Energy	Yes
Grounds	No
Purchasing	No
Transportation	No
Waste	No
Water	No
Coordination, Planning & Governance	No
Diversity & Affordability	No
Health, Wellbeing & Work	No
Investment	No

Other topic(s) that the innovation relates to that are not listed above:

The website URL where information about the innovation is available:

Responsible Party

Benjamin Champion

Director

Office of Sustainability

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Submission Note:

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Title or keywords related to the innovative policy, practice, program, or outcome:

Thermal Ice Project

A brief description of the innovative policy, practice, program, or outcome:

At the University of Arizona, cooling is crucial. In a city where summertime temperatures linger for half the year, an inefficient air-conditioning system is more than a money-guzzler—it's an unnecessary drain on limited water and energy resources.

So the university turned to ice. Throughout the evening and early morning hours, water is frozen and stored in central refrigeration plants. During the day, as temperatures rise and air conditioners fire up, the chilled water is circulated through buildings across the main campus and at the Arizona Health Sciences Center. The process moves the bulk of the UA's electrical load from the hot daytime hours to the cooler nighttime hours, when cooling requires less energy. By using the stored "thermal" energy of ice to cool the buildings during the daytime peak-usage periods, the system decreases daytime electrical consumption and dependence on fossil fuel-produced electricity.

The bulk of the ice-making occurs in 165 eight-foot-tall tanks in the campus's Central Refrigeration Building. These tanks, along with another 49 tanks in the main campus Central Heating and Refrigeration Plant, can produce more than 900 tons of ice per hour, which, once melted, reaches buildings across campus through an intricately managed network of chillers, cooling towers, pumps and underground pipes that connect the campus.

Estimated energy savings are \$40,000 per month, with annual savings reaching \$480,000.

In addition to these financial incentives, ice storage also provided the unique ability to increase cooling capacity while improving the overall efficiency of the plant—in other words, less input for a cooler output. The water is cooled at a highly efficient rating of 0.683 kilowatts per ton. In comparison, a home air conditioner generates energy at about 1.5 kilowatts per ton.

The thermal ice storage project, connected to the largest chilled water loop system in the world, attracts the attention of engineers and building managers from around the globe, many of whom come to Tucson to tour the UA's facilities. The unique system is also used to teach engineering students at the university about chilled water technology and other heating and cooling processes.

Besides making triple-digit temperatures bearable, air conditioning is a necessity in many research facilities and medical centers across the UA campus. The innovative solution to keeping the university cool has had significant and immediate effects on both the university's carbon emissions as well as its bottom line financials.

A brief description of any positive measurable outcomes associated with the innovation (if not reported above):

A letter of affirmation from an individual with relevant expertise:

[STARS Thermal Ice Project Letter.pdf](#)

Which of the following STARS subcategories does the innovation most closely relate to? (Select all that apply up to a maximum of five):

	Yes or No
Curriculum	No
Research	No
Campus Engagement	No
Public Engagement	No
Air & Climate	No
Buildings	Yes
Dining Services	No
Energy	Yes
Grounds	No
Purchasing	Yes
Transportation	No
Waste	No
Water	No
Coordination, Planning & Governance	No
Diversity & Affordability	No
Health, Wellbeing & Work	No
Investment	No

Other topic(s) that the innovation relates to that are not listed above:

The website URL where information about the innovation is available:

Responsible Party

Benjamin Champion

Director

Office of Sustainability

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Title or keywords related to the innovative policy, practice, program, or outcome:

Tree Inventory and Valuation Project

A brief description of the innovative policy, practice, program, or outcome:

What is a tree worth? It's hard to put a price on the value trees add to our communities—harder still to put a price on nearly 8,000 of them. But that's precisely what University of Arizona students are doing.

The UA Campus Arboretum consists of 7,810 mature trees spread across 387 acres, the oldest continually maintained green space in Arizona. Though in some ways these trees are priceless, weaving the campus together like a green thread, in fact each of these unique trees contributes a quantifiable value to the campus and greater community.

As the growing university expands within its borders, assessing and assigning value to these trees is a crucial step in preserving their continued presence within the campus landscape. So UA students and faculty, along with the City of Tucson's Office of Conservation and Sustainable Development, have initiated a comprehensive study to quantify the value these trees contribute to the university and Tucson community.

Six UA students are involved in the project, and will traverse the campus from February to May to inventory and assess every one of those 7,810 trees. Students are collecting data using i-Tree software, which was developed by a former UA professor, Greg McPherson, who now heads the Center for Urban Forest Research at the University of California at Davis. Though the software is now used to catalogue trees around the world, it is rarely used on university campuses. In fact, only 2 individuals in southern Arizona are trained to use the software. With the completion of the arboretum inventory project, the six UA students will quadruple that number.

The i-Trees software considers both economic and environmental components, providing a comprehensive evaluation of a tree's role in the local ecosystem. Environmental benefits considered in tree valuation include atmospheric carbon reduction, air quality benefits, stormwater runoff reductions, as well as aesthetic and other benefits. Many economic considerations are direct, such as maintenance expenses, but others are indirect, such as the replacement value of large trees and energy cost savings. For example, by lowering the campus temperature and shading buildings, the nearly 8,000 trees of the Campus Arboretum save the university thousands of dollars every year in energy costs.

In addition to environmental and economic benefits, the arboretum offers unique educational opportunities. The UA arboretum contains 522 distinct species of trees, including 12 one-of-a-kind species, found nowhere else in the world, and 4 heritage trees. Species in the collection were selected from around the world due to their adaptations to arid landscapes, which provides students and scholars the chance to study a diverse array of drought-resistance horticulture and arid lands ecosystems within a narrow space.

By quantifying the value that specific trees add to the campus landscape, the project not only provides a justification for further plantings, but also hones in on those species that offer the greatest return on investment—the greatest bang for leafy buck.

A brief description of any positive measurable outcomes associated with the innovation (if not reported above):

A letter of affirmation from an individual with relevant expertise:

STARS Tree Inventory and Valuation Project.pdf

Which of the following STARS subcategories does the innovation most closely relate to? (Select all that apply up to a maximum of five):

	Yes or No
Curriculum	No
Research	Yes
Campus Engagement	Yes
Public Engagement	Yes
Air & Climate	Yes
Buildings	No
Dining Services	No
Energy	No
Grounds	Yes
Purchasing	No
Transportation	No
Waste	No
Water	No
Coordination, Planning & Governance	No
Diversity & Affordability	No
Health, Wellbeing & Work	No

Investment

No

Other topic(s) that the innovation relates to that are not listed above:

The website URL where information about the innovation is available:
