



# Pennsylvania State University

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

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*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

<b>Credit</b>
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?
<b>Agricultural school</b>	Yes	Yes
<b>Medical school</b>	Yes	No
<b>Pharmacy school</b>	No	No
<b>Public health school</b>	No	No
<b>Veterinary school</b>	No	No
<b>Satellite campus</b>	Yes	No
<b>Hospital</b>	Yes	No
<b>Farm larger than 5 acres or 2 hectares</b>	Yes	Yes
<b>Agricultural experiment station larger than 5 acres or 2 hectares</b>	Yes	No

## Reason for excluding agricultural school:

Included.

**Reason for excluding medical school:**

The Penn State Milton S. Hershey Medical Center, which includes the College of Medicine, is located in Hershey, PA, approximately 100 miles from Penn State's main campus at University Park. Because of this geographic separation, and because the medical school is administered as a separate unit, we have chosen not to include it in this STARS submission for the University Park campus.

**Reason for excluding pharmacy school:**

N/A

**Reason for excluding public health school:**

N/A

**Reason for excluding veterinary school:**

N/A

**Reason for excluding satellite campus:**

Penn State University encompasses 23 geographically dispersed campuses. This STARS submission applies only to the main campus at University Park. "Satellite campuses" (which include the 19 "Commonwealth Campuses", Great Valley campus, Dickinson School of Law, and College of Medicine), are encouraged to submit their own STARS data.

**Reason for excluding hospital:**

The Penn State Milton S. Hershey Medical Center, which includes a teaching hospital, is located in Hershey, PA, approximately 100 miles from Penn State's main campus at University Park. Because of this geographic separation, and because the medical center is administered as a separate unit, we have chosen not to include the hospital in this STARS submission for the University Park campus.

**Reason for excluding farm:**

Land and related facilities that are managed by the College of Agriculture for educational and research purposes, and are adjacent to the core of the University Park campus, ARE included in the institutional boundary. Also included is the Arboretum. Other non-contiguous agricultural land and facilities are NOT included.

**Reason for excluding agricultural experiment station:**

The Russell E. Larson Agricultural Research and Education Center, located ~20 miles from the UP campus, is managed as a separate campus and therefore is not included within the institutional boundary. Neither are other non-contiguous ag experiment stations operated by Penn State.

**Narrative:**

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# Operational Characteristics

## Criteria

n/a

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### Submission Note:

Campus acreage includes land owned by Penn State in the UP campus vicinity, and areas on long-term lease. Included, for example, are Innovation Park, leased or owned portions of Cato Park, and agricultural lands adjacent to the core campus, including the Arboretum. Does not include areas that are some distance from the UP campus, e.g., the Larson Agricultural Experiment Station or Shaver's Creek/Stone Valley.

Building GSF includes buildings owned by Penn State, or on a long-term lease.

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

### Endowment size:

3,034,000,000 *US/Canadian \$*

### Total campus area:

7,795.34 *Acres*

### IECC climate region:

Cold

### Locale:

Mid-size city

### Gross floor area of building space:

20,490,517 *Gross Square Feet*

### Conditioned floor area:

---

### Floor area of laboratory space:

1,299,069 *Square Feet*

### Floor area of healthcare space:

43,342 *Square Feet*

### Floor area of other energy intensive space:

418,124 Square Feet

**Floor area of residential space:**

2,492,437 Square Feet

**Electricity use by source::**

	Percentage of total electricity use (0-100)
Biomass	0
Coal	56
Geothermal	0
Hydro	1
Natural gas	23
Nuclear	19
Solar photovoltaic	0
Wind	1
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	0
Coal	44
Electricity	0



<b>Fuel oil</b>	0
<b>Geothermal</b>	0
<b>Natural gas</b>	56
<b>Other (please specify and explain below)</b>	0

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

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# Academics and Demographics

## Criteria

n/a

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### Submission Note:

FTE of employees was estimated by using full-time and part-time non-student headcounts from the Penn State Fact Book, and assuming that part-time and "casual" workers are 0.625 FTE.

Number of residential employees was not available; assumed zero because likely very small.

FTE distance education enrollment is NOT included in the overall FTE enrollment value.

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

### Number of academic divisions:

13

### Number of academic departments (or the equivalent):

83

### Full-time equivalent enrollment:

44,935

### Full-time equivalent of employees:

15,115

### Full-time equivalent of distance education students:

4,130

### Total number of undergraduate students:

40,085

### Total number of graduate students:

6,099

### Number of degree-seeking students:

45,414

### Number of non-credit students:

770

**Number of employees:**

16,703

**Number of residential students:**

14,801

**Number of residential employees:**

0

**Number of in-patient hospital beds:**

0

# 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.

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

## Responsible Party

**Mary Easterling**

Assoc Director, Analysis & Assessment  
Sustainability Institute

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## 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:**

We removed from the course counts, courses in the following categories: independent study, practicums/ internships, thesis/ research, and individualized instruction in the performance arts. Still included in the overall counts are courses in physical education (listed under Kinesiology), and group instruction in performance arts such as Dance (e.g., Beginning Ballet), Music (e.g., Campus Choir), and Theater (e.g., Acting I). These courses could not easily be pulled out for the purpose of the course counts and their presence tends to inflate the number of courses, which lowers the percentage of sustainability courses.

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

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

	Undergraduate	Graduate
<b>Total number of courses offered by the institution</b>	5,150	2,045
<b>Number of sustainability courses offered</b>	57	2
<b>Number of courses offered that include sustainability</b>	121	10

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

43

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

83

**Number of years covered by the data:**

One

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

[course list for STARS2.0 \(2\).xlsx](#)

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

See attached file.

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

<http://www.sustainability.psu.edu/>

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

Our initial course inventory - prepared for our 2011 STARS submission - was completed using a survey approach, as described in detail below. Due to a low response rate, we believe that this approach failed to identify a number of existing sustainability courses.

In 2013-14, for our current STARS report, we reviewed the original course list and expanded it by (1) searching the online Penn State curriculum archives, and evaluating the material found in the course descriptions and syllabi, (2) searching through course descriptions found in the online Course Bulletin, with special attention given to programs where one or more sustainability courses had already been identified, and (3) revising the course survey and encouraging faculty to complete it. We are in the process of verifying this expanded list by contacting the individual course instructors. Although it is possible that we have misidentified some sustainability courses using this approach, we think this is more likely to be an underestimate than an overestimate of the all such courses offered at Penn State.

The course counts provided above include only courses actually offered during academic year 2012-13. The full inventory attached includes all sustainability courses currently "on the books" at Penn State.

#### Methodology for 2010 Course Survey:

A request to complete an on-line questionnaire was sent from the university provost to all deans and chancellors, thence to all department heads and thence to course instructors – in theory this would reach all course instructors for the 2009-2010 academic year.

Although announcements and reminders about this course survey were also made via the university's official news site, the Center for Sustainability web site, and other appropriate venues, we have learned that some instructors did not hear about the survey. Others heard about it only by word of mouth, and inquired about completing the survey—they were directed to the Course Survey web site. There were 273 responses from University Park instructors. Of these, 75 reported teaching at least one sustainability-related or –focused course, with a total of 96 courses reported.

In completing the survey, instructors were not required to work with a particular definition of sustainability; a number of definitions were provided, and they were asked to develop their own concept of sustainability that included social, environmental and economic factors. The distinct criteria for sustainability-focused and –related courses were given, and the concept of an immersive experience in sustainability was explained.

Instructors were asked to list sustainability-focused and –related courses and to describe any immersive experiences in sustainability that were offered through their classes.

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

Other (please describe below)

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

Course counts are for Fall 2012, Spring 2013, and Summer 2013 (one academic year).

Counts were made by semester, then the semester values were totaled to arrive at annual counts. This method results in courses being counted each semester they are offered - so up to 3 times each year.

Multiple sections of the same course are counted only once each semester.

If the same course was offered both online and in person during the same semester, it was counted only once.

Counting methods were the same for both sustainability courses and non-sustainability courses.

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

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

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## Responsible Party

**Mary Easterling**

Assoc Director, Analysis & Assessment  
Sustainability Institute

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## 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.

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## Submission Note:

A list of degree programs with sustainability learning outcomes was developed in the following manner:

- (1) A survey was sent to all undergraduate and graduate program officers in 2011, asking them to identify academic programs that focus on sustainability, and additional programs that have specific sustainability learning outcomes. Programs that met either or both of these criteria were included on the list.
- (2) This initial list was reviewed and updated in 2014 by searching through the online University Bulletin, which provides detailed descriptions of all Undergraduate and Graduate degree programs.

Our value for the number of students graduating from programs with sustainability learning outcomes is a conservative one, because it does not include graduates of minor programs, since we lacked sufficient information to avoid double-counting. Also, we lacked information on degrees awarded by specific inter-college programs, which include several graduate-level sustainability programs.

Penn State currently does not specify sustainability learning outcomes at the institutional level.

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

3,258

**Total number of graduates from degree programs:**

12,504

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

[sust learning outcomes STARS\\_2.xlsx](#)

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

See file above.

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

A required course for graduation in the Business School is BA 342 which covers four main topics: ethics, social responsibility, sustainability and diversity. Below are learning outcomes from the sustainability literacy series:

- Define sustainability
- Explain the "Triple Bottom Line" (Economic, Environment, Social)
- Understand the importance of responsibility for/stewardship of resources (personal and corporate)
- Consider the three major forces (population, intensity resource usage, climate) that drive all approaches to sustainability
- Explain intensity of resource usage by applying the "Tragedy of the Commons" to sustainability
- Understand population statistics and their impact on sustainability
- Consider the United Nation's Intergovernmental Panel on Climate Change's impact on corporations
- Understand sustainability and corporations through the use of data, cases and exercises
- Learn to work with Sustainability Reporting Tools (GRI, Dow Jones, Carbon, ISO, etc.)
- Consider all Smeal majors and their responsibility to sustainability through cases and data

From our survey of program officers:

One of our program educational objectives is that early career Biological Engineering graduates will be expected to: "Effectively identify, analyze and design sustainable solutions to address issues and opportunities throughout the world"

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

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# Undergraduate Program

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## Responsible Party

**Mary Easterling**

Assoc Director, Analysis & Assessment  
Sustainability Institute

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## 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*.

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"---" 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):

Community, Environment, and Development

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

The Community, Environment, and Development major focuses on the fields of community and economic development, environment and natural resources, and the critically important interactions between these fields, both locally and globally.

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

<http://aese.psu.edu/majors/ced>

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

Energy and Sustainability Policy

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

STARS Reporting Tool | AASHE

The Energy and Sustainability Policy degree program, offered online through Penn State's World Campus, is designed to provide a unique, interdisciplinary curriculum that integrates areas of study in energy security, sustainability management, foreign and domestic energy and sustainability policy analysis.

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

<http://www.worldcampus.psu.edu/degrees-and-certificates/energy-and-sustainability-policy-bachelors/overview>

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

Landscape Architecture

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

This undergraduate program is a five-year curriculum leading to a professionally accredited Bachelor of Landscape Architecture (BLA) degree. It is designed to prepare graduates for either advanced study or professional careers. Landscape architecture is the art of design, planning, or management of the land and of the natural and built elements upon it. As an academic discipline, it embodies creative, cultural, philosophical, and scientific knowledge bases. As a professional discipline, the practice of landscape architecture includes site design, urban design, master planning, community planning, regional planning, resource conservation, and stewardship.

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

<http://stuckeman.psu.edu/larch/undergraduate>

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

Other sustainability-focused and -related degree programs are listed on the Sustainability Institute website:

<http://sustainability.psu.edu/learn/students/programs>

**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):**

Sustainability Leadership Minor

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

The Intercollege Minor in Sustainability Leadership allows students in any major to incorporate sustainability as a significant theme in their undergraduate degree program. Through a combination of coursework and immersive experiences in sustainability, students develop the knowledge, skills, and attitudes required to become sustainability leaders in their respective fields.

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

<http://sustainability.psu.edu/learn/students/minor-sustainability-leadership>

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

Environmental and Renewable Resource Economics Minor

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

This minor introduces students to how fundamental economic principles can be used to explain and seek solutions for problems related to the degradation of the environment and unsustainable use of natural resources.

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

<http://bulletins.psu.edu/undergrad/programs/minors/E/E%20RREMIN>

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

Global Health Minor

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

The Global Health Minor (GLBHL) is designed to provide undergraduate students with a multidisciplinary exposure to the theoretical and practical issues affecting the health of populations in various countries and regions of the world. This minor is appropriate for students whose career goals incorporate public health interventions, education, policy or research related to global health.

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

<http://bulletins.psu.edu/undergrad/programs/minors/G/GLBHL>

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

Other sustainability-focused and -related degree programs are listed on the Sustainability Institute website:

<http://sustainability.psu.edu/learn/students/programs>

## Responsible Party

**Mary Easterling**

Assoc Director, Analysis & Assessment  
Sustainability Institute

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## 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*.

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"---" 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):

Human Dimensions of Natural Resources and the Environment (dual title Ph.D. and M.S./ M.A.)

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

This interdisciplinary dual-title intercollege graduate degree program exposes students to a broad base of state-of-the-art methodologies, theories, and technologies for addressing contemporary resource and societal issues, including, but not limited to: global climate change; sustainable energy, food, and fiber supplies; threats to biodiversity; water pollution and availability; genetic modification; and sustainable design.

Students electing the dual-title intercollege program in HDNRE through participating majors may earn a degree with dual-title at both the Ph.D. and M.S./M.A. levels. The following graduate programs offer dual-title degrees in HDNRE: M.A. and Ph.D. in Anthropology and HDNRE; M.S. and Ph.D. in Energy and Mineral Engineering and HDNRE; M.S. and Ph.D. in Forest Resources and HDNRE; M.S. and Ph.D. in Geography and HDNRE; M.S. and Ph.D. in Recreation, Park and Tourism Management and HDNRE; and M.S. and Ph.D. in Rural Sociology and HDNRE.

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

<http://agsci.psu.edu/hdnre>

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

BioRenewable Systems (M.S. and Ph.D.)

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

Biorenewable Systems are the structures and processes that create and support biologically-based products capable of being continuously replaced through sound technology and management. BRS is positioned to be a world-renowned graduate program in renewable biologically-based materials, products, and processes that fully integrates scientific research with the principles of systems technology, business, management, marketing, leadership development, and entrepreneurship for biorenewable systems.

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

<http://abe.psu.edu/graduateprograms/brs>

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

Landscape Architecture (M.S.L.A. and M.L.A.)

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

The M.L.A. in Landscape Architecture program is an accredited professional degree program focused on preparation to practice landscape architecture for students who hold a bachelor's degree in another field. The M.S. in Landscape Architecture program is a research focused degree program designed to offer students graduate level research inquiry into landscape architecture for students who hold a bachelor's degree.

Landscape architecture encompasses analysis, planning, design, management and stewardship of the natural and built environment through a blending of art and science. It is a profession that is broad in scale and scope. As an academic discipline, it embodies creative, cultural, philosophical, and scientific knowledge bases. As professional practice, landscape architecture includes site and urban design, community and regional planning, and resource conservation and stewardship. With this diverse background, landscape architects process a unique abilities to help address local, national and global priorities, such as sustainable development, healthy communities, landscape urbanism and natural lands restoration.

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

<http://stuckeman.psu.edu/larch/graduate>

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

Programs are listed at:

<http://sustainability.psu.edu/learn/students/sustainability-degree-programs-penn-state>

**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):**

Bioenergy certificate program

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

The graduate certificate in Bioenergy is designed specifically for current and aspiring practitioners who seek advanced skills for growing the bioenergy industry. To accommodate participation by working professionals the program is offered through Penn State's World Campus by Renewable Energy and Sustainability Systems (RESS) graduate program.

The intercollege RESS professional master's program (iMPS-RESS) is an online-interdisciplinary master's degree program designed to prepare professionals in the fields of renewable energy and sustainability systems to lead the world's transformation from an unsustainable, fossil energy economy to a renewable, sustainable basis of operation.

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

<http://bulletins.psu.edu/graduate/programs/certificates/GRAD%20BIOERG%20CERT>

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

Solar Energy certificate program

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

The Graduate Certificate program in Community and Economic Development helps students prepare to confront the multidimensional challenges faced by community development practitioners. The main objective of the certificate program is to educate professionals who will assume leadership roles in helping establish and maintain viable communities.

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

<http://bulletins.psu.edu/graduate/programs/certificates/GRAD%20COMM%20ECON%20DEV%20PBC>

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

Sustainability Management and Policy

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

The graduate certificate in Sustainability Management and Policy is designed specifically for current and aspiring practitioners who seek advanced skills for advancing sustainability practice. The program is offered by the Department of Energy and Mineral Engineering through Penn State's World Campus.

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



<http://bulletins.psu.edu/graduate/programs/certificates/GRAD%20SUSPOL%20CERT>

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

See

<http://sustainability.psu.edu/learn/students/sustainability-degree-programs-penn-state>

# Immersive Experience

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## Responsible Party

**Mary Easterling**

Assoc Director, Analysis & Assessment  
Sustainability Institute

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## 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.

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*"---" 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:**

Penn State offers a number of courses with sustainability-focused immersive experiences. Listed below are some examples:

The Pittsburgh Landscape Architecture Studio (LARCH 414.2) provides Penn State students with real-life design experience while also providing valuable help to local communities. Students engage local communities to address issues such as re-greening of depopulated neighborhoods, use of vacant lots, and use of community parks and other green spaces.

A summer program for incoming freshman - Sustainability Research in Jamaica - introduces students to basic concepts in sustainability principles and provides them with tools to aid in understanding the challenges of sustainable development. Students then travel to Jamaica for 7 days to live in a self-sustaining community, work on sustainability related research and service learning projects along with Penn State faculty and local collaborators.

The Adventure Literature series of courses - offered as ENGL 181 - explores the relationship between culture and nature through reading and place-based experiences. In one course, Sailing the Chesapeake: Cultural and Natural Landscapes, students read classic texts about the Bay while participating in a series of weekend trips meant to deepen their knowledge of the Bay and its watershed. In another, The Beach: Cultural Artifact/ Environmental Reality, students read and study the nature and culture of the shore, with specific attention to the South Carolina Low Country.

GEOG 493, Sustainability Issues Across the Americas, is a service learning experience based on an interdisciplinary team-based, problem-solving, project-driven approach to sustainability issues. Students travel to Peru for 3.5 weeks and investigate the human health and happiness, environmental, and economic dimensions of critical issues such as water resources, gold mining, sustainable development, biodiversity, ecotourism, and human migrations.

Students enrolled in ME 442/ 443, Advanced Vehicle Design, participate in the EcoCAR Challenge, where student teams construct vehicles that employ innovative technologies to reduce greenhouse emissions and petroleum consumption while maintaining consumer acceptability and usability.

In ENT 518, Insect Natural History, students engage in experiential learning in field ecology highlighting insect dynamics, diversity and adaptations in terrestrial and aquatic systems.

The American Indian Housing Initiative (AIHI) is a collaborative research and education program focused on applying sustainable building technologies such as strawbale construction and solar energy systems on American Indian Reservations.

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

<http://www.sustainability.psu.edu/learn/students/courses>

# Sustainability Literacy Assessment

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## Responsible Party

**Mary Easterling**

Assoc Director, Analysis & Assessment  
Sustainability Institute

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## 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.

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## Submission Note:

Penn State currently does not have a sustainability literacy assessment. However the need for such a survey has been recognized, and one is slated for development over the next year. In a related effort, sustainability competencies are being defined for students, faculty, and staff. Assessment tools for these competencies will then be developed.

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

# Incentives for Developing Courses

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## Responsible Party

**Mary Easterling**

Assoc Director, Analysis & Assessment  
Sustainability Institute

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## 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.

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*"---" 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:

Penn State has two programs that encourage and support faculty in developing new sustainability courses and incorporating sustainability topics into existing courses:

The Reinvention Fund is an internal competitive small grants program designed to foster integration of sustainability into teaching, research, outreach, and operations at Penn State. Faculty are eligible to apply for funding to develop innovative new courses, or to revamp existing academic programs to better incorporate sustainability concepts and issues. For example, one project currently underway is an overhaul of the Recreation, Parks, and Tourism Management curriculum to infuse sustainability concepts. Another is "Building Sustainable Communities through the Digital Global Classroom", that will create nodes of community engagement on sustainability that utilize technology to link African students and communities with (1) a Penn State resident courses and, (2) local K-12 schools.

Penn State's Penn's Woods Program for faculty development offers workshops and online resources for faculty who wish to incorporate sustainability into their course offerings.

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

Faculty can receive funding to support curriculum revisions through the Reinvention Fund.

Faculty receive training on educating for sustainability. This year the Sustainability Institute awarded monetary prizes to faculty with an exceptional history of educating for sustainability.

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

<http://sustainability.psu.edu/reinvention>

# Campus as a Living Laboratory

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## Responsible Party

**Mary Easterling**

Assoc Director, Analysis & Assessment  
Sustainability Institute

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## 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.

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### Submission Note:

Within the Office of Physical Plant's strategic plan for 2014-2018 is a strategy to "expand academic partnerships" with a dual vision of directly enhancing the University's academic activities and directly benefiting from its faculty and student expertise. In other words, this strategy is to expand Living Lab partnerships.

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

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

**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:**

In April 2014 a group of Penn State faculty, staff, and students committed to responding to the threat of climate change convened on the University Park campus for a workshop entitled "Penn State's Carbon Emissions: Getting to Zero". The goal was to begin imagining a

[STARS Reporting Tool](#) | [AASHE](#) Snapshot | Page 32



workable plan to achieve zero effective emissions by 2050. A series of concurrent workshops was held on topics such as "physical plant retrofitting", "promoting emerging technologies for alternative energy and carbon sequestration", and "assessing and changing carbon-intensive practices and cultures". This conference marks the beginning of a living lab-type initiative to address Penn State's greenhouse gas emissions.

**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:**

AE 597C: Sustainable Building Project MGMT is partnering with Penn State's Office of Physical Plant to review Penn State's current LEED and Green Building Policy and to make recommendations to PSU leadership on how to revise this policy. The activity includes a review of PSU experiences in adopting LEED, lessons on LEED Silver, Gold, and Platinum projects, and a debate on the merits of LEED 4.0 vs Green Globes as potential new standards for PSU projects. The class will also provide tours of Penn State's SALA Building to students in a freshman experience course.

EDSGN 497: Sustainability Leadership Projects Students in this course utilize online modules and practicum experiences to gain the capacity and confidence to provide tours of the MorningStar Solar Home on the Penn State campus. Learning objectives include the knowledge of the core design principles of passive design, local materials, and prefabrication techniques, and also organize event for local organizations at the facility to build awareness of the facility as a teaching resource, and to help pursue the mission of the MorningStar as an instrument for transformation.

**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:**

Two students are overseeing a pilot program to bring reusable carryout food containers to campus dining halls, beginning with Pollack Dining Commons in Spring 2014. Working closely with Food Services staff, the students have been instrumental in moving the project forward and provide a valuable perspective on what might or might not sell to their peers.

**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:**

EDSGN 497: Sustainability Leadership Projects Students in this course utilize online modules and practicum experiences to gain the capacity and confidence to provide tours of the MorningStar Solar Home on the Penn State campus. Learning objectives include the knowledge of the core design principles of passive design, local materials, and prefabrication techniques, and also organize event for local organizations at the facility to build awareness of the facility as a teaching resource, and to help pursue the mission of the MorningStar as an instrument for transformation.

**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:**

Penn State's main composting facility - the Organic Materials Processing & Education Center (OMPEC) - is a partnership of College of Agricultural Sciences, Hospitality Services, Housing and Food Services, and Office of Physical Plant. Feedstocks include materials from grounds maintenance - such as logs, brush, and leaves - as well as food residuals and animal waste. The resulting compost and mulch are used for enhancing soil quality and growing conditions on campus. The site serves as a learning laboratory for students, as well as a demonstration facility for workshops and seminars.

The wood from Elm trees removed on campus due to disease or failing health is salvaged and repurposed into furniture and other products that are sold. OPP partners with the Alumni Association on this project. It results in a much higher reuse of the wood instead of mulch. Proceeds from the sale of products is split between OPP and the Alumni Association. OPP's share goes to the Tree Replacement Endowment which is used to purchase and plant new trees on campus. We have sold close to \$500,000 of Elms Collection items in the 3+ years the program has existed.

**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:**

In 2010, Penn State Office of Physical Plant, Procurement Services, and the Smeal College of Business launched an ambitious collaborative effort: to develop a new standard for carpet purchasing, installation and removal that would reduce the first cost by 3-5% and the total cost of ownership by an estimated 20% and ensure 100% of Penn State carpet never sees a landfill. A team of MBA students, under leadership of a Smeal College of Business faculty member, completed a thorough analysis, ultimately leading to the selection of vendors that would allow Penn State to meet its objectives of reduced cost and improved environmental performance.

**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 Penn State Biodiesel Plant initiative is a collaborative effort of Penn State Cooperative Extension, the Office of the Physical Plant, the University Fleet Garage, Farm Services, and faculty in the College of Engineering. The group is developing a pilot-scale commercial biodiesel plant on the University Park campus that will be used to provide about 20% of the university fleet's diesel fuel needs. The ultimate goal of the project is to grow and harvest canola, press the seeds for vegetable oil, utilize the oil in university dining halls and restaurants, collect the used vegetable oil, and process it into biodiesel. The system will be expanded to include two parallel processing lines, to allow for side-by-side tests of different processing strategies and feedstocks. See

<http://extension.psu.edu/natural-resources/energy/biofuels/resources/psu-biodiesel-plant>

**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:**

Student "EcoAmbassadors", University Park students interning with the Environmental Protection Agency and working through the Campus Sustainability Office, partnered with OPP, Housing, Residence Life, and Runkle Hall residents to conduct promotions, communications, and research for an initiative "Green It Together" with a goal of zero waste in residence halls. They were successful and created a program that will now be rolled out in 50 residence halls. See

<http://sustainability.psu.edu/spotlight/runkle-hall-quest-zero-waste>

**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:**

Penn State faculty and staff have worked together over the years to create a "living filter" to recycle wastewater on the UP campus. Treated wastewater is piped from the campus wastewater treatment plant to an area know as "Big Hollow", where it is sprayed over 600 acres of farm fields and trees. The thick soil in this area, along with the vegetation, naturally filters the remaining nutrients out of about 2 million gallons a day of treated wastewater. This system reduces the need for large, unsightly retention ponds. Students and faculty conduct ongoing research on this system at the Penn State Spray Center Research Facility. See

<http://sustainability.psu.edu/spotlight/where-does-water-go>

Another student project related to water was piloted at Penn State's wastewater treatment plant. The project aims to build a simple microbial fuel cell using only cheap materials that spontaneously generates electricity from wastewater. "The system could eventually provide residents of poor urban communities with cooking fuel, renewable electricity, sanitized fertilizer, and disinfected drinking water." See

<http://sustainability.psu.edu/spotlight/award-winning-students-find-sustainable-solution-water-sanitation>

### **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:**

Ten MBA students from the Smeal College of Business helped to guide three units (Schreyer Honors College, Information Technology Services, and College of Communications) in incorporating sustainability into their strategic planning process, using a guidebook developed by the Sustainability Institute.

A College of Communications class organized a "Sustainability Unites" meet-up of sustainability-focused student clubs and groups on campus. This student-led initiative will, hopefully, catalyze increased student involvement in sustainability and interactions among the clubs. The class also is working with the Sustainability Institute Communications team to provide input to a web-based student portal with information of relevance to students such as courses, majors, careers, and other areas that the students might identify.

### **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 "World in Conversation Project", a Center for Public Diplomacy in Penn State's College of the Liberal Arts, relies on student facilitators and the Socratic method to generate candid dialogue on some of today's most difficult social issues—from race to the Middle East to college drinking culture. World In Conversation grew directly out of SOC 119 ("Race and Ethnic Relations") in response to the need to bridge deep divides that existed between racial and ethnic groups at Penn State following death threats and the ensuing student takeover of the HUB in 2002. This fall the Center will partner with the North Atlantic Treaty Organization (NATO) to sponsor trained Penn State undergraduate dialogue facilitators to lead groundbreaking virtual conversations between NATO military cadets and civilians in conflict zones, beginning with Afghanistan.

### **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 new Hort Woods child-care center on campus recently received Platinum level LEED certification. The Center's curriculum is integrated with the Penn State College of Health and Human Development. According to Linda Reichert, Center Director, "The HHD Family Studies students do full-time internships here, and School of Visual Arts students work with the kids on a variety of sustainable arts. The School of Music students also do activities with preschoolers every week. Kids get exposure to tap dancing, ballet and even traditional Irish dancing. We are very lucky to have the campus as an oasis of resources for child enrichment." It is a true living laboratory for Penn State.

<http://sustainability.psu.edu/spotlight/penn-state-child-care-center-awarded-platinum-leed-cert>

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**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:**

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**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 nine-acre Sustainability Experience Center is a destination for students, teachers, business leaders, and citizens to experience and experiment with ways to apply the practices of sustainability to food, water, building materials, and energy systems. The Center includes a net-zero energy solar home, a community garden, wind turbine, solar carport, sustainability research facilities, and other features. Student interns offer tours to K-12 school groups and other community groups. See

<http://sustainability.psu.edu/live/what-penn-state-doing/buildings-teach/learning-grounds>

**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:**

LED Growth Chambers: Penn State researchers from theatre arts and horticulture collaborated with Office of Physical Plant to fine-tune lighting for improved plant growth and energy conservation in greenhouses. The research team explored how using theatrical LED fixtures in place of traditional lighting could reduce energy consumption in plant growth chambers, without compromising plant growth. Initial results suggest the potential for lower energy and maintenance costs as well as reduced plant stress and improved health. See

<http://sustainability.psu.edu/spotlight/research-moves-leds-theatre-stage-greenhouse>

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

<http://www.sustainability.psu.edu/>  
STARS Reporting Tool | AASHE



# 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.

<b>Credit</b>
Academic Research
Support for Research
Access to Research

## Responsible Party

**Mary Easterling**

Assoc Director, Analysis & Assessment  
Sustainability Institute

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## 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.

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### **Submission Note:**

Total number of faculty engaged in research includes 2013 headcount of faculty (from Penn State Factbook Plus), with academic rank of professor, associate professor, or assistant professor; and research faculty with rank of senior scientist, senior research associate, or research associate (generally, all PhD level designations). Lecturers and Research Assistants were NOT included in the count. Likewise, the list and count of faculty engaged in sustainability research includes only faculty at those same academic and research ranks.

### Counts of academic departments:

19 faculty on our list of faculty who conduct sustainability research are appointed directly through a research institute or center that resides at the college or inter-college level, not through an academic department. Due to the difficulty of enumerating ALL institutes and centers at Penn State, our departmental numbers above include only academic departments, and faculty affiliated with them. The omitted research institutes with faculty who conduct sustainability research include the Applied Research Lab, the Earth and Environmental Systems Institute, the Energy Institute, the Larson Transportation Institute, the Penn State Institutes of Energy and the Environment, and the Sustainability Institute.

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

418

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

2,396

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

58

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

83

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

[sust research for STARS.xlsx](#)

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

List attached.

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

For Penn State's last STARS submission, based on 2009/10 data, a survey was sent to all faculty who conduct research at the UP campus, including all tenured and tenure-track faculty, as well as non-tenure track, PhD level, faculty in research positions. Survey results were used to compile an initial list of faculty who conduct sustainability research, and of sustainability research projects.

The researchers so identified were added to a searchable database of faculty with expertise in sustainability, energy, and/ or the environment, maintained by the Penn State Institutes of Energy and the Environment. The database can be found here:

<http://www.sustainability.psu.edu/learn/researchers/expert-database>

For the current STARS submission we obtained a list of research grants active as of June 30, 2013, and reviewed this list to identify sustainability research projects, and faculty serving as lead or co-principal investigators of these projects. The faculty list was cross-checked with that developed previously to update and expand our list of faculty who conduct sustainability research. The previously developed list was cross-checked to ensure that faculty on it were still Penn State employees.

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



Examples of some recent accomplishments in sustainability research can be found on Penn State's sustainability website:

<http://www.sustainability.psu.edu/lead/spotlights/research>

**The website URL where information about sustainability research is available:**

<http://www.sustainability.psu.edu/learn/researchers>

# Support for Research

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## Responsible Party

**Mary Easterling**

Assoc Director, Analysis & Assessment  
Sustainability Institute

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## 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:

The Reinvention Fund makes available ~\$600K a year to support faculty and student research and educational innovations in sustainability.

Opportunities for sustainability research funding through external grants are posted weekly on the Sustainability Institute's website: <http://sustainability.psu.edu/learn/researchers/sustainability-funding-opportunities>

"---" 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:**

In 2013, Penn State's Sustainability Institute established the Reinvention Fund to provide support for student and faculty research in sustainability. The purpose of the Reinvention Fund is to provide resources to innovative teams seeking to pursue interdisciplinary and holistic solutions to sustainability challenges in a way that fosters cross functional integration of Penn State's teaching, research, outreach, operation, and administration expertise, so that our university community can link and leverage our depth and build our

collective capacity in pursuit of sustainability. The first round of Reinvention Fund projects is currently underway.

Penn State has joined an international field of universities taking part in the Dow Sustainability Innovation Student Challenge Award (SISCA), which recognizes and rewards students and universities for their innovation and research of sustainable solutions to the world's most pressing social, economic and environmental problems. Winning students have the opportunity to network with global sustainability thought leaders and peers, receive monetary prizes (Grand Prize is \$10,000 and a runner-up is awarded \$2,500), join a network of SISCA alumni, and showcase their work with various external sustainability media. Penn State's 2013 winning team used a microbial fuel cell design to create a technology that would process wastewater and, at the same time, produce an electrical current. This competition is administered by Penn State with funding from Dow.

Penn State faculty mentor students' participation in other externally sponsored research competitions. For example, a Penn State student team was selected as one of ten to compete in the inaugural U.S. Department of Energy (DOE) Collegiate Wind Competition, held May 5 to 7, 2014 in Las Vegas. During the fall and spring semesters, the undergraduate student team designed and built a wind turbine to perform according to their own customized, market data-derived business plan. The team was awarded first place.

Another example is the Penn State Advanced Vehicle Team, which has participated in Advanced Vehicle Competitions for over a decade. The objective of EcoCAR2, one such competition, is to construct vehicles employing innovative technology which reduce greenhouse emissions, have better efficiency, and reduce overall petroleum consumption from well-to-wheels when compared to the stock vehicle-while maintaining consumer acceptability and usability. The Penn State team placed first in the 2013 competition and third in 2014.

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

<http://sustainability.psu.edu/reinvention>

**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:**

In 2013, Penn State's Sustainability Institute established the Reinvention Fund to provide support for faculty and student research in sustainability. The purpose of the Reinvention Fund is to provide resources to innovative teams seeking to pursue interdisciplinary and holistic solutions to sustainability challenges in a way that fosters cross functional integration of Penn State's teaching, research, outreach, operation, and administration expertise, so that our university community can link and leverage our depth and build our collective capacity in pursuit of sustainability. The first round of Reinvention Fund projects is currently underway.

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

<http://sustainability.psu.edu/reinvention>

**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 Office of the Vice President for Research is centrally responsible for facilitating the \$805-million-per-year research enterprise at Penn State, and its mission is to support a rigorous program of faculty and student research and creative accomplishment by enhancing the environment for scholarly and artistic endeavors, encouraging the highest standards of quality, and fostering ethical conduct in research. A primary responsibility of the Office in enhancing this environment is the facilitation of strong programs for interdisciplinary research, operationalized via nine university-level research institutes and centers focused on fostering interdisciplinary research. The interdisciplinary institutes promote collaboration across departmental boundaries in order to focus research strengths on important scientific questions and societal needs, through a combination of funded and co-funded faculty positions (with clear P&T expectations for interdisciplinary research), seed funding, and support services. However, as a large research institution with a diverse array of colleges, Penn State does not specify an institution-wide criteria for what constitutes “interdisciplinary research”, because such a definition at an institutional level would be both impossible and without basis. Accordingly, Penn State does not specify criteria for interdisciplinary research in promotion and tenure decisions at the institutional level. Rather "it is expected that units will devise ways to assess scholarly substance and the quality of the research".

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

<http://www.research.psu.edu/about/mission>

**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 Penn State University Libraries provide access to a plethora of materials and searchable databases that support sustainability research including GreenFILE, GreenR, GreenWire, ClimateWire, Land Letter, BNA Environment Law Reporter, Environmental Sciences and Pollution Management, Ecology Abstracts, and many others.

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

<http://www.libraries.psu.edu/content/psul/researchguides/socialsciences/sustainability1.html>

## Responsible Party

**Mary Easterling**

Assoc Director, Analysis & Assessment  
Sustainability Institute

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## 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.

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### Submission Note:

In addition, the Penn State Data Commons was developed to provide a resource for data sharing, discovery, and archiving for the Penn State research and teaching community. The datacommons@psu is made possible through resources provided by Penn State Institutes of Energy & the Environment, the Penn State Institute for CyberScience, PSU Research Computing & Cyberinfrastructure.

<http://www.datacommons.psu.edu/default.html>

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

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

14

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

0

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

Currently, Penn State does not have a formal open access policy. Penn State Libraries is in the process (as of 5/2014) of drafting such a policy for their unit, that would then be subject to vote. If passed, such a policy might serve as a model for other academic units on campus.

### A copy of the open access policy:

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### The open access policy:

None at this time.

**The website URL where the open access repository is available:**

[http://www.libraries.psu.edu/psul/researchguides/pubcur/oa\\_guide.html#about-open-access](http://www.libraries.psu.edu/psul/researchguides/pubcur/oa_guide.html#about-open-access)

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

Penn State University Libraries provides an Open Access Guide on its website, with links to information, databases, and resources for students, authors, and editors. This site also provides access to readings and ongoing discussion about the pros and cons of open access to research.

University Libraries offers two main repositories that provide open access to research:

- ScholarSphere is a secure repository service enabling the Penn State community to share its research and scholarly work with a worldwide audience. Faculty, staff, and students can use ScholarSphere to collect their work in one location and create a durable and citeable record of their papers, presentations, publications, data sets, or other scholarly creations. See

<https://scholarsphere.psu.edu/>

- eTD serves as Penn State's electronic Thesis and Dissertation open access repository. Submitting and archiving eTDs helps students to understand electronic publishing issues and provides greater access to students' research. See

<https://etda.libraries.psu.edu/>

In addition, many of the Penn State Libraries' Digitized Collections of images are open access. See

<http://www.libraries.psu.edu/psul/digital.html>

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

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# 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.

<b>Credit</b>
Student Educators Program
Student Orientation
Student Life
Outreach Materials and Publications
Outreach Campaign
Employee Educators Program
Employee Orientation
Staff Professional Development

# Student Educators Program

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## Responsible Party

**Rob Andrejewski**

Associate Director of Engagement  
Sustainability Institute

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## 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*.

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"---" 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:**

45,351

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

Penn State Eco-Reps Program

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

4,600



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

Penn State Student Eco-Reps are first-year student sustainability educators living in residence halls. Eco-Reps educate and engage their peers through their own example, interactive programs, and educational campaigns. Eco-Reps emphasize recycling and composting during the fall semester and organize a recycling challenge in the residence halls. In the spring semester, they encourage responsible energy usage and activities include a No Impact Week and an energy conservation challenge. Eco-Reps work together to design activities that are informative and fun that support campus-wide sustainability focused initiatives. They utilize the principles of community-based social marketing to guide their outreach strategies. The overall approach of the Penn State Student Eco-Rep Program can be summarized as "lead by example, one issue at a time, one behavior at a time." They focus on promoting on educating themselves so they may be ready to educate others. The targeted behaviors were chosen because they are actions students can control, are measurable and have the most significant environmental impact.

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

Application to the program is open to all incoming first-year students at Penn State University Park. Currently all Eco-reps live in East Halls on the UP campus; however there is potential for expanding the program to other residence halls on the UP campus, as well as to other campus locations with residence halls. Students interested in applying for a position send a cover letter explaining their interest, resume, and two references via email to the Eco-Rep Coordinator. Selected students are interviewed and reviewed by an Eco-Rep Selection Committee.

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

The Eco-Reps:

- Learn about the issue or problem the behavior is meant to address (such as the financial, environmental, and social impact issues of energy use)
- Adopt the new behaviors themselves
- Teach and empower their peers to adopt the new behaviors via passive (signage, online strategies) and active programming (events, in-person engagement).

To prepare for their role, the selected Eco-Reps participate in an all-day orientation before move-in day and attend weekly training programs. A high level of interactivity, hands-on learning and engagement is part of every training program. Students learn the basics of sustainability issues, resources and statistics from subject area experts from the Office of Physical Plant (OPP), Auxiliary and Business Services and various academic colleges. For example, they learn about the types and amount of energy used at Penn State University Park from OPP energy engineers. The Eco-Reps learn the strategies and tools of effective behavior change using as a foundation the principles of community-based social marketing. Teambuilding training is also offered to get the Eco-Reps working effectively together and with others. Throughout the school year Eco-Reps receive training from Penn State leaders and take educational tours like a tour of the the community waste authority and the campus recycling tour.

Training is based on the theme or issue of each semester. Traditionally we have focused on energy one semester and waste (recycling/composting) the other semester.

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

Currently, the coordinator of the Eco-Rep Program is a full-time staff member at the Penn State Sustainability Institute. The funding for the program is provided mainly from the Housing and Food Services department which is part of Auxiliary and Business Services. Other direct financial and in-kind support is provided by Residence Life and the Sustainability Institute. University Housing and Food Services

funds the Eco-Reps stipends of \$500 per semester. Residence Life funds programming supplies, food during orientation, and incentives needed for the Eco-Reps programs. Various university faculty and staff participate in training the Eco-Reps. The Campus Sustainability Office funds trainings, tours, transportation, some marketing materials, the Eco-Rep Handbook, Eco-Rep shirts, and food.

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

Students Taking Action to Encourage Recycling (STATERs)

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

21,000

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

Begun in 2005 as a group encouraging tailgaters to pitch it in to the right bin, STATERs has grown into a key OPP partner on educating about recycling and composting. Under the guidance of the Manager of Solid Waste Operations, the STATERs educate students and community members on recycling and composting practices at major events, including football games, THON, the Eisenhower Patio Party, and various sustainability conferences. They collaborate with a number of groups on Penn State's service leaders roundtable, known as the Council of Lionhearts, and help plan campus service days!

<http://sustainability.psu.edu/staters>

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

All students are welcome to join STATERs. Leaders in the organization submit applications and are selected by their peers and the faculty coordinator of the group. Students who do not have a leadership role can join STATERs at their many events and get trained on-the-job. The recent "Beaver Stadium Recycling Effort" trained many students to be peer educators on best practices in waste diversion.

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

The training is done under the supervision of Al Matyasovaky, Senior Program Manager of Solid Waste Services. All members of the organization receive formal and hands-on training in types of solid waste they may encounter, waste diversion practices at Penn State, and how to engage various audiences.

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

STATERs is a volunteer organization, but there are in-kind donations of food, tickets to sporting events, and gear. All STATERs gear used during education, waste diversion, and audit efforts - shirts, tyvek suits, goggles - is provided by the Office of Physical plant. Students who worked the Beaver Stadium recycling effort received a ticket to the football game that they worked. Meal tickets are given to students at conferences for assistance with zero waste efforts.

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

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

793

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

Penn State Net Impact Undergraduate (PSNIUG) is a newly formed and fast growing student organization in the Smeal College of Business. We are affiliated with Net Impact National, a nonprofit organization with over 50,000 students and professional leaders in over 300 volunteer-led chapters across the globe. Our mission is to inspire, educate, and equip individuals to use the power of business to create a more socially and environmentally sustainable world. Net Impact is The Small Steps, Big Wins Challenge is a competition for undergraduate students seeking to tackle our world's social and environmental challenges one step at a time. This challenge represents the "Live" aspect of Penn State Net Impact's goal.

<http://sites.psu.edu/netimpactugchapter/about-us/>

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

The student educators for this program are titled as Campus Directors. These Campus Directors are usually a member of the Net Impact Chapter at a participating college campus. The Small Steps, Big Wins Challenge is fairly new, and in Spring 2013 the campus director for Penn State was placed based on a review of their resume and an interview was conducted. They hold an executive board position within Penn State Net Impact Undergraduate, however this may not be the case for other campuses. When the campus director moves on from their position a similar process is carried out. A new campus director for Penn State was chosen in early Spring Semester 2014 based on a review of a resume and interview.

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

Upon initiation into their new position the 2014 - 2015 Campus Director is mentored by the previous individual who held that position for the remainder of the Spring 2014 Semester. In Fall 2013, the top 20 Campus Directors at the time (Penn State being one of them) were asked to fly out to the Net Impact National Conference in October 2013 to hold discussions, workshops, and collaboration with other successful college campuses on training s for the Small Steps, Big Wins Challenge. The trip was paid for by Net Impact National.

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

Small Steps, Big Wins Campus Challenge is implemented by Penn State Net Impact Undergraduate. The PSU Net Impact Undergraduate Chapter provides cash incentives (prizes) for our own organization's top performers in the challenge. We also provide cash incentives (prizes) for a class that offers the challenge as extra credit. The prizes are provided to the top 5 performs within the class.

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

HealthWorks

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

2,000

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

HealthWorks is a peer education/outreach program in University Health Services that aims to promote health among Penn State students.

The mission of HealthWorks is to: Increase awareness and knowledge of health issues such as sexual health, nutrition and fitness, stress, sleep, alcohol, tobacco and other drugs, body image and eating disorders, and wellness; Promote healthy lifestyle choices; Provide health education programs, information, and materials to students; and Advocate for a healthy Penn State community.

<http://studentaffairs.psu.edu/health/wellness/healthWorks.shtml>

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

Students complete an online application, submit a copy of an unofficial (advising) transcript, provide the name, e-mail address, and telephone number of a current/former employer, advisor, or instructor who can complete a recommendation. Applicants are notified of whether or not they are selected for an interview. Interviewees are notified of whether or not they are accepted into the HealthWorks training class. If accepted into the HealthWorks training class, participants have the option to accept or decline.

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

Training consists of a mandatory 3-credit class (BB H 324) that addresses health behavior theory, health promotion strategies, and health issues relevant to the college population. Health topics include alcohol and other drugs, nutrition, physical activity, sexual health, sleep, and stress. Additional ongoing training will take place during the Spring 2015 semester.

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

Affiliated with University Health Services and Student Affairs.

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

1,000

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

<http://sustainability.psu.edu/ecoreps>

## Responsible Party

**Rob Andrejewski**

Associate Director of Engagement  
Sustainability Institute

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## 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.

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

### **The percentage of entering students that are provided an opportunity to participate in orientation activities and programming that prominently include sustainability:**

100

### **A brief description of how sustainability is included prominently in new student orientation:**

This year Penn State's New Student Orientation (NSO) switched from one day to two, allowing for more inclusion of activities. The Sustainability Institute will be at the Resource Fair from 12:30-2:30 p.m. for all 39 days of NSO. We have the opportunity to engage approximately 10,000 incoming and transfer students and their parents at these events. Our table contains information on what sustainability is, how to get involved, learning opportunities, leadership opportunities, and green dorm room supplies. The table is interactive with games and a "sledgehammer" energy bike.

### **The website URL where information about sustainability in student orientation is available:**

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

## Responsible Party

**Rob Andrejewski**

Associate Director of Engagement  
Sustainability Institute

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## 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.

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### Submission Note:

Other links:

<http://sites.psu.edu/zero/2014/03/17/overview/>

<http://www.psiee.psu.edu/news/colloquium.asp>

"---" 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?:**

	<b>Yes or No</b>
<b>Active student groups focused on sustainability</b>	Yes
<b>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</b>	Yes
<b>Student-run enterprises that include sustainability as part of their mission statements or stated purposes</b>	Yes
<b>Sustainable investment funds, green revolving funds or sustainable microfinance initiatives through which students can develop socially, environmentally and fiscally responsible investment and financial skills</b>	Yes
<b>Conferences, speaker series, symposia or similar events related to sustainability that have students as the intended audience</b>	Yes
<b>Cultural arts events, installations or performances related to sustainability that have students as the intended audience</b>	Yes
<b>Wilderness or outdoors programs that follow Leave No Trace principles</b>	Yes
<b>Sustainability-related themes chosen for themed semesters, years, or first-year experiences</b>	Yes
<b>Programs through which students can learn sustainable life skills</b>	Yes

<b>Sustainability-focused student employment opportunities offered by the institution</b>	Yes
<b>Graduation pledges through which students pledge to consider social and environmental responsibility in future job and other decisions</b>	No
<b>Other co-curricular sustainability programs and initiatives</b>	Yes

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

Advanced Vehicle Team - For more than a decade, the Penn State Advanced Vehicle Team has participated in Advanced Vehicle Competitions similar to EcoCAR 2. The goal of these competitions is to encourage innovation and to train the next generation of engineers in the automotive, energy and technology sectors. As team members move through the same vehicle design process used in the real world they gain invaluable experience that translates to their future careers. Penn State EcoCAR 2 team won first place at Year Two Competition. The team brought home 11 awards and nearly \$18,000 in prize money that will be used in Year Three of the competition.

Ag Advocates - Ag Advocates are undergraduates who have been chosen to represent Penn State and the College of Agricultural Sciences at activities throughout the year. Ag Advocates help to inform the public about the college and the diversity of the agricultural sciences. We have meetings every week during the school year.

American Solar Energy Society - The Penn State chapter of the American Solar Energy Society (ASES) was founded in 2010 at Penn State's University Park campus. Our mission is to advance all things solar at Penn State. Our parent organization is supported by more than 8,000 energy professionals and grassroots supporters. With the Penn State Chapter included, ASES has regional chapters in 40 states across the U.S.

American Water Resources Association - The American Water Resources Association is an organization dedicated to the advancement of interdisciplinary water resources research, planning, management, development, and education. The mission of the AWRA Penn State Student Chapter is to collect, organize, and disseminate ideas and information in the field of water resources; provide a means of interaction within the water resources community; perform and participate in community service projects; represent membership in the campus community; and provide information about the organization to incoming and current undergraduate and graduate students. The student chapter also performs specific activities such as hosting speakers for monthly meetings, conducting watershed education programs, organizing field trips, participating in community service projects, and sponsoring conferences.

Bridges to Prosperity - American Society of Civil Engineers - Bridges to Prosperity is a non-profit organization that seeks to build footbridges over impassable rivers in impoverished rural areas across the globe. Through construction of bridges, residents of these communities are provided with better access to healthcare, education, and economic market opportunities. The Penn State chapter was founded in the Spring of 2013 and is composed of a dedicated core of engineering students. The club is supported by the school's Civil Engineering department as it works towards the completion of its first project in Membrillo, Panama.

Community Garden at Penn State - Student club that coordinates the usage and maintains the 98-plot community garden at the Sustainability Experience Center

charity: water - The mission of charity: water Penn State is to assist the non-profit organization, charity: water, by creating awareness of the ongoing water crisis in developing nations and to raise funds to assist charity: water's mission to bring safe, clean drinking water to those in need.



Community Environment and Development Club - The Community, Environment, and Development Club is networking and community service based club focused on the local community of State College. The CED Club coincides with the missions of the CED major. We strive to build relationships with community members and community organizations to enhance the sustainability and economic development of State College and its surrounding areas.

Collegiate 4-H Club - Collegiate 4-H is a student organization committed to the leadership development of its members, doing community service that makes a difference, and continuing our support of the Pennsylvania 4-H program. Former members and nonmembers alike are always welcome. Regardless of the activity, we're always having fun, so come check us out.

Community Food Security Club - Community Food Security (CFS) focuses on taking an active role in the community to educate others about the benefits of eating nutritious and locally produced food. Through community, school, and gardening projects we will be making a real impact, while educating ourselves. Our ultimate goal is to spread conscious eating habits to the Penn State and State College communities, to assist in the support of a local food system, and to raise awareness and support for food security.

Eco Action - Since its foundation as Penn State's first environmental organization in 1972, students have breathed life into the environmentalist movement, working as one to transform Penn State into an ultimately sustainable university. Each semester, we collectively decide on two to three environmental campaigns we will focus our efforts towards. Past campaigns have included Quit Coal, An Environmental Bill of Rights, and many others.

Ecology Graduate Student Organization - The Ecology Graduate Student Organization (EGSO) was formed in December 1999 to provide a forum for graduate students in the Penn State Ecology Program to engage in activities related to academic aspects of the program, recruitment, mentoring and professional development, special activities and events, outreach to other groups at PSU and the broader community.

Eco-Reps - Eco-Reps are first-year students committed to creating a culture of sustainability at Penn State. The position is paid and welcomes students from diverse majors and backgrounds to encourage sustainable behaviors in the residence halls through fun activities. Currently, the program is only in East Halls, with two Eco-Reps per hall. Some of the program's successes include East Halls going "Zero Waste" and the energy savings from the energy challenge each spring. Students in the program also have many opportunities for leadership development and sustainability training.

Energy, Business, and Finance Society - The Energy Business and Finance Society offers students within the EBF major, or those with interest in the major, with a different array of venues to learn about the opportunities that come with the program. The group works on several areas including company relations, alumni involvement, resume and interview preparation recruiter receptions, promotion of the major to raise awareness within our college and the university.

Engineers without Borders - Engineers Without Borders (EWB) is a non-profit, humanitarian organization that partners with developing communities worldwide to improve their quality of life through the implementation of sustainable engineering projects, while fostering leadership skills, technical ability and a global outlook in students of any major. Engineers Without Borders-Penn State (EWB-PSU) has been a recognized chapter of Engineers Without Borders-USA since the spring of 2010.

Engineers for a Sustainable World - ESW strives to promote sustainability throughout the engineering process. We do this by working on various projects throughout the semester. In addition, we host guest lecturers who have a hand in sustainable practices, and we go on field trips to local places that demonstrate various aspects of sustainability.

Fair Trade Penn State - Fair Trade Penn State was founded at Penn State in 2009 by Barbara Donnini (Economics, '12), with the goal to increase awareness among consumers about the manufacturing processes of major industries. Since, FTSPSU sponsors events to encourage informed, ethical buying practices that support human rights. FTSPSU also promotes campaigns of other nonprofit organizations that identify human needs. We are looking to recruit dedicated students who exhibit an interest in mobilizing the Penn State community to commit to ethical consuming practices and gaining valuable leadership skills while making an impact in people's lives.

Friday Night Lights Out - The Mission of Architecture Brigades is to collaborate with rural communities in Honduras to alleviate needs in health and education infrastructure through design and hands-on construction projects. All Architecture Brigades' trips take place in Honduras. Projects include designing and constructing schools and health centers for rural communities.

Global Architecture Brigades - The Mission of Architecture Brigades is to collaborate with rural communities in Honduras to alleviate needs in health and education infrastructure through design and hands-on construction projects. All Architecture Brigades' trips take place in Honduras. Projects include designing and constructing schools and health centers for rural communities.

Global Environmental Brigades - The mission of Environmental Brigades is to empower rural communities in Panama to reverse degradation and preserve their environment through reforestation, sustainable agriculture, waste management and education programs. All Environmental Brigades take place in Panama.

Global Medical Brigades - Global Medical Brigades provides a holistic model for sustainable health care in under-served rural communities by conducting preliminary needs assessments, treating patients to the highest ethical standards, sponsoring referrals to those with needs beyond our capability, recording data for the production of quantitative reports, and working with other GB programs to improve the water, sanitation, and economic infrastructures.

Global Water Brigades - Global Water Brigades (GWB) is a movement of passionate students and professional volunteers from around the world dedicated to improving access to clean water and sanitation. GWB designs and implements water systems to increase access and quantity of water to the communities it services. Our systems also prevent communicable illnesses in communities with limited access to clean water.

Global Business Brigades - Global Brigades is the world's largest student-led global health and sustainable development organization. Since 2004, Global Brigades has mobilized thousands of university students and professionals through nine skill-based programs that work in partnership with community members to improve quality of life in under resourced regions while respecting local culture.

GlobeMed - GlobeMed aims to strengthen the movement for global health equity by empowering students and communities to work together to improve the health of people living in poverty around the world. GlobeMed at Penn State partners with ACUDESBAL, a grassroots organization working with 29 communities in Bajo Lempa, El Salvador. ACUDESBAL formed in 1998 on the idea that the strength of a community working together is the way to achieve social, economic, political, and environmental justice. All of these are an important part of Bajo Lempa's history of civil war and devastating natural disasters.

Habitat for Humanity - Habitat for Humanity International is a nonprofit, ecumenical Christian housing ministry. HFHI seeks to eliminate poverty housing and homelessness from the world, and to make decent shelter a matter of conscience and action. Throughout the year, Habitat at Penn State has a constant presence and is actively involved in projects around campus as well as in the community.

HealthWorks - HealthWorks is a peer education/outreach program in University Health Services that aims to promote health among Penn State students.

Horticulture Club - The Horticulture Club is an organization for all university students interested in plants, gardening, and landscaping. It is the goal of the club to educate both its members and the public on sound horticultural practices, new plants, and new techniques. The largest event that the club conducts throughout the year is its annual Horticulture Show. For this event, the agricultural arena on campus is created into a full indoor landscape and all of the material is sold to help fund the club. Other events throughout the year include spring flower sales, trips, guest speakers, and community service.

Human Rights Brigade - Penn State's chapter of Global Human Rights Brigades (formerly known as Global Law Brigades) is a chapter of Global Brigades, the largest student-run sustainable development organization in the world. Members of HRB work with in-country lawyers and social workers to improve access to legal counsel, legal education, and human services in Panama's rural communities during 8-day trips throughout the year.

Innoblue - Innoblue is a community of artists and hackers, coders and designers, innovators and makers, who want to change the world for the better.

Net Impact (Graduate) - Through speakers, workshops, field trips, panels, and discussion meetings, PSNI focuses on a collaborative learning environment where all members help educate each other. The role of the Board of Officers is to facilitate this learning and cultivate relationships with professionals and organizations in the business world. We discuss topics related to social entrepreneurship, socially responsible investing, sustainable supply chains, sustainable growth and development, corporate citizenship, social marketing, green building, and community economic development.

Net Impact (Undergraduate) - Penn State Net Impact Undergraduate (PSNIUG) is a newly formed and fast growing student organization in the Smeal College of Business. We are affiliated with Net Impact National, a nonprofit organization with over 50,000 students and professional leaders in over 300 volunteer-led chapters across the globe.

Penn State Outing Club - The Penn State Outing Club, PSOC for short, is an entirely student run organization that is dedicated to experiencing the outdoors in every possible capacity. PSOC was founded in 1920, making it one of the oldest clubs at Penn State. Still running strong today, PSOC club members organize backpacking, canoeing, kayaking, hiking, and trail maintenance trips from the Catskills to California. PSOC is dedicated to helping the community through extension programs at Shaver's Creek and the surrounding trail maintenance groups.

Public Health Brigades - Working side-by-side with community members, volunteers improve the overall infrastructure within the home through the construction of five projects: eco-stoves, latrines, water storage units, showers, and concrete floors. The five projects were chosen based on observations of medical brigade patient records, which illustrated high levels of respiratory, chagas and other preventable diseases caused by poor in-home health infrastructure, as well as student input and observations. Between brigades the in-country team provides follow-up to ensure the maintenance of the structures and work to find funding that will complement the health goals of the community to perpetuate future construction.

Recreation, Park, and Tourism Student Society - Unites all recreation education majors at the University, fosters and maintains high standards of professional qualifications, and disseminates information concerning the activities and interests of the Society.

Society of American Forestry - The Penn State Student Chapter of the Society of American Foresters seeks to advance the science, technology, education, and practice of professional natural resource management and to use the knowledge and skills gained to benefit society. Penn State SAF hosts various forestry-related professionals who share their knowledge and experiences with the organization. In addition to regular meetings, Penn State SAF sponsors a number of activities throughout the year, including a Christmas tree sale, service projects such as tree plantings and trail maintenance, camping trips, and other outdoor activities. Student members also have the opportunity to attend the SAF National Convention and participate in the annual Forestry Quiz Bowl.

Society of Energy Engineers - Penn State is now the first university to create the Society of Energy Engineers for its students majoring in energy engineering. As more universities adopt similar academic programs in energy engineering, the Society will expand across the country and globe. Objectives of the group are to provide a forum for energy engineering students to meet and discuss various academic, research, and professional opportunities that are available; to provide enriching educational experiences including lectures from experienced professionals, field trips, and more; to network with peers and share internship and co-op experiences and advice; to facilitate networking opportunities with industry professionals; to educate and inform prospective students and employment recruiters about the skill set of energy engineering graduates.

Society of Environmental Systems Engineers - We provide a forum for the concerns and interests of EnvSE students. Our goals include publicizing ENVSE to industry, corporations, and the general public, creating awareness of EnvSE at Penn State, encouraging student involvement, participating in campus projects (including volunteer day at Shaver's Creek Environmental Center, College of Earth and Mineral Sciences Exhibition, and Earth Day), and professional development through industry and government speakers.

Society of Women Engineers - The Society of Women Engineers, SWE, is a national organization composed of both student and professional members. This society was founded nationally in 1950 to act as a supportive organization for women in the engineering field. SWE's mission statement is to "stimulate women to achieve as engineers and leaders, expand the image of the engineering profession as a positive force in improving the quality of life, and demonstrate the value of diversity." The Penn State Student Section was founded in 1975 and has grown to become the largest and most active engineering organization on campus, with over 250 members.

Supporting Women in Geography (SWIG) - Supporting Women in Geography, or SWIG, is an official, University-recognized organization largely made up of students within the Department of Geography. SWIG's mission is to promote the participation of women in the discipline of geography and to empower women who are pursuing academic and professional careers in geography. We provide regular opportunities for women and supporters of women to come together for intellectual, professional, and personal support, and to develop a network of information and resources.

Students Taking Action to Encourage Recycling (STATERS) - STATERS is a group of motivated and enthusiastic Students Taking Action To Encourage Recycling! Starting in 2005 as a casual group encouraging tailgaters to pitch it in to the right bin, STATERS has grown to continue doing that and more. Today, we offer our help to big campus events such as football games, THON, the Eisenhower Patio Party, Friday Night Lights Out, and various sustainability conferences. We collaborate with a number of groups on Penn State's service leaders roundtable, known as the Council of Lionhearts. We also help to plan big campus service days.

Student Society for Indigenous Knowledge - We're a brand new student group and are looking for members who are enthusiastic and interested in indigenous knowledge and who want to help plan and implement the direction our club will take in the following years.

Students for Environmentally Enlightened Design (SEED) - Students for Environmentally-Enlightened Design (SEED) is a multidisciplinary student organization recognized by the Penn State office of Student Affairs. SEED was founded by three Department of Architecture students in 2009 to promote student-supported initiatives, as well as existing work in environmentally sustainable design.

Student United Way - The Penn State Student United Way (PSU SUW) is a student-run branch of the Centre County United Way. We are a group of student volunteers devoted to lending our time and talent for the benefit of our surrounding community. Additionally, we work closely with Centre County United Way to provide continuing support for its 40 partner agencies.

Sustainable Agriculture Club - The Sustainable Agriculture Club strives to help the Penn State community better understand the importance of sustainable agriculture. This is advocated through educational speakers, community programs, and activities. The club gives students the opportunity to engage in activities and discussions that explore today's food system at a farm level. The club is open to any Penn State student interested in sustaining the future of agriculture from a producer or consumer standpoint.

Vegetarian Club - As ambassadors of a vegetarian lifestyle, we invite Penn State students and the dynamic State College community to partake in the benefits of a plant-based diet for the sake of health, the animals, and the planet. Through outreach, education and social events, we act as catalysts in the veg movement. We welcome all who are curious about trying vegetarian food, the ethics behind our food choices or environmental impact. All are welcome regardless of personal diet choice, background and/or individual beliefs.

The Wildlife Society - The Wildlife Society (TWS) has a wide range of activities in professional development, recreation, fund-raising and recruitment, and community service. Our club strives to keep members involved by offering series of activities, speakers, workshops, and social events to attend each semester. In the past these have included short courses at Shaver's Creek such as Project WILD and Pennsylvania Songbirds, Bird Box building, trips to bat caves and T n D Cats, and a variety of guest speakers at meetings, to name a few. The club fund-raises with an annual game dinner and some merchandise sales. We are also looking for new suggestions from members. We want members to have a good list of experiences in the wildlife field and we feel that by being an active member of TWS this can be achieved.

Undergraduate Students in the Department of Geography (UnderDoGS) - The UnderDoGS at Penn State are a group of undergraduates in the Department of Geography. The UnderDoGS represent the commitment of the students in the Department of Geography to not only excel in their studies, but also in contributing to their fellow students and to society.

UNICEF - 21,000 children die from preventable causes EVERY DAY! UNICEF's goal is to make that number 0 through their presence in 190 countries! Whether it's providing food, medicine or simply a blanket, UNICEF is there where a child is in need. UNICEF Penn State helps UNICEF reach their fund raising and awareness goals by holding various events throughout the year.

**The website URL where information about student groups is available:**

<http://sustainability.psu.edu/live/what-students-can-do/join-student-group>

**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 98-plot, student-managed community gardens coordinated by the Sustainability Experience Center are organic. They are not certified, but are required to follow all organic gardening techniques.

The herb garden in front of Cafe Laura, part of the School of Hospitality Management, is also organic.

Crop Mobs, a project started by a small group of Penn State students in the fall of 2013 and supported by the Reinvention Fund, connects the community and farmers in a fresh and creative way. A “mob” of volunteers heads out to a farm to help with a normally laborious and time-consuming project. In-turn, the students learn from the farmer from shared stories about life on the farm and the practices they are integrating to work with the ecosystems around them, as well as a communal meal supplemented with fresh products straight from the farm. The goal is to link those who grow our food with members of the community in a way that leads to learning, growing and sharing.

Plans for a student farm are currently under development.

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

<http://www.psugarden.org/>

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

Innoblue is a community of artists and hackers, coders and designers, innovators and makers, who want to change the world for the better. Innoblue was established in April 2010 by two Penn State students, David Adewumi and Jon Tornetta, dedicated to starting and supporting innovative business, civic, and social ventures in State College. Since beginning in April 2010, Innoblue has grown to include a team and large advisor pool with multidisciplinary backgrounds, who all work together to oversee and catalyze the progress of early stage ventures. Innoblue is run primarily by Penn State students who envision a community transformed by entrepreneurship. Their expertise lie in creating planned serendipity: connecting great mentors and advisors to the students and ventures who are searching for guidance. In the future, Innoblue will open Innoblue Labs, a space that is open to all innovators, designers, engineers and other creative minds that will facilitate communication and collaboration, creating an environment that will produce great products.

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

<http://www.innoblue.org/>

**A brief description of the sustainable investment or finance initiatives:**

Penn State Global Business Brigades (Microfinance Brigades - Student Governed) volunteers work with a local network of “Community Development Funds” to empower rural communities by establishing savings and credit cooperatives and teaching community members basic financial literacy. Volunteers provide rural communities with the educational, financial, and organizational resources necessary to sustainably drive their own economic development. A 10-Day Microfinance Brigade provides volunteers with the opportunity to gain first-hand micro-lending experience and perpetuate the movement to alleviate poverty worldwide. Volunteers participate in real micro-lending transactions and also engage in the daily lives of the actual borrowers. Volunteers learn about microfinance by participating in seminars from local professionals, and by shadowing loan officers as they visit micro-entrepreneurs in their communities. Volunteers empower community members to reach their potential with basic educational workshops and a capital investment that the volunteer personally delivers. Each volunteer is allotted part of their program contribution to work with community micro entrepreneurs and banks to determine how to allocate their loan. In this way, volunteers are able to directly empower local community members to achieve their financial goals.

Penn State Reinvention Fund - In October 2013, the Sustainability Institute announced its new internal grant program, The Reinvention Fund, intended to support collaborative projects by faculty, staff and students that will improve and expand sustainability efforts at Penn State. \$102,000 has been dedicated to support proposals received by student teams. Awards must be managed by the student teams. Utilization of funds must be reported. Not student governed.

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

<http://www.clubs.psu.edu/up/gb/brigades/business-microfinance.html>

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

Penn State has an annual Colloquium on the Environment Speaker Series, open to students as well as faculty/ staff. Speakers that have been hosted by the university include: Robert F. Kennedy Jr., Christine Todd Whitman, William McDonough, Amory Lovins, David Suzuki, Bill McKibben, and Majora Carter.

An annual Earth Day Celebration is held to recognize the sustainability achievements of students, faculty, and staff. The 2014 events on UP campus included a film screening of Growing Cities, which focused on urban agriculture. The filmmaker was part of a panel discussion that followed, was invited to address several classes, and interacted informally with students on several occasions during his two-day visit.

Penn State's Carbon Emissions Conference "Getting to Zero" brought together Penn State community members (including students) committed to responding to the threat of climate change. Our goal is to begin imagining a workable plan to achieve zero effective emissions by 2050, providing a model for universities and large corporations across the country and an inspiration for local and regional governments.

There are other speakers and symposia throughout the year, including Terracycle CEO Tom Szaky and those invited to the Environmental Forum

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

<http://www.psiee.psu.edu/news/colloquium.asp>

**A brief description of cultural arts events, installations or performances related to sustainability that have students as the intended audience:**



Students are one intended audience, although certainly not the only one, at Penn State's Center for Performing Arts. Some past performances have focused on sustainability topics, including "Water is Rising", a powerful performance by a group of Pacific Islanders whose islands are being directly impacted by rising sea levels associated with climate change. Also see

<http://culturalconversations.psu.edu>

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

<http://www.cpa.psu.edu/>

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

The word aurora refers to the dawn, as well as to the natural electrical phenomena of colorful streams of light in the night sky — usually near the magnetic poles. Similarly, AURORA Penn State Outdoor Orientation Programs offer a powerful start to a student's Penn State experience. These three unique programs — ORION, URSA, and VEGA — offer first-year students a distinctive entrance into Penn State life — forging friendships and unforgettable adventures to carry with them always.

The ORION Program is provided by the Penn State Shaver's Creek Environmental Center.

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

<http://shaverscreek.org/penn-state-students/aurora/orion/>

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

Sustainable State - This new First Year Seminar explores the meaning of the concept of sustainability and its relevance to the work of engineers. The exploration will use field trips, guest speakers, readings, videos, self assessment, research and class discussions to engage students in this endeavor. We will look at what Penn State is doing as well as our own personal behavior and the potential for engineers to contribute to this mega-challenge.

**The website URL where information about the theme is available:**

<http://shaverscreek.org/penn-state-students/credit-courses/environment-and-culture/>

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

The website below describes Penn State programs designed to deliver transformative educational experiences that prepare participants to become leaders of positive change—in their studies, their workplaces, and their personal lives.

<https://sustainability.psu.edu/learn/students/programs>

The Ecoreps program provides peer-to-peer training in sustainable living to first year students living in selected residence halls.

<http://sustainability.psu.edu/live/what-students-can-do/eco-reps/eco-reps>

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

<https://sustainability.psu.edu/>

**A brief description of sustainability-focused student employment opportunities:**

The Sustainability Institute offers paid internships during the school year and summer. These offer students the opportunity for sustainability-focused experience. See

<http://sustainability.psu.edu/live/what-students-can-do/sustainability-institute-internships>

The

[sustainability.psu.edu](http://sustainability.psu.edu)

website lists student work opportunities on campus, in the community, and beyond. See

<http://sustainability.psu.edu/opportunities>

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

<http://sustainability.psu.edu/live/what-students-can-do/sustainability-institute-internships>

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

Penn State does not have a graduation pledge at this time.

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

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

Student Sustainability Advisory Council (SSAC) - The Penn State Student Sustainability Advisory Council provides consultation and advice on Penn State sustainability planning, programs, and initiatives. The Council meets bi-monthly for discussions and planning. The Council is comprised of students with experience and interest in studying, advancing, and promoting sustainability.

Earth House - EARTH House is an enjoyable and diverse living environment for students interested in agricultural and environmental issues. Academic support including tutoring and study groups is also part of EARTH House. Activities include hiking trips, clean-up at Shaver's Creek, volunteer projects, and trips to agricultural events such as the Pennsylvania Farm Show. EARTH House is located in North Halls.



Council of Lionhearts - Established in 2004, the Penn State Council of LionHearts is an affiliate student organization and is comprised of student representatives from Penn State's most active volunteer and community service student organizations. Generally, two representatives from each group are invited to sit on the Council. The president and primary service leader of each organization are those delegates. Previous Council members are also invited to continue to serve as emeritus leaders.

IFC (Sustainability Chair) - Sustainability Chair for the InterFraternity Council at Penn State is tasked with merging concepts of sustainability into fraternity life.

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

<http://studentaffairsblogs.psu.edu/sustainability-council/>

# Outreach Materials and Publications

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## Responsible Party

**Lydia Vandenberg**

Assoc. Dir. Employee Engagement & Education  
Sustainability Institute

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## 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.

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*"---" 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
<b>A central sustainability website that consolidates information about the institution's sustainability efforts</b>	Yes

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

**A brief description of the central sustainability website:**

Penn State has a Sustainability Portal that allows those that access the site to learn about sustainability initiatives at all 24 locations of Penn State and the University's Sustainability Strategic Plan. The site's organization parallels the strategic plan: Learn, Live, and Lead and aims to meet the needs of students, faculty, staff and the community. . Learn: Find learning opportunities for students, faculty, staff, and the general public about Penn State's efforts in sustainability. Find out about programs, funding opportunities, courses, and more. Live: Read more about how to live a more sustainable lifestyle at Penn State by getting information on the Reinvention Fund, Sustainable Communities Cooperative, Green Teams, student groups, möbius, and much more. Lead: Stories on inspiring leaders in the world of research, student life, faculty and staff, and efforts across all of Penn State campuses.

**The website URL for the central sustainability website:**

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

**A brief description of the sustainability newsletter:**

The "Mainstream" e-newsletter is Penn State's Sustainability Highlights for each week. We share stories from across all campuses and areas at Penn State while also letting everyone know about upcoming events, funding opportunities, and how to follow us on social media.

**The website URL for the sustainability newsletter:**

<http://www.icontact-archive.com/cm/kMnNjucz6ZEaaX8iASZi5aG5dun5o-rBbDeId-xsB7utqyEWXxehJA===?w=3>

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

Penn State uses Facebook, Twitter, Instagram, Pinterest, LinkedIn and Google+. Our most engaging/engaged platform is our Twitter account:

<https://twitter.com/sustainPSU>

<http://www.pinterest.com/sustainpsuedu/>

<https://twitter.com/sustainPSU>

<http://instagram.com/sustainabilitypsuedu#>

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

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

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

The Penn State Institutes of Energy and the Environment (PSIEE) has an on-line resource geared to publicize and disseminate student research on energy and the environment. (See web URL below.) For a more ephemeral but larger representation, we also "publish and disseminate" student research at the PSIEE's annual picnic: Bar Charts and Bar-B-Que. At this gathering, faculty and students share their research results.

Many of our student's sustainability research projects get published in the peer-reviewed scientific literature. Undergraduates may present their research results at the university's annual undergraduate research exposition. Graduate student theses and dissertations are published in the online eTD database that allows one to search titles for terms such as "sustainability".

<https://etda.libraries.psu.edu/>

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

[http://www.psiee.psu.edu/for\\_students/student\\_spotlight\\_archives.asp](http://www.psiee.psu.edu/for_students/student_spotlight_archives.asp)

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

N/A

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

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

The dining halls have signage to combat food waste. There are posters to educate about composting. Vegetarian meals are made available in all five dining areas and are labeled as well.

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

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

In an effort to rehabilitate Penn State's historic Hort Woods, the University has been removing invasive plants and restoring the area with native woodland trees, shrubs and herbs. Signage has been installed to help the public understand this example of diverse forest on our campus and its importance to our community. At the Penn State arboretum, interpretive signage educates the public about the pollinator garden and the meadow marsh.

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

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**A brief description of the sustainability walking map or tour:**

[STARS Reporting Tool | AASHE](#)

Penn State has both an online and paper map that guides people to see sustainable features on the University Park campus. A description of the sustainable features is included for all 24 sites, as well as icons for key features. The map shows the community garden, LEED buildings, green roofs, native landscaping, public transportation stops, and more.

**The website URL of the sustainability walking map or tour:**

<http://greentour.psu.edu/>

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

The

[sustainability.psu.edu](http://sustainability.psu.edu)

portal lists alternative transportation means for commuting to and navigating around the University Park campus.

Some of the information that can be found using the portal includes:

Penn State and Centre Area Transportation Authority (CATA) offer a free on-campus bus system. Transportation Services coordinates an express bus to New York City, Washington D.C., Baltimore, and other urban areas. Full-time employees can purchase monthly bus passes for five dollars a month. Students, faculty, and staff can find out how to register their bikes on the site.

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

<http://sustainability.psu.edu/live/what-penn-state-doing/infrastructure/transportation>

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

Penn State's University Park campus strives to be both pedestrian and bicyclist friendly! The University recently collaborated with the Borough of State College to develop a Bicycle Master Plan that will promote bicycle commuting and expand on-campus mobility for students and staff. Penn State and our local township created a bicycle and bus route map to assist walkers and cyclists.

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

<http://www.transportation.psu.edu/transportation/alt-transportation/bicycles/loader.cfm?csModule=security/getfile&PageID=40694>

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

Recycling Guidelines are annually shared with the Resident Assistants (RAs) in a booklet publication. The publication is updated annually so students are aware of changes in recycling and composting guidelines. The publication includes: Residence Hall Recycling Guidelines, Recycling Program History, Recycling Facts, Composting Guidelines, Energy Conservation Tips, Special Event Recycling Guidelines, and other resources. The booklet is produced by Residence Life, Housing Services, and the Office of Physical Plant.

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

<http://sustainability.psu.edu/live/what-students-can-do/what-you-can-do-residence-hall>

**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:**

Each semester, a student is assigned to cover the environment beat for Penn State's student newspaper, The Daily Collegian. In fall 2013, Sarah Rafacz covered this area and this spring, Clayton Over wrote several articles on this topic area. See the following for an example:

[http://www.collegian.psu.edu/news/campus/article\\_ccd8bb48-8ed8-11e3-bbc2-001a4bcf6878.html](http://www.collegian.psu.edu/news/campus/article_ccd8bb48-8ed8-11e3-bbc2-001a4bcf6878.html)

A search of the Daily Collegian archives shows 139 articles that include the term "sustainability" appeared in the most recent one year period.

A columnist for Onward State, the alternative student newspaper, frequently writes about sustainability 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://www.collegian.psu.edu/>

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

Sustainability is included in Penn State's staff review process and our University's Sustainability Institute worked closely with our Human Resources division to create a tip sheet to guide a supervisor's and staff's conversation on this topic.

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

<http://ohr.psu.edu/assets/recruitment-and-compensation/documents/YouPennStateandSustainability.pdf>

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

Yes

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

To assist our community to understand Penn State's goals and approaches to embedding sustainability into the fabric of our University, we have posted the University's strategic plan for sustainability on our website, as well as the strategic plan for the Sustainability Institute.

<http://sustainability.psu.edu/sustainability-institute/sustainability-institutes-strategic-plan>

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

<http://sustainability.psu.edu/sustainability-strategic-plan>

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

**material):**

Yes

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

The Green Paws Action Checklists is organized into four levels of certification that signify an office's progression towards higher and higher levels of efficiency, health, and environmental sustainability. Faculty and Staff can follow the checklists to reach levels of Green Paw Certification.

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

<http://sustainability.psu.edu/greenpaws>

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

Yes

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

Each major Penn State unit is required to submit a updated strategic plan to the University administration by July 2014. The Sustainability Institute (SI) has put together tools and resources to support unit's effective implementation of the guidelines for sustainability found in the Unit Strategic Planning Guidelines. These resources have been combined in an easy to use guidebook:

[http://sustainability.psu.edu/sites/default/files/SustainabilityGuidebook\\_final\\_feb19.pdf](http://sustainability.psu.edu/sites/default/files/SustainabilityGuidebook_final_feb19.pdf)

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

<http://sustainability.psu.edu/strategic-planning>

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

Yes

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

Penn State presently has over 100 Green Teams, defined as a group of faculty and staff who volunteer to learn about sustainability and find ways to apply these concepts to unit decision making. Monthly, the Institute releases a newsletter to the members filled with tips, calendar events, success stories, and indepth resources.

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

<http://sustainability.psu.edu/live/what-faculty-staff-can-do/green-teams-program/air-newsletter-archive>



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

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

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

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

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

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

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

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

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

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# Outreach Campaign

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## Responsible Party

**Lydia Vandenberg**

Assoc. Dir. Employee Engagement & Education  
Sustainability Institute

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## 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):**

Residence Hall Energy Challenge, Residence Hall Recycling Challenge

**A brief description of the campaign (1st campaign):****Student Energy Challenge**

During the fall semester, students living within 44 residence halls on the Penn State University Park Campus participate in an annual week-long energy challenge. For 7 days, students living in residence halls are encouraged to take action to reduce their building's electrical energy usage by following actions that reduce individual energy use. Students are given daily feedback on their buildings kilowatt hour usage per student and per building.

**Student Recycling Challenge**

During the spring semester, students living within each residential area participate in the recycling challenge. The goal of the recycling challenge is to learn which residential area (East, North, South, Pollock, West) will have the least amount of recyclable materials in the trash bins. Waste audits are done in the various halls and the area with the least amount of recyclables in the trash at the end of 7 days wins the challenge. A trophy is displayed in the common area.

Students learn about both campaigns from emails by their Resident Assistants. The campaigns are also advertised in the monthly Residence Hall Newsletter "Stall Stories" posted in restroom stalls.

**No Impact Week**

In Spring 2014, Penn State resident students had the opportunity to participate in this one-week experiment in sustainable living, which allowed them to experience the difference lowering their impact can have on their quality of life, their community and their planet. Special events focused on local food, energy use, reducing consumption of bottled water, and recycling.

Also in Spring 2014, students in 14 East Halls residence buildings competed against each other and over 100 other universities in the Campus Conservation Nationals energy reduction challenge during three weeks in March and April. The challenge is led by Eco-Reps and their captains (students recruited from their halls).

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

During the energy challenge, daily kilowatt hours for each residence hall is provided during the challenge week. These numbers are painted on the windows of each common area: East, Pollock, North, West, South.

The energy challenge week has resulted in significant decreases in electrical energy use during the week. All residence halls have building metering systems to track daily, weekly, or monthly electricity usage per building.

During the Spring 2014 Campus Conservation Nationals energy challenge, an online Lucid building dashboard shows 14 Penn State residence halls participating, with energy savings that ranged from a 7.4% reduction to a 1.5% increase, and an average reduction of 3.2%.

A waste audit determines the winning residential area of the recycling challenge. Recyclable items in the trash bins are taken and weighed daily for a week. During the spring of 2011, East Halls, a first year living area won the recycling challenge after 3 years of the same upperclassmen area winning.

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

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**The name of the campaign (2nd campaign):**

20/20 Energy Challenge for Staff

**A brief description of the campaign (2nd campaign):**

This two-week challenge is designed to engage faculty and staff in learning new energy conservation practices (such as turning off lights, appliances and electronics). These small behavior changes, when performed collectively, can decrease Penn State's environmental impact. Participating reduces energy waste, helping Penn State achieve its dual goals of a 20% reduction in overall energy usage over the next 10 years and a 35% reduction in greenhouse gas emissions (over 2005 levels) by 2020.

**A brief description of the measured positive impact(s) of the campaign (2nd campaign):**

In 2014, we had 244 Green Team members engaging over 900 non-team members to participate and complete the challenge. Because we cannot measure energy consumption at the sub-building level, we measured the impact via the number of people who took six actions everyday for two weeks. These actions included: turning off lights, computers, appliances and electronics when not in use; putting printers to sleep; taking the stairs; and unplugging coffee makers and other appliances over the weekends. We offered four additional actions that participants could take over the weekends. Prizes were awarded for those who completed all actions for two weeks.

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

<http://sustainability.psu.edu/live/what-faculty-staff-can-do/green-teams/penn-states-2020-energy-challenge>

**A brief description of other outreach campaigns, including measured positive impacts:**

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# Employee Educators Program

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## Responsible Party

**Lydia Vandenberg**

Assoc. Dir. Employee Engagement & Education  
Sustainability Institute

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## 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*.

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## Submission Note:

The number of employees served by the program is calculated by adding up the information from the Green Team registration forms. We ask each team how many people they have within their unit and/or building.

"---" 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:**

16,703

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

Green Teams Program

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

4,000

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

In most cases, the Green Team members are self selected but in a few cases, they are appointed by the head of a department or college. Presently we have 103 Green Teams with about 800 members.

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

The Sustainability Institute offers Green Teams Orientation to all Green Team members. Through this orientation, the members get acquainted with the concept of sustainability, learn about different approaches to adopting sustainable practices into their unit, and the resources available to them. For example, they can easily adopt the Green Paws Office Certification program as a self-guided method to green their operations. Or, we also offer training and tools on how they can analyze their operations and programs through a "sustainability lens" and see opportunities for improvements that will lessen their economic, social and environmental impacts.

Furthermore, Green Team members gather quarterly at a free luncheon to exchange information and hear presentations on specific sustainability topics. Every month, we send out a newsletter to all members with tips, events notices, and resources.

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

The Sustainability Institute supports this program with one full-time staff member and one intern.

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

<http://sustainability.psu.edu/live/what-faculty-staff-can-do/green-teams-program>

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

Green Paws Program

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

1,746

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

The Penn State Sustainability Institute's Green Paws Program is a simple, yet effective way for faculty and staff to "green" their workspace and earn a Green Paws Office Certification for their efforts. Participants self-select themselves.

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

Monthly orientations are offered for this program to get participants started.

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

The Sustainability Institute manages this program and it is coordinated by one full-time staff person and one intern.

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

<http://sustainability.psu.edu/greenpaws>

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

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**Number of employees served by all other programs:**

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

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

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

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

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# Employee Orientation

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## Responsible Party

**Lydia Vandenberg**

Assoc. Dir. Employee Engagement & Education  
Sustainability Institute

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## 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).

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### Submission Note:

New employee orientation will be moving to an on-line format in the future.

---" 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:**

100

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

At Penn State's New Employee Orientation, our Center for Workplace Learning and Performance introduces the participants to the concept of sustainability, and ways they can become involved, such as the Green Paws (sustainable office practices) Program. A follow-up email sent to new employees includes additional information about sustainability, including links to the

[sustainability.psu.edu](https://sustainability.psu.edu)

website, an informational video about sustainability at Penn State, and a news article about our Mobius recycling program.

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

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# Staff Professional Development

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## Responsible Party

**Lydia Vandenberg**

Assoc. Dir. Employee Engagement & Education  
Sustainability Institute

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## 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
- 

## Submission Note:

The percentage of the 16,700 staff members who participated in sustainability training was derived by adding up the participation in the following events:

Green Team 101 Orientations

Green Paws Orientation

Green Team lunches

Environmental Forum

New Employee Orientation

Environmental Colloquium

Green Team Trainings

Green Team sponsored events - information derived from the annual survey of Green teams.

We realize that this process double counts those who attend more than one event. Beginning this year, we will be using a centralized registration process for many of these events and will therefore be able to gauge a more accurate picture of how many people are receiving professional development training for sustainable decision making.

"---" 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 :**

The annual Staff Professional Development Review process includes sustainability thus providing an incentive for staff to learn about sustainability and practice these concepts in their work. Training is offered in a variety of formats.

On an ongoing basis, the Sustainability Institute offers workshops and presentations on the following:

- How to form Green Teams
- How to adopt the Green Paws Program to have an office "green" certified
- Sustainability 101
- Sustainability Strategic Planning

These workshops are available to all staff and faculty.

Faculty and staff can also learn sustainability concepts through the Green Teams program. At the quarterly Green Teams lunches, we bring in speakers to talk about specific topics, such as "green" purchasing, recycling, energy conservation, and wellness.

At the New Employee Orientation, we introduce the participants to the sustainability concept, the role of sustainability in Penn State's Strategic plan, and ways they can become involved.

Annually, the Finance and Business Environmental Key Initiative sponsors an Environmental Forum, open to all faculty and staff in order to create awareness about sustainability. At each forum, we want the participants to leave with ideas that they can act on in order to improve their sustainability practices, both in their own lives and at work. The 2013 Forum and the 2014 Earth Day celebration focused on food topics. Both events featured panel discussions exploring ideas on local food systems, food security, and more. In addition, every spring, an Environmental Colloquium is held to educate Penn Staters and the community about sustainability topics. The speakers have included Bill McKibben, Amory Lovins, David Suzuki, Peter Diamandis and other national leaders.

[www.earthday.psu.edu](http://www.earthday.psu.edu)

<http://sustainability.psu.edu/food>

<http://sustainability.psu.edu/calendar/peter-diamandis-lecture-abundance-our-future>

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

20

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

<http://sustainability.psu.edu/live/faculty-staff>

# 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.

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

# Community Partnerships

**Responsible Party**

**Mary Easterling**

Assoc Director, Analysis & Assessment  
Sustainability Institute

**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><b>A. Supportive</b></p>	<ul style="list-style-type: none"> <li>• <i>Scope:</i> Addresses a sustainability topic or a specific aspect of sustainability (e.g. community garden, environmental remediation, community environmental health and education)</li> <li>• <i>Duration:</i> May be time-limited (short-term projects and events), multi-year, or ongoing</li> <li>• <i>Commitment:</i> Institutional involvement may include financial and/or staff support or may be limited to resource sharing and/or endorsement</li> <li>• <i>Governance:</i> Campus and community leaders or representatives are engaged in program/project development</li> </ul>
<p><b>B. Collaborative</b></p>	<ul style="list-style-type: none"> <li>• <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)</li> <li>• <i>Duration:</i> May be time-limited, multi-year, or ongoing</li> <li>• <i>Commitment:</i> Institution provides faculty/staff, financial, and/or material support</li> <li>• <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</li> </ul>

**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*.

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"---" 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:**

Penn State has a number of supportive sustainability partnerships within the greater State College area, which include:

"Trash to Treasure" is a recycling partnership between Penn State and the local United Way. The program collects discarded items from student move-out in the spring, diverting them from the landfill, and selling them to raise money for the United Way. This is an annual event.

<http://sites.psu.edu/trash2treasure/>

Penn State's Shaver's Creek Environmental Center partners with a number of community groups. For example, it works with regional school districts to provide programming in the form of Outdoor School and educational field trips, and partners with the Central Pennsylvania Native Plant Society annually to sponsor the Central PA Native Plant Festival, which celebrates native plants and local food.

<http://shaverscreek.org/about-us/environmental-partners/>

The Pennsylvania Technical Assistance Program (PennTAP) is an ongoing federal-state-university partnership for economic development. The program services the entire state of Pennsylvania through a network of technical specialists. Often the assistance provided has been in the area of economy, energy, and the environment.

<http://penntap.psu.edu/success-stories/>

**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 Conewago Creek Initiative is a locally-led, collaborative partnership effort in the Conewago Creek watershed in Dauphin, Lebanon, and Lancaster Counties of Pennsylvania. The Initiative seeks to improve water quality in the Conewago Creek watershed by working with local residents and landowners in the community to increase awareness of and interest in adopting land management practices that will improve water quality of local streams, ensure healthy farms, forests, and communities, and protect and maintain quality of life.

Penn State is the lead university partner in this Initiative; its Agriculture and Environment Center and Cooperative Extension program are key participants. Penn State Public Broadcasting (now Penn State Public Media) has helped to document and share the lessons learned. Other partners include local, state, and national entities, both government, private, and nonprofit.

<http://agsci.psu.edu/aec/conewago-creek-initiative>

**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 "Penn State Center: Engaging Pittsburgh" provides an example of a transformative sustainability partnership. The Center connects citizens, communities, businesses, and corporations who want to collaborate with Penn State through learning and research partnerships that help to solve critical issues impacting the Greater Pittsburgh area, in support of a sustainable future. The Center's strategic program areas include Community Revitalization; Energy; Land Use; Science, Technology, Engineering, and Math (STEM); Stormwater Management; and The Arts. Although the Center is located in Pittsburgh, the majority of its faculty and budget come from the University Park campus.



<http://pittsburgh.center.psu.edu/>

Examples of specific projects and partnerships include:

- The Penn State Center collaborated with the city of Pittsburgh on a demonstration storm water mitigation project that planners hope will reduce flooding in Pittsburgh's Four Mile Run neighborhood, and serve as a model for the rest of the city and beyond.
- Pittsburgh Green Innovators is an extensive local partnership that seeks to energize the Hill District of Pittsburgh by advancing a blended economy that uses the best of Pittsburgh's work ethic and skilled labor to position this region as a global leader in sustainability.
- The Penn State Center is a lead organization bringing new perspectives to the issue of home energy evaluations and weatherization retrofits through the Department of Energy's National Renewable Energy Laboratory-funded project.

Many other examples can be found at:

<http://pittsburgh.center.psu.edu/program-areas>

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

As a land-grant institution, Penn State has substantial sustainability partnerships with several other communities across the state, including:

The Penn State Center: Philadelphia connects Penn State students, faculty, and staff with Philadelphia citizens, communities, and organizations for learning-research partnerships in support of a sustainable future for the City of Philadelphia.

<http://www.outreach.psu.edu/outreach/the-penn-state-center-philadelphia/>

The Consortium for Building Energy Innovation (CBEI), located at The Navy Yard in Philadelphia, is focused on generating impact in the small- and medium-sized commercial buildings retrofit market through developing and demonstrating systems solutions in a real-world regional context for future national deployment.

<http://cbei.psu.edu/>

Penn State also supports sustainability partnerships with international communities. For example, The Humanitarian Engineering and Social Entrepreneurship (HESE) initiative of the School of Engineering Design, Technology, and Professional Programs develops innovative and practical technology-based solutions to address the most compelling challenges facing the developing world and marginalized communities. The quest is for solutions with the four hallmarks of sustainability – technologically appropriate, environmentally benign, socially acceptable and economically sustainable. HESE seeks the convergence of the tripartite university missions of teaching, research and outreach to educate globally engaged social problem solvers and create sustainable value for developing communities, while generating and disseminating knowledge and lessons learned.

### **The website URL where information about sustainability partnerships is available:**

<http://www.outreach.psu.edu/>

# Inter-Campus Collaboration

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## Responsible Party

**Mary Easterling**

Assoc Director, Analysis & Assessment  
Sustainability Institute

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## 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.

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*"---" 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:**

Penn State's main sustainability website serves a clearinghouse of our guides, presentations, videos, courses, whitepapers on a wide range of sustainability topics touching every aspect of university life: research, curriculum, student life, outreach, and operations.

[www.sustainability.psu.edu](http://www.sustainability.psu.edu)

Staff from Penn State's Sustainability Institute have recently developed materials to guide academic and support units in incorporating sustainability into their strategic plans: the "Fast Track Guide" and "Sustainability Guidebook for Teams" (available in print and on-line), and the on-line "Opportunity Finder". These materials have received enthusiastic attention from other universities interested in using a similar approach.

Penn State faculty, staff, and students participate in, and present at, national and regional conferences sponsored by organizations such as those listed below, where they share their sustainability experiences with other institutions through presentations and informal conversation. Examples of presentations made during the last three years include:

E. Foley. "The Next Frontier: Integrating Sustainability Into Unit Strategic Planning", Smart and Sustainable Campuses Conference, March 2-4, 2014, Baltimore, MD

N. Franklin. "Sustainable Communities" presented at University of Oregon Sustainable City Year Workshop, 4/11/13 (Eugene, OR)

SH Barsom, DR Riley "Foundations of Leadership in Sustainability for 20 Campuses: Finding a Common Thread" presented at the Association for the Advancement of Sustainability in Higher Education conference, 2012, Los Angeles.

**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:**

Penn State is a leader and/ or a member of a number of sustainability organizations and research consortia. A few examples follow:

- AASHE, the Association for the Advancement of Sustainability in Higher Education; also a charter member of STARS (AASHE's Sustainability Tracking Assessment and Rating System)
- Pennsylvania Environmental Resource Consortium (PERC), a state-wide network of over 55 sustainability-leading colleges and universities
- National Council for Science and the Environment (NCSE). NCSE's University Affiliate Program advances environmental and energy programs across the nation's campuses.
- USGBC, the U.S. Green Building Council.

Examples of national student sustainability organizations with Penn State chapters include:

Engineers for a Sustainable World

Net Impact

The American Solar Energy Society

Global Brigades

...and many more

In addition to the above organizations, Penn State leads, or participates in, a number of multi-institutional research consortia focused on sustainability issues, including:

- The NSF-sponsored Sustainable Climate Risk Management (SCRiM) research network links a transdisciplinary team of scholars at 19 universities and 5 research institutions across 6 nations to answer the question, "What are sustainable, scientifically sound, technologically feasible, economically efficient, and ethically defensible climate risk management strategies?"
- Penn State leads the Department of Energy-funded Consortium for Building Energy Innovation (CBEI) - formerly the Energy Efficient Buildings Hub - located at The Navy Yard in Philadelphia. The CBEI is comprised of 14 organizations including major research universities, global industrial firms, and national laboratories from across the United States who collaborate to develop and demonstrate solutions for 50% energy reduction in existing buildings by 2030.
- EcoCAR: The NeXt Challenge is a multi-college competition sponsored by GM and the U.S. Department of Energy (DOE), organized and overseen by Argonne National Laboratory. It is a joint venture between Government, Industry, and Academia with 16 teams from North America competing in this challenge. The goal is to design and build a working hybrid vehicle applying GM's standard engineering design methods and procedures.

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

Penn State led the creation of the Big Ten Environmental Stewardship Group. The group meets twice a year with counterparts at all the Big Ten institutions plus a number of additional universities. Members are vice presidents and associate vice presidents of business operations along with sustainability officers of each institution.

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

<http://www.sustainability.psu.edu/>

# Continuing Education

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## Responsible Party

**Mary Easterling**

Assoc Director, Analysis & Assessment  
Sustainability Institute

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## 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.

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## Submission Note:

Below is a sampling of Penn State sustainability-related educational opportunities, both non-credit and for-credit, offered in a non-traditional format (i.e., online) or targeted to non-traditional students and the general public.

As noted previously, Continuing Education (Outreach) primarily offers for-credit courses and academic programs targeted to adults seeking a career change, professional development, and degree completion. None of these for-credit academic programs are in areas directly relevant to sustainability.

Penn State Extension in the College of Agricultural Sciences offers a variety of non-credit educational opportunities in the areas of agriculture, natural resources, food and health, and youth and family.

Penn State's World Campus offers a wide variety of for-credit online courses, degrees and certificate programs, including some in the sustainability realm. Some of these offerings are available exclusively online, while others provide an alternative format to residential courses and programs.

A small number of MOOCs (Massive Open Online Courses) have been developed by Penn State faculty thus far. One of these - entitled "Energy, the Environment, and our Future", taught by Geosciences professor Richard Alley - has a strong sustainability theme.

There are a number of other centers and programs at Penn State with an educational focus that offer sustainability-related education that is not for academic credit. For example:

The GridSTAR Center (Grid Smart Training and Application Resource Center) and the Northern Mid-Atlantic Solar Education and Resource Center deliver professional and skilled workforce educational programming in the areas of smart grid and solar technologies, respectively. The Centers are coordinated by faculty and staff on the Penn State UP campus, but delivered at locations in Philadelphia and Pittsburgh.

The Small Business Development Center and the Pennsylvania Technical Assistance Program both offer training and advice in areas that include energy and the environment.

"---" 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:**

607

**Total number of continuing education courses offered:**

3,329

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

[STARS extension sust courses.xlsx](#)

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

See attached list.

Penn State's non-credit educational offerings, while numerous, are not housed primarily in Continuing Education, or even under a single alternative administrative structure. For this reason it is a formidable task to enumerate the full suite of such courses. The largest collection of non-credit courses is housed in Extension, with a much smaller number offered by Continuing Education. (Most course offerings through Continuing Education are for-credit.) We evaluated these two groups of non-credit courses to compute the values for this STARS credit.

All Extension courses, regardless of where they are delivered, are connected to research and programming developed centrally at University Park. These "courses" represent a mix of many types of educational events, ranging from those where the primary focus is on education (e.g., workshops, conferences and courses) to more informal events such as camps, fundraisers, 4-H "round-ups", and club meetings. Most of the sustainability-related offerings fall into the former (primarily educational) category. For the purpose of this credit, each individual section or repeat offering of a course was counted separately; this counting method was the same for both sustainability-related and non-sustainability courses.

An additional 50 non-credit courses are offered through Continuing Education; 10 of those address sustainability issues.

See Notes section for more details on the variety of non-traditional (vs non-credit) sustainability educational opportunities at Penn State.

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

No

**A brief description of the certificate program:**

Penn State does not offer non-credit certificate programs in any area, including sustainability. All of its certificate programs consist of for-credit courses.

The following for-credit certificate programs related to sustainability are offered through Penn State's on-line World Campus:

Graduate Certificate in Bioenergy - for current or aspiring practitioners who want to obtain advanced skills to further their career in the growing bioenergy industry.

<http://www.worldcampus.psu.edu/degrees-and-certificates/bioenergy-certificate/overview>

Graduate Certificate in Solar Energy - for current or aspiring professionals seeking the progressive skills needed to advance the solar energy sector.

<http://www.worldcampus.psu.edu/degrees-and-certificates/solar-energy-certificate/overview>

Graduate Certificate in Sustainability Management and Policy - for students with a technical mindset who are interested in focusing on the implementation and interpretation of existing sustainability policies and regulations — and in exploring future sustainability strategies with regard to changing economic, environmental, political, and societal conditions.

**Year the certificate program was created:**

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

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## Responsible Party

**Mary Easterling**

Assoc Director, Analysis & Assessment  
Sustainability Institute

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## 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.

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### Submission Note:

Student numbers are based on a Spring 2012 Student Affairs "Pulse" survey of Civic Engagement.

<http://studentaffairs.psu.edu/assessment/pdf/171.pdf>

Penn State is home to the largest student-run philanthropic event in the world, the IFC/ Panhellenic Dance Marathon, known as THON. The 46-hour dance marathon, held on Penn State's University Park campus, raises money for the Four Diamonds Fund, a program at Penn State Hershey Children's Hospital that helps families of children with cancer. Since its beginning in 1973, THON has raised more than \$114 million. Through campus organizations and THON Committees, more than 15,000 students volunteer for THON each year.

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

### Number of students engaged in community service:

29,519

### Total number of students :

45,414

### 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:**

2,538,643

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

No

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

We do not include it at this time.

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

Yes

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

Penn State University occupies a unique and vital fundraising role in the annual Centre County United Way Campaign. In 2012, over 40% of the total United Way dollars raised came from university employees who supported United Way through contributions and special event fundraisers. Penn State maintains an active Centre County United Way Steering Committee and contributes innumerable in-kind support services.

Many units on campus host a United Way committee, which works to inspire other faculty and staff to make a difference, encourages monetary contributions via payroll deduction, and raises additional funds through holding special events, such as sales of pizza, gift baskets, and raffle tickets, and social events such as an "office Olympics".

Many employees volunteer at the annual United Way Day of Caring, where faculty, staff, and students participate in a variety of work projects - such as painting, cleanup, and repairs - that benefit local community non-profit organizations. Further, employees are essential volunteers organizing and running the Trash to Treasure annual sale of student leftovers, and the Special Olympics competitions held each summer at Penn State.

Employees also provide support to the annual student-run IFC/ Panhellenic Dance Marathon (THON) fundraiser, described in Notes. For example, Penn State Food Services formed a committee to provide nutritional guidance and support for THON dancers. Some Transportation Services staff volunteer to work long hours to oversee parking at the event. Other employees support student-led activities and events.

The Penn State University Park campus offers an institutional-level annual service award, the Barash Award for Human Service, which recognizes a full-time member of the faculty, staff, or student body who has contributed most, apart from regular duties, to human causes, public service activities and organization, or the welfare of fellow humans.

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

<http://www.volunteer.psu.edu/>



# Community Stakeholder Engagement

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## Responsible Party

**Mary Easterling**

Assoc Director, Analysis & Assessment  
Sustainability Institute

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## 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*.

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## Submission Note:

Penn State has not yet adopted a framework for community stakeholder engagement; however, the need for such a framework has been recognized by the administration, and plans for developing one are underway.

The need for such a framework was highlighted by a recent conflict between Penn State and community members over the proposed route for a high-pressure natural gas pipeline to serve the University. Original plans - which called for running the pipeline through a residential neighborhood - were developed by Columbia Gas in consultation with Penn State, but without sufficient input from all stakeholders in the community. Opposition by residents along the proposed route forced Penn State to re-route the line through campus at considerably higher cost. A recently completed analysis of "lessons learned" from this experience is expected to lead to the beginnings of a framework for community stakeholder engagement that will help to avoid such conflicts in the future.

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

**Has the institution adopted a framework for community stakeholder engagement in governance, strategy and operations?:**

No

**A brief description of the policies and procedures that ensure community stakeholder engagement is applied systematically and regularly across the institution's activities:**

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**A brief description of how the institution identifies and engages community stakeholders, including any vulnerable or underrepresented groups:**

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**List of identified community stakeholders:**

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**A brief description of successful community stakeholder engagement outcomes from the previous three years:**

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**The website URL where information about the institution's community stakeholder engagement framework and activities is available:**

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# Participation in Public Policy

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## Responsible Party

**Mary Easterling**

Assoc Director, Analysis & Assessment  
Sustainability Institute

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## 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.

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"---" 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:

Penn State engages in public policy advocacy through the Office of Governmental Affairs, which is within the Office of the President, and therefore is authorized to speak for the entire university on matters of public policy. The office chooses the issues to engage in through interactions with senior administrators, deans, faculty and staff from across the university. Some of the policies and programs that the Office of Governmental Affairs has promoted for Penn State in the last 3 years include:

Energy Appropriations - Department of Energy research programs:

- In support of increased funding for Office of Science.
- In support of funding for Basic Energy Sciences.
- In support of funding for Energy Frontier Research Centers.
- In support of funding for Fossil Energy Research.
- In support of funding for ARPA-E program. -
- In support of funding for energy efficient building systems research.

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

Penn State is a public institution for higher education, and as such does not take political positions as an institution.

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

Penn State is a public institution for higher education, and as such does not make political donations as an institution.

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

<http://www.govt.psu.edu/>

**Responsible Party**

**Mary Easterling**

Assoc Director, Analysis & Assessment  
Sustainability Institute

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**Criteria**

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

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**Submission Note:**

The University's licensing agent, The Collegiate Licensing Company (CLC), administers the license application process on behalf of Penn State. Penn State has agreed to the CLC's Special Agreement Regarding Labor Codes of Conduct.

<http://www.clc.com/Resources/Labor-Code.aspx>

*"---" 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? :**

No

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

<http://www.clc.com/Resources/Labor-Code.aspx>

## Responsible Party

**Mary Easterling**

Assoc Director, Analysis & Assessment  
Sustainability Institute

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## 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.

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This credit was marked as **Not Applicable** for the following reason:

*The affiliated hospital or health system has been excluded from the institutional boundary.*

# 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.

<b>Credit</b>
Greenhouse Gas Emissions
Outdoor Air Quality

# Greenhouse Gas Emissions

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## Responsible Party

**Shelley McKeague**

Environmental Compliance Specialist  
Engineering Services

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## 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<sub>2e</sub>) per gross square foot (0.002 MtCO<sub>2e</sub> 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.

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## **Submission Note:**

Enrollment/ employment data are most readily available as a fall snapshot; the values above are for Fall 2005 & 2013. Distance education students are NOT included in the FTE enrollment figures; thus we do not provide a value for them above to allow a more



accurate calculation of "Weighted Campus Users". Employee FTE is estimated from employee headcount.

"---" 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
<b>Business travel</b>	Yes
<b>Commuting</b>	Yes
<b>Purchased goods and services</b>	No
<b>Capital goods</b>	No
<b>Fuel- and energy-related activities not included in Scope 1 or Scope 2</b>	No
<b>Waste generated in operations</b>	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:**

Penn State utilizes a Excel-based calculation tool developed by a graduate student customized for Penn State's emissions profile and data availability. Emissions factors and calculation methodologies are based on EPA MRR and WRI guidance.

**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?:**

No

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

The original inventory calculation tool was developed by a graduate student as part of a thesis and was reviewed by multiple faculty members.

**Scope 1 and Scope 2 GHG emissions::**

	<b>Performance Year</b>	<b>Baseline Year</b>
<b>Scope 1 GHG emissions from stationary combustion</b>	162,885 <i>Metric Tons of CO2 Equivalent</i>	194,547 <i>Metric Tons of CO2 Equivalent</i>
<b>Scope 1 GHG emissions from other sources</b>	11,552 <i>Metric Tons of CO2 Equivalent</i>	12,560 <i>Metric Tons of CO2 Equivalent</i>
<b>Scope 2 GHG emissions from purchased electricity</b>	167,101 <i>Metric Tons of CO2 Equivalent</i>	232,004 <i>Metric Tons of CO2 Equivalent</i>
<b>Scope 2 GHG emissions from other sources</b>	0 <i>Metric Tons of CO2 Equivalent</i>	0 <i>Metric Tons of CO2 Equivalent</i>

**Figures needed to determine total carbon offsets::**

	<b>Performance Year</b>	<b>Baseline Year</b>
<b>Institution-catalyzed carbon offsets generated</b>	0 <i>Metric Tons of CO2 Equivalent</i>	0 <i>Metric Tons of CO2 Equivalent</i>
<b>Carbon sequestration due to land that the institution manages specifically for sequestration</b>	0 <i>Metric Tons of CO2 Equivalent</i>	0 <i>Metric Tons of CO2 Equivalent</i>
<b>Carbon storage from on-site composting</b>	397 <i>Metric Tons of CO2 Equivalent</i>	535 <i>Metric Tons of CO2 Equivalent</i>
<b>Third-party verified carbon offsets purchased</b>	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:**

none

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

none

**A brief description of the composting and carbon storage program:**

Pre and post consumer food waste is collected at PSU operated hotels and catering services. Post consumer food waste is collected at dining halls. Other inputs include leaves, landscape debris and animal cage waste. Farm animal manure and crop residues are also used to create an optimal compost mix. Leaves, plant debris, brush, logs and pallets are also processed into mulch. Both the compost and mulch are used in landscape management.

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

Penn State purchased Renewable Energy Credits (RECs) from 2005-2012 to jump-start GHG reductions. These funds are now used for onsite efficiency projects.

In 2013, Penn State entered into a 10-year power purchase agreement with Mahoning Creek Hydroelectric Company. This new 6MW hydroelectric generating plant was built in 2013 at the existing USACE dam on Mahoning Creek located in Armstrong County, PA. Penn State will purchase all of the net electric output from the facility and retain the environmental attributes. This is approximately 8% of the University Park campus' electric purchase.

**Figures needed to determine “Weighted Campus Users”::**

	Performance Year	Baseline Year
Number of residential students	14,801	13,795
Number of residential employees	0	0
Number of in-patient hospital beds	0	0
Full-time equivalent enrollment	49,065	39,043
Full-time equivalent of employees	16,793	14,183
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, 2005	June 30, 2006

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

FY2005-06 was adopted as our baseline year to be consistent with our previous STARS reporting.

**Gross floor area of building space, performance year:**

20,490,517 *Square Feet*

**Floor area of energy intensive building space, performance year:**

	<b>Floor Area</b>
<b>Laboratory space</b>	1,299,069 <i>Square Feet</i>
<b>Healthcare space</b>	43,342 <i>Square Feet</i>
<b>Other energy intensive space</b>	418,124 <i>Square Feet</i>

**Scope 3 GHG emissions, performance year::**

	<b>Emissions</b>
<b>Business travel</b>	15,927 <i>Metric Tons of CO2 Equivalent</i>
<b>Commuting</b>	39,805 <i>Metric Tons of CO2 Equivalent</i>
<b>Purchased goods and services</b>	---
<b>Capital goods</b>	---
<b>Fuel- and energy-related activities not included in Scope 1 or Scope 2</b>	---
<b>Waste generated in operations</b>	1,543 <i>Metric Tons of CO2 Equivalent</i>
<b>Other categories (please specify below)</b>	10,273 <i>Metric Tons of CO2 Equivalent</i>

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

Transmission & Distribution loss

**A copy of the most recent GHG emissions inventory:**

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**The website URL where the GHG emissions inventory is posted:**

<http://sustainability.psu.edu/live/what-penn-state-can-do/energy-environment/campus-inventories>

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

The reduction strategy focuses primarily on energy, with initiatives in conservation, efficiency and green building design. In 2011, a natural gas Combustion Turbine and Heat Recovery Steam Generator was installed to cogenerate steam and provide for more on-site electricity production. This has significantly reduced the coal use as well as reduced purchased electricity. There is a plan to eliminate coal use by 2016. The University has invested heavily in efficiency with the Energy Conservation Program, Continuous Commissioning Program and large projects through the Energy Savings Program. The University will invest \$60M over the next 5 years. Programs in transportation, waste management and purchasing as well as comprehensive sustainability awareness efforts contribute to the strategy.

# Outdoor Air Quality

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## Responsible Party

**Shelley McKeague**

Environmental Compliance Specialist  
Engineering Services

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## 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<sub>x</sub>), sulfur oxides (SO<sub>x</sub>), and other standard categories of air emissions identified in environmental permits held by the institution, international conventions, and/or national laws or regulations.

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#### **Submission Note:**

Emissions data provided comes from the 2012 PADEP Emissions Inventory Production Report.

"---" 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:**

Penn State has anti-idling guidelines for compliance with The Diesel Powered Motor Vehicle Idling Act. This restricts idling to 5 minutes per 60-minute period unless exemptions apply. Penn State has a coordinated effort among Parking, Housing & Food Services, General Stores and Athletics. Signs have been placed in appropriate areas.

#### **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:**

Penn State submits an Emissions Inventory Production Report annually to DEP. GHG Emissions from stationary sources are reported annually to the EPA under the GHG MRR.

Emissions are calculated based on fuel use and emissions factors from stack test results or industry standard emissions factors.

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

	<b>Weight of Emissions</b>
<b>Nitrogen oxides (NOx)</b>	<i>225 Tons</i>
<b>Sulfur oxides (SOx)</b>	<i>927 Tons</i>
<b>Carbon monoxide (CO)</b>	<i>36 Tons</i>
<b>Particulate matter (PM)</b>	<i>11 Tons</i>
<b>Ozone (O3)</b>	---
<b>Lead (Pb)</b>	<i>0 Tons</i>
<b>Hazardous air pollutants (HAPs)</b>	<i>53 Tons</i>
<b>Ozone-depleting compounds (ODCs)</b>	---
<b>Other standard categories of air emissions identified in permits and/or regulations</b>	---

**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 West Campus Steam Plant (WCSP) has emissions controls. A Baghouse, installed in 1986 greatly decreases particulate emissions from the plant. The WCSP also has 2 steam turbines for combined heat and power. CHP systems are much more efficient and emit lower emissions than traditional power plants. In 2011, Penn State expanded its CHP ability with the installation of a natural gas Combustion Turbine and Heat Recovery Steam Generator at the East Campus Steam Plant. As a baseloaded machine, its operation has significantly reduced coal consumption and resulting emissions from this dirtier fuel. Penn State plans to eliminate coal use by 2016.

**The website URL where information about the institution’s outdoor air quality policies, guidelines or inventory is**

**available:**

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# 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.

<b>Credit</b>
Building Operations and Maintenance
Building Design and Construction
Indoor Air Quality

# Building Operations and Maintenance

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## Responsible Party

**Shelley McKeague**

Environmental Compliance Specialist  
Engineering Services

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## 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.

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### Submission Note:

Although there is not a single sustainability Building O&M document, multiple policies, guidelines and practices exist at Penn State that address all the criteria.

*"---" 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
--	-----------

<b>LEED for Existing Buildings or another 4-tier rating system used by an Established Green Building Council (GBC)</b>	No
<b>The DGNB system, Green Star Performance, or another 3-tier GBC rating system</b>	No
<b>BREEAM-In Use, CASBEE for Existing Building, or another 5-tier GBC rating system</b>	No
<b>Other non-GBC rating systems (e.g. BOMA BEST, Green Globes)</b>	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):**

20,490,517 *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::**

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

	<b>Certified Floor Area</b>
<b>Minimum Level</b>	0 <i>Square Feet</i>

<b>Mid-Level</b>	<i>0 Square Feet</i>
<b>Highest Achievable Level</b>	<i>0 Square Feet</i>

**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::**

	<b>Certified Floor Area</b>
<b>Minimum Level</b>	<i>0 Square Feet</i>
<b>4th Highest Level</b>	<i>0 Square Feet</i>
<b>Mid-Level</b>	<i>0 Square Feet</i>
<b>2nd Highest Level</b>	<i>0 Square Feet</i>
<b>Highest Achievable Level</b>	<i>0 Square Feet</i>

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

*0 Square Feet*

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

*20,490,517 Square Feet*

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

[Penn State Blue Cleaning Manual.pdf](#)

**The date the guidelines or policies were formally adopted:**

Jan. 10, 2011

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

Although Penn State does not certify buildings under LEED for Existing Buildings: O&M, sustainability principles are infused into all aspect of maintenance and operation of buildings. Multiple policies and practices address this:

Campus Grounds & Master Plan -

Energy Conservation Policy (AD64) -

<http://guru.psu.edu/policies/AD64.html>

Continuous Commissioning, Energy Savings Program & Energy Conservation Measures -

<http://www.opp.psu.edu/services/energy/energy-projects-jze>

Penn State has building level energy and water metering. For 50 of the highest energy-use buildings, real-time energy use data is collected to monitor consumption, conduct detailed energy analysis and provide for demand response.

Penn State's Purchasing Department has a several programs centered around environmentally preferable materials.

<http://sustainability.psu.edu/live/what-penn-state-doing/infrastructure/green-purchasing>

Recycling Policy (AD34) -

<http://guru.psu.edu/policies/AD34.html>

Indoor Air Quality - See credit OP-3

Water/Stormwater -

<http://www.opp.psu.edu/about-opp/divisions/ee/engineering/eng-resources/psu-initiatives.pdf>

Penn State has Blue Cleaning Guidelines aimed to reduce exposure of personnel and occupants to potentially hazardous products, equipment or procedures.

<http://www.opp.psu.edu/intranet/bg/processes/Penn%20State%20Blue%20Cleaning%20Manual.pdf/view>

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

Technical staff are trained based on the policies and guidelines in place. Staff are held accountable for following sustainability practices. Sustainability is a component of the annual performance review for all staff, which includes supervisors. Units develop Quality Service Action Plans annually to address specific issues.

As part of a greater Finance & Business effort, sustainability has been included in unit level strategic planning.

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

<http://guru.psu.edu/policies/AD64.html>

# Building Design and Construction

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## Responsible Party

**Shelley McKeague**

Environmental Compliance Specialist  
Engineering Services

---

## 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.

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*"---" 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
<b>LEED or another 4-tier rating system used by an Established Green Building Council (GBC)</b>	Yes
<b>The DGNB system, Green Star, or another 3-tier GBC rating system</b>	No

<b>BREEAM, CASBEE, or another 5-tier GBC rating system</b>	No
<b>The Living Building Challenge</b>	No
<b>Other non-GBC rating systems (e.g. BOMA BEST, Green Globes)</b>	No

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

LEED Certified Buildings  
 Stuckeman Family Building - Gold  
 Forest Resources Building - Silver  
 Medlar Field at Lubrano Park - Certified  
 Recreation Hall Addition - Gold  
 Borland Building - Gold  
 Student Health and Counseling Services Building - Silver  
 North Frear Building - Silver  
 Lewis Katz Building - Certified  
 Millennium Science Bldg - Gold  
 Child Care at Hort Woods - Platinum  
 Softball Park - Certified

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

630,179 *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::**

	<b>Certified Floor Area</b>
<b>Minimum Level (e.g. LEED Certified)</b>	146,416 <i>Square Feet</i>
<b>3rd Highest Level (e.g. LEED Silver)</b>	67,089 <i>Square Feet</i>
<b>2nd Highest Level (e.g. LEED Gold)</b>	388,611 <i>Square Feet</i>
<b>Highest Achievable Level (e.g. LEED Platinum)</b>	28,063 <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:**

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

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

0 Square Feet

**A copy of the guidelines or policies :**

[PSU\\_LEED\\_Policy\\_2011.pdf](#)

**The date the guidelines or policies were adopted:**

Aug. 1, 2007

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

All new and renewed facilities shall be Leadership in Energy and Environmental Design (LEED) certified. LEED Certification shall follow the current version of the "PSU Policy based on LEED for New Construction and Major Renovations" .

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

Penn State uses LEED as a tool to ensure green principles are applied to all new construction and major renovation. Specific requirements are outlined in the Design Standards, Section 01 81 13 Sustainable Design Requirements. Penn State's LEED Policy customizes the LEED process by prioritizing the implementation of sustainable elements that are most important to the University. The Office of Physical Plant (OPP) oversees and coordinates the design and construction of all new construction, renovation and major maintenance projects for the University Park Campus. OPP has 14 LEED Accredited Professionals and 3 LEED Green Associates. Compliance is ensured through the design and construction process led by LEED professionals and design review by LEED professionals in Engineering Services. The LEED certification process itself provides third-party verification that the building was built using green strategies.

**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.opp.psu.edu/planning-construction/design\\_and\\_construction\\_standards/Division-01](http://www.opp.psu.edu/planning-construction/design_and_construction_standards/Division-01)

# Indoor Air Quality

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## Responsible Party

**Shelley McKeague**

Environmental Compliance Specialist  
Engineering Services

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## 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.

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*"---" 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:**

20,490,517 *Square Feet*

## **Gross floor area of building space:**

20,490,517 *Square Feet*

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

Penn State's Indoor Air Quality (IAQ) plan covers all occupied space on campus, including offices, classrooms, and labs. Labs and production area spaces would be covered under a specific standard that keeps air quality acceptable for the tasks being performed within the lab or production area.

The IAQ plan generally aims to provide fresh air, proper filtration, and reasonably clean duct work to all labs, offices, and classrooms on campus. It also aims to provide 20 CFM per person with carbon dioxide (CO<sub>2</sub>) levels around 800 or below.

Indoor Air quality issues can be reported through the Work Control Center. The Environmental Health & Safety office has developed standard procedures for investigating indoor air quality issues following methods developed by NIOSH.

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

[http://www.ehs.psu.edu/occhealth/indoor\\_air.cfm](http://www.ehs.psu.edu/occhealth/indoor_air.cfm)

# 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.

<b>Credit</b>
Food and Beverage Purchasing
Low Impact Dining

# Food and Beverage Purchasing

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## Responsible Party

**Mary Easterling**

Assoc Director, Analysis & Assessment  
Sustainability Institute

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## 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).

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## Submission Note:

Housing and Food Services manages food purchases for a wide array of facilities at Penn State, including residential dining halls, retail dining, athletic facilities, branch campuses, etc. It was not feasible to separate values by facility type, so the percentages of local/sustainable above are the same for both groups of facilities.

Purchases were considered applicable if they met any of the following standards:

1. Product is grown in PA. (This qualifier is for fresh produce, and all other unprocessed foods.)
2. Raw materials in the finished product originate from PA. Minimum of 40% of the raw materials must originate from PA sources.
3. Products are processed and/or manufactured in PA. Products may be considered if they are processed or manufactured in a PA Facility. (Raw materials need not originate from PA sources for this qualifier.)

[Note that the UP campus is centrally located in PA, so that any PA purchases meet the STARS stipulation that "local" is within 250 miles of campus.]

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

Values given above include only food purchases and do not include related non-food items such as compostable cutlery.

Also note that some food items sold on campus are produced by on-campus facilities, including the Berkey Creamery (dairy products), The Penn State Bakery (baked goods) and the Penn State Mushroom Lab.

"---" 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:**

18.20

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

[PA and Green Purchases 12-13.xlsx](#)

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

See file above.

**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)?:**

Yes

**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:**

18.20

**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:**

[PA and Green Purchases 12-13.xlsx](#)

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

See file above.

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

Penn State Food Services strives to purchase from local suppliers whenever possible. In 2009 guidelines were developed to encourage Pennsylvania companies to partner with the University. Our current standard for sustainable purchases includes those products processed within or grown or raised within the state of Pennsylvania.

All products meeting our PA/Green standards are purchased on a competitive bid basis and, in addition to meeting our standards, are also our best pricing alternatives. We currently allow for a small cost premium for PA produce items on the UP campus, in order to encourage our produce suppliers to source PA grown products.

We continue to put great efforts into increasing the number of PA vendors we purchase from directly, as well as the amount that we purchase from them.

For 3rd party certified products, our requirements vary by product. For example, for egg products we require UEP or American humane certification. Most of our fair trade and organic purchases are centered on coffee, tea and retail item purchases. Our coffee program is exclusively Starbucks and Seattle's Best. Please see the following link for their standards:

<http://www.starbucks.com/responsibility/sourcing/coffee>

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

Our current local purchases are tracked using a combination of both manual tracking and custom software. Some purchases are tracked by vendor while others are on an item-by-item basis.

**Total annual food and beverage expenditures:**

29,227,073.70 US/Canadian \$

**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	Yes	Yes
Dining operations and catering services operated by a contractor	Yes	Yes

<b>Franchises</b>	Yes	Yes
<b>Convenience stores</b>	Yes	Yes
<b>Vending services</b>	---	---
<b>Concessions</b>	Yes	Yes

**Has the institution achieved the following?:**

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

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

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

<http://sustainability.psu.edu/live/what-penn-state-doing/health/dining-services#what-psu-is-doing>



# Low Impact Dining

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## Responsible Party

**Mary Easterling**

Assoc Director, Analysis & Assessment  
Sustainability Institute

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## 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.

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### Submission Note:

Currently, Penn State does not track sustainably produced animal products.

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

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

38

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

Unavailable.

**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”):**

Penn State dining services offers both meatless and vegan options for every meal at all dining facilities on campus. One dining hall on campus is dedicated to healthy eating alone. An advisory board meets once a semester to ensure that the offerings of meatless and vegan options are meeting the expectations of the vegetarians on campus.

At Penn State, 43% of all items are vegan. Every day, we aim to have at least one vegan soup, one vegan entrée, and at least one vegan side on the menu. We have an extensive salad bar with a variety of vegan items, such as tofu, chickpeas, and edamame, and also have a fruit selection available. We have done a variety of promotional activities, such as promoting World Vegetarian Day, The Great American Meatout, and Vegetarian Awareness Week. There are also vegan selections available 4 The Road, our grab n’ go concept.

At Penn State, the office of the Corporate Executive Chef as well as the Registered Dietitian’s office work together to label all items with an entrée card. If the item meets the criteria to be vegan, it has a “V” designation in the left hand corner of the entrée card. If it qualifies as meatless, it will have an “M” in the left hand corner.

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

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

<http://www.foodservices.psu.edu/FoodServices/EatingSmart/Vegetarianism.cfm>

**Annual dining services expenditures on food:**

29,227,073.70 US/Canadian \$

**Annual dining services expenditures on conventionally produced animal products:**

11,100,000 US/Canadian \$

**Annual dining services expenditures on sustainably produced animal products:**

0 US/Canadian \$

# 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.

<b>Credit</b>
Building Energy Consumption
Clean and Renewable Energy

# Building Energy Consumption

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## Responsible Party

**Shelley McKeague**

Environmental Compliance Specialist  
Engineering Services

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## 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.

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### Submission Note:

In 2014, Penn State joined the U.S. Department of Energy's Better Buildings Challenge and pledged to reduce its building portfolio's energy use by 20 percent over the next decade. With a commitment of 28 million square feet (all campuses except Hershey Medical & Pennsylvania College of Technology), Penn State becomes the largest university in the program.

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

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

	Performance Year	Baseline Year
<b>Total building energy consumption</b>	3,221,565 <i>MMBtu</i>	3,425,963 <i>MMBtu</i>

### Purchased electricity and steam:

	Performance Year	Baseline Year
<b>Grid-purchased electricity</b>	822,335 <i>MMBtu</i>	1,128,482 <i>MMBtu</i>
<b>District steam/hot water</b>	2,215,599 <i>MMBtu</i>	2,128,207 <i>MMBtu</i>

**Gross floor area of building space::**

	Performance Year	Baseline Year
Gross floor area	20,490,517 <i>Gross Square Feet</i>	18,577,348 <i>Gross Square Feet</i>

**Floor area of energy intensive space, performance year::**

	Floor Area
Laboratory space	1,299,069 <i>Square Feet</i>
Healthcare space	43,342 <i>Square Feet</i>
Other energy intensive space	

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

	Degree Days
Heating degree days	6,163
Cooling degree days	632

**Source-site ratios::**

	Source-Site Ratio (1.0 - 5.0; see help icon above)
Grid-purchased electricity	3.14
District steam/hot water	1

**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:**

FY 2005-06 was adopted as the baseline to be consistent with our previous STARS report.

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

Penn State has an Energy Conservation Policy (AD64). Set points are specifically addressed in the policy:

Interior Environment - Every effort will be made to maintain the occupied temperature in all University facilities at 70 degrees in the winter and 75 degrees in the summer. This excludes areas that currently are not heated or cooled and areas with special environmental needs.

-The temperature during low occupancy or unoccupied periods in all University facilities will be allowed to cool down to 60 degrees in the winter and warm up to 85 degrees in the summer. This excludes areas that currently are not heated or cooled and areas with special environmental needs.

-Employees and students with manual control of the equipment that heats or cools their space shall operate the equipment so that the least amount of energy is consumed (example, operate window air conditioning units only when the spaces are occupied).

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

Light Emitting Diode (LED) technology is used for various applications in many buildings on campus. All new construction or renovation attempts to incorporate the technology. Common applications include replacing incandescent bulbs in elevators, down light applications exit signs and parking lots. They have even been installed in Penn State's -40 degree Blast Freeze in the Food Science Building. 3 Parking decks (Nittany, HUB, East) have LEDs for upper deck lighting, stairways and access lighting with multi-level occupancy sensor and daylight controls. LEDs have been used for underbowl lighting at Beaver Stadium as well as the new logo signs. LEDs have been used in complex lighting locations including the HUB Art Gallery, Earth & Mineral Science Museum and the Nittany Lion Shrine.

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

Occupancy sensors are installed in all new construction buildings and as part of all renovation projects in a building. Their wide-spread use includes hallways, offices, classrooms, labs, large spaces, etc. Sensors are typically the ceiling or wall mounted style depending on the space. These are often tied to HVAC and ventilation systems in variable occupancy spaces.

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

n/a

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

At the University Park campus, the Golf Team Clubhouse and the Arboretum utilize a ground-source heat pump. This technology is considered for buildings on the perimeter of campus that do not have access to the district steam system.

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

Penn State operates 2 steam plants, both with cogeneration equipment.

At the West Campus Steam Plant, two 1930's vintage backpressure steam turbines rated at 2.5 mW and 3.5 mW generate electricity to serve Penn State's emergency power needs as well as provide low-pressure steam to campus. These turbines produce approximately 6% of Penn State's total power needs. These are scheduled for replacement by 2016.

At the East Campus Steam Plant, a combustion turbine and heat recovery steam boiler to cogenerate steam and 7MW of electricity was installed in 2011. This operational change has reduced the University's coal consumption as well as increased on-site electricity production. University Park now cogenerates approximately 20% of its power needs.

<http://www.opp.psu.edu/about-opp/divisions/ee/util/steam-services>

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

Continuous Commissioning (CCx) - Commissioning occurs shortly after a building's completion to verify if it is functioning according to its design objectives. Implemented in 1998, the University Park Continuous Commissioning Program (CCx) focuses on the re-commissioning, retro-commissioning, and maintenance of campus buildings. The goals of the program are to reduce energy costs and optimize building performance. CCx are "corrective" projects that typically have a 5-year simple payback. The program currently includes 2 CCx Engineers and three 2-person technical service crews. These savings are repurposed toward other energy saving projects.

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

Penn State utilizes McKinstry Enterprise Energy Management Suite (EEMS) for tracking of energy commodity purchasing, energy and water consumption, meter data and real time energy data for a select number of buildings. This system allows for accurate tracking of energy consumption and the data is used to inform development of Energy Program projects. Meter data is collected manually by Utility Services and transferred electronically into the system. Monthly invoice data from suppliers is entered into the system.

Over 50 buildings on campus are smart metered and fed into the EEMS system through the building automation system. These buildings are the largest energy consumers on campus and this interval data allows for real-time energy management strategies to be executed.

### **A brief description of the institution's program to replace energy-consuming appliances, equipment and systems with high efficiency alternatives:**

The University Energy Policy (AD64) addresses appliances and equipment. It covers the purchase of new equipment as well as the operation of current equipment:

#### 5. Appliances

##### •Employees

•Non-University provided appliances (such as printers, coffee makers, refrigerators, freezers, microwaves, toasters, lamps, televisions, and scanners) may only be used if approved by the department head or supervisor in charge of the area.

•The quantities of University purchased appliances shall be reduced through consolidation to central locations for shared use whenever



possible.

- All new or replacement appliances purchased with University funds are required to be ENERGY STAR labeled unless specifically approved by the responsible budget executive. Exceptions are authorized if there are no Energy Star rated appliances manufactured that meet the user's needs.
- All new or replacement televisions shall be LCD unless there is a justifiable need for the tube based display.
- All appliances shall be turned off when not in use, unless it is detrimental to do so (for example a refrigerator or freezer).

•Students

- All appliances shall be turned off when not in use unless it is detrimental to do so (for example a refrigerator or freezer). Students are encouraged to bring to campus only appliances with the ENERGY STAR label.
- For additional information regarding appliances that can be used in the residence halls, please refer to the Regulations section of Terms, Conditions, & Regulations on the Housing website.

Office of Physical Plant has a rebate program targeted towards ultra-low research freezers. A \$3000 rebate is offered to replace older freezers with new energy efficient models.

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

Penn State has a comprehensive landscaping design effort. Design techniques include:

Planting trees for the purpose of providing shade, planting windbreaks to slow winds near buildings, green roofs and minimizing paved areas. On-campus composting and chipping is utilized to reduce greenwaste hauling. Stock is purchased from local growers as appropriate to avoid energy in transportation.

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

n/a

### **A brief description of other energy conservation and efficiency initiatives employed by the institution:**

The Office of Physical Plant Energy Program administers the behind-the-scenes mechanical, technical and operational aspects of energy efficiency and conservation in buildings and utilities. The Program consists of energy usage monitoring and benchmarking, performance contracting, energy efficiency and continuous commissioning.

Energy Savings Program (ESP)- Penn State has implemented a program following the guidelines of the PA Guaranteed Energy Savings Program. Using an Energy Service Company (ESCO), Penn State awards performance contracts where the entire cost of the project can be recovered through energy savings. ESP projects are large in nature and may combine multiple energy savings efforts into one project. The maximum payback for these projects is 10 years including financing costs. Some projects are performed by internal technical staff. These projects are Capital funded. Multiple ESP projects have been completed at University Park as well projects at multiple commonwealth campuses.

Energy Conservation Measures (ECM) - These projects are smaller in scope and are completed in E&G buildings. The average simple payback is less than 5 years. Solutions in the past have included:

- Improving Steam Traps
- Installing Low-flow water fixtures
- Upgrading Chiller/Chilled Water
- Programming Thermostats

- Reprogramming/ upgrading control systems
- Tuning up systems and equipment
- Switching fuel selection
- Cleaning and flushing HVAC (heating, venting and air conditioning) piping
- Installing room occupancy sensors
- Winter Break shutdown

As opportunities arise, miscellaneous projects are initiated to reduce energy consumption. As buildings are connected to University Park's central chilled water system and standalone systems are removed, a significant energy savings is expected. Power management software has been rolled out to campus computers for energy conservation. A rapid commissioning initiative was implemented to quickly look at HVAC systems in buildings to find low and no-cost energy conservation solutions.

The University is planning for \$60 million investment over the next 5 years in these and other energy efficiency and conservation initiatives.

In 2014, Penn State joined the U.S. Department of Energy's Better Buildings Challenge and pledged to reduce its building portfolio's energy use by 20 percent over the next decade. With a commitment of 28 million square feet (all campuses except Hershey Medical & Pennsylvania College of Technology), Penn State becomes the largest university in the program.

**The website URL where information about the institution's energy conservation and efficiency initiatives is available:**

<http://sustainability.psu.edu/live/what-penn-state-can-do/energy-environment/strategies#energy-demand>

## Responsible Party

**Shelley McKeague**

Environmental Compliance Specialist

Engineering Services

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## 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.

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

**Clean and renewable energy from the following sources::**

	Performance Year
<b>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</b>	48 <i>MMBtu</i>
<b>Option 2: Non-electric renewable energy generated on-site</b>	0 <i>MMBtu</i>
<b>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</b>	0 <i>MMBtu</i>
<b>Option 4: Purchased third-party certified RECs and similar renewable energy products (including renewable electricity purchased through a certified green power purchasing option)</b>	0 <i>MMBtu</i>

**Total energy consumption, performance year:**

3,221,565 *MMBtu*

**A brief description of on-site renewable electricity generating devices :**

Penn State has three different solar arrays on campus:

The first is a 2 KW array that was installed in 2001. This array is thin film panels with a grid-tied inverter and is fixed roof mounted on our Physical Plant Building.

The second system is a 1.75 KW pole mounted array and uses passive tracking. It is installed on our Center for Sustainability greenhouse and is mono-crystalline silicon panels with a grid-tied inverter.

The third system is an 8 KW array which is roof mounted onto our MorningStar home, which was PSU's 2007 entry into the Solar Decathlon. This array is mono-crystalline silicon panels with a grid-tied inverter.

A new 5 KW system is planned for the Physical Plant Building roof to offset a vehicle charging station for electric cars purchased as part of a Reinvention Fund grant through the Sustainability Institute.

**A brief description of on-site renewable non-electric energy devices:**

not applicable

**A brief description of off-site, institution-catalyzed, renewable electricity generating devices:**

In 2013, Penn State entered into a 10-year power purchase agreement with Mahoning Creek Hydroelectric Company. This new 6MW hydroelectric generating plant was built in 2013 at the existing USACE dam on Mahoning Creek located in Armstrong County, PA. Penn State will purchase all of the net electric output from the facility and retain the environmental attributes. This is approximately 8% of the University Park campus' electric purchase.

**A brief description of the RECs and/or similar renewable energy products:**

not applicable

**The website URL where information about the institution's renewable energy sources is available:**

<http://sustainability.psu.edu/live/what-penn-state-can-do/energy-environment/energy-environment-strategies-projects>

# 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.

<b>Credit</b>
Landscape Management
Biodiversity

# Landscape Management

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## Responsible Party

**Mary Easterling**

Assoc Director, Analysis & Assessment  
Sustainability Institute

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## 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"><li>• Using least-toxic chemical pesticides,</li><li>• Minimum use of chemicals, and</li><li>• Use of chemicals only in targeted locations and only for targeted species</li></ul>

<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"> <li>• Integrated pest management (see above)</li> <li>• 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</li> <li>• Soil stewardship - organic soils management practices that restore and/or maintain a natural nutrient cycle and limit the use of inorganic fertilizers and chemicals</li> <li>• Use of environmentally preferable materials - utilizing reused, recycled and local and sustainably produced landscape materials</li> <li>• 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</li> <li>• Materials management and waste minimization - composting and/or mulching waste from groundskeeping, including grass trimmings</li> <li>• Snow and ice management (if applicable) - implementing technologies or strategies to reduce the environmental impacts of snow and ice removal</li> </ul>
<p>3) Organic, Certified and/or Protected</p>	<p>Protected areas and land that is:</p> <ul style="list-style-type: none"> <li>• 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</li> <li>• Certified Organic</li> <li>• Certified under the Forest Stewardship Council (FSC) Forest Management standard</li> <li>• Certified under the Sustainable Sites Initiative™ (SITES™) and/or</li> <li>• Managed specifically for carbon sequestration (as documented in policies, land management plans or the equivalent)</li> </ul>

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:**



Penn State landscape management practices appear to meet the criteria for a "sustainable landscape management program". The value given for the acreage of undeveloped land is what is designated in the Campus Master Plan as "Environmental Resource". Managed acreage was computed as total campus acreage, minus the building footprint and acres of undeveloped land.

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

**Figures required to calculate the total area of managed grounds::**

	<b>Area</b>
<b>Total campus area</b>	<i>7,795 Acres</i>
<b>Footprint of the institution's buildings</b>	<i>470 Acres</i>
<b>Area of undeveloped land, excluding any protected areas</b>	<i>860 Acres</i>

**Area of managed grounds that is::**

	<b>Area</b>
<b>Managed in accordance with an Integrated Pest Management (IPM) Plan</b>	<i>0 Acres</i>
<b>Managed in accordance with a sustainable landscape management program that includes an IPM plan and otherwise meets the criteria outlined</b>	<i>6,465 Acres</i>
<b>Managed organically, third party certified and/or protected</b>	<i>0 Acres</i>

**A copy of the IPM plan:**

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**The IPM plan :**

Penn State's Pesticide Management Program Manual (Section B.1.) outlines Penn State's approach to IPM. The manual explains the six steps to IPM.

1. Identify pest
2. Understand pest biology
3. Monitor environment to determine pest levels
4. Determine action threshold
5. Choose tactics

## 6. Evaluate results

Tactics include cultural, physical, mechanical, biological, genetic and legal with chemical options as a last resort. The manual states "At Penn State, everyone must use IPM except those persons who are performing research where specific pesticide protocols are necessary."

Penn State utilizes IPM principles in its grounds operations for Turf, Horticulture and Tree Maintenance as well as the control of Dutch Elm Disease. Action thresholds as well as prevention and control measures are based on levels of expectation in the area.

For trees, strict IPM practices are followed. Weekly IPM reports are generated providing weather and pest alerts information to provide the crews with the most current information to shape pest management activities.

Agricultural and wooded lands make up a substantial amount of Penn State's land holding at University Park. Farm Operations manages these lands and follow IPM practices. Best Management Practices are utilized including crop rotation, crop diversity as well as just-in-time use of fertilizers.

Through the College of Agricultural Sciences, Penn State is collaborating with the PA Department of Agriculture on The Pennsylvania Integrated Pest Management Program.

<http://extension.psu.edu/ipm>

### **A brief summary of the institution's approach to sustainable landscape management:**

In addition to the IPM practices noted above, Penn State uses the following sustainable landscape management practices: Leaves and plant debris are composted and the brush and logs are ground and manufactured as mulch and then used in campus landscape maintenance. An alternative to round-up herbicide is horticultural vinegar. Alternatives to conventional fertilizers used include general purpose fertilizer that include 32% organic sources of nitrogen, organic specialty turf fertilizer, compost from Penn State's OMPEC facility, tree root zone renovation and bio-stimulants that increase the biological activity in the soils to unlock the nitrogen and other nutrients present.

Penn State has a comprehensive tree maintenance program that exceeds the standards set for recognition by the Arbor Day Foundation's Tree Campus USA Program. Penn State has a University Tree Commission and has developed a policy for designating a tree as a Heritage Tree for its exceptional historical, cultural or aesthetic value. This information is made available to the campus community via The Trees of Penn State web site.

### **A brief description of how the institution protects and uses existing vegetation, uses native and ecologically appropriate plants, and controls and manages invasive species:**

Although the use of native plant species in landscaping is not prioritized across the entire university, there are efforts to prioritize sustainable behaviors in landscaping through reducing water usage, using soils made from natural composting methods on campus, etc. In addition, there are efforts for certain areas of campus to be dominated by native species. For example, the University's Office of the Physical Plant has recently made an effort to remove invasive species from an area called Hort Woods, in North Campus, and began reintroducing native plant-life in the area. The Arboretum Ecological Restoration Group organizes work sessions in which volunteers help to stop the spread of nonnative shrubs such as honeysuckle, privet, and multiflora rose in the understory of the Hartley Wood, an historic woodlot in the Arboretum. These efforts have now been extended into other areas of the Arboretum in Big Hollow.

## **A brief description of the institution's landscape materials management and waste minimization policies and practices:**

Leaves, plant debris, brush and logs are collected from campus landscape maintenance. The leaves and plant debris are composted and the brush and logs are ground and manufactured as mulch. The compost is used in campus landscape maintenance, in research projects, and is sold to the public. The mulch is used in campus landscape maintenance.

The wood from Elm trees removed on campus due to disease or failing health is salvaged and repurposed into furniture and other products that are sold. OPP partners with the Alumni Association on this project. It results in a much higher reuse of the wood instead of mulch. Proceeds from the sale of products are split between OPP and the Alumni Association. OPP's share goes to the Tree Replacement Endowment which is used to purchase and plant new trees on campus. Close to \$500,000 of Elms Collection items have been sold in the 3+ years the program has existed.

In FY 2013, Penn State composted almost 3,000 tons of animal manure, crop and food residuals, ground pallet wood, leaves and plant debris, offal, drywall and soiled cardboard/paper to produce 1,040 cubic yards of compost. Almost 1,800 tons of brush, logs and bark produced 3,028 cubic yards of mulch.

Since 1997 Penn State's Organic Materials Processing and Education Center (OMPEC) has demonstrated continuous growth in quantity, quality and variety of organic materials captured, processed and utilized at the University Park Campus. The OMPEC site is operated as a captive facility. The primary inputs diverted from the waste stream are pre and post-consumer food residuals, leaves, landscape debris and lab animal cage wastes. Farm animal manure and crop residues are used to compliment the various feedstocks to create an optimal compost mix and to produce value added end products demanded by users.

The OMPEC facility fulfills operational needs of the University, provides research opportunities and serves as a model facility for the public and private organics processing sector to observe and learn organics processing procedures. Each year classes in Environmental Resource Management, Horticulture, Agro Ecology and Ag Engineering visit the site to learn about environmental design, production and equipment.

The program is a collaboration between the College of Agricultural Sciences, Housing and Food Services, Hospitality Services and the Office of Physical Plant. The project has parallel goals of responding to the needs of handling organic residuals generated from within the university and enhancing teaching, research and extension/outreach programs of a land-grant university. The Office of Physical Plant coordinates collection and delivery of food residuals and the College of Agricultural Sciences is responsible for compost production.

## **A brief description of the institution's organic soils management practices:**

An alternative to round-up herbicide is horticultural vinegar. Alternatives to conventional fertilizers used include general purpose fertilizer that include 32% organic sources of nitrogen, organic specialty turf fertilizer, compost from Penn State's OMPEC facility, tree root zone renovation and bio-stimulants that increase the biological activity in the soils to unlock the nitrogen and other nutrients present.

## **A brief description of the institution's use of environmentally preferable materials in landscaping and grounds management:**

Penn State uses compost and mulch from its own composting facility. In FY2013, this facility produced 3,028 cu. yds of mulch and 1,040 cu yds of compost. Penn State uses compost as nutrients for its flowers and shrubs and some of it to topdress its lawns.

## **A brief description of how the institution restores and/or maintains the integrity of the natural hydrology of the**

**campus:**

The University's storm water program promotes the use of conservation design practices that preserve and use natural critical hydrologic areas to minimize the impact on the environment. Penn State monitors more than two dozen storm water facilities continuously and makes changes or improvements to them as required. The University is always installing new and innovative facilities to reduce the quantity and improve the quality of runoff from its campuses.

The University uses bioretention as a method of treating storm water by pooling water on the surface and allowing filtering and settling of suspended solids and sediment at the mulch layer, prior to entering the plant/soil/microbe complex media for infiltration and pollutant removal. Rain gardens or bioretention techniques are used to accomplish water quality improvement and water quantity reduction.

At University Park, numerous hard armored conveyance swale types have been used around campus. Interlocking concrete block swales, concrete swales, fabri-form concrete mates, gabion basket, reno mattresses, and the more common rip rap stone are some examples of the stone swale styles used. The University owns numerous grass lined swales, however, these swales cannot adequately provide long term stability for high flow or slope channels so stone swales are also used on campus.

The UP campus currently has five buildings with green roofs: the Forestry Building, the vegetable cellar, the Dickinson School of Law, the Health Services Building, and the Millennium Science Complex building. The Penn State Center for Green Roof Research is located at the University Park Campus in the College of Agricultural Sciences, and the University has created a Storm Water Management magazine describing its initiatives and facilities.

**A brief description of how the institution reduces the environmental impacts of snow and ice removal (if applicable):**

The Office of Physical Plant exercises judgment when applying salt for winter deicing and anti-icing materials in an effort to provide for public safety, yet considers the environmental impacts of the materials used. Currently most materials used are granular. Discretion is used in only applying these materials at the proper times to gain the optimal impact, using the least possible material. Training occurs annually to assure that proper amounts are applied for proper coverage patterns, avoiding over-application. Mechanical spreaders are calibrated annually, and with the large trucks used for roads and parking lots, liquid brine is sprayed on the salt as it crosses the spinner for spreading on the surface. This reduces bounce of the salt, keeping it on the hard surfaces, and enhances the melting capability of the rock salt, allowing less to be used than in dry granular applications in past years.

NAAC (sodium acetate) is used on parking structures to reduce exposure to corrosion, but it also had the environmental benefit of better properties to biodegrade, and is considered relatively harmless to aquatic life.

OPP is switching to the use of granular magnesium chloride for about 1/4 of campus landscape use as a pilot, with a goal to eliminate sodium and calcium based salts from use at building entrances and campus walkways. Additionally, one area will pilot the use of brine as a fully liquid application. Magnesium chloride is recognized as causing less of an impact on plant materials. Planning is also taking place to convert to a liquid application for roads and parking lots to provide more controlled application to the target surfaces, again reducing total use of salts, and corresponding impact to plant growth and ground water.

**A brief description of any certified and/or protected areas:**

There are no certified or legally protected areas on campus. There are areas designated in the campus master plan as environmentally sensitive, including four Natural Heritage Inventory Biological Diversity Areas. These are described in the section on Biodiversity.

**Is the institution recognized by the Arbor Day Foundation's Tree Campus USA program (if applicable)?:**

No

**The website URL where information about the institution's sustainable landscape management programs and practices is available:**

[http://www.ehs.psu.edu/hazmat/psu\\_pesticide\\_management\\_manual.pdf](http://www.ehs.psu.edu/hazmat/psu_pesticide_management_manual.pdf)

## Responsible Party

**Mary Easterling**

Assoc Director, Analysis & Assessment  
Sustainability Institute

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## 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.

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

**Does the institution own or manage land that includes or is adjacent to legally protected areas, internationally recognized areas, priority sites for biodiversity, and/or regions of conservation importance?:**

No

**A brief description of any legally protected areas, internationally recognized areas, priority sites for biodiversity, and/or regions of conservation importance on institution owned or managed land:**

N/A

**Has the institution conducted an assessment or assessments to identify endangered and vulnerable species with habitats on institution-owned or –managed land?:**

Yes

**Has the institution conducted an assessment or assessments to identify environmentally sensitive areas on institution-owned or –managed land?:**

Yes

## **The methodology(-ies) used to identify endangered and vulnerable species and/or environmentally sensitive areas and any ongoing assessment and monitoring mechanisms:**

Penn State's University Park Master Plan contains a map showing Environmentally Sensitive Areas, including several indicated as Natural Heritage Inventory areas. See

<http://www.opp.psu.edu/about-opp/divisions/cpd/images/s-5-3%20Environ-1.pdf>

These areas were surveyed by the Western Pennsylvania Conservancy in 2002, and results are reported in the "Centre County Natural Heritage Inventory"

[http://www.naturalheritage.state.pa.us/CNAI\\_PDFs/Centre%20County%20NHI%202002-WEB.pdf](http://www.naturalheritage.state.pa.us/CNAI_PDFs/Centre%20County%20NHI%202002-WEB.pdf)

These four areas, that occur fully or partially on lands owned by Penn State, are all classified as Biological Diversity Areas (BDA), or sites that are recognized as supporting populations of state, national or globally significant species or natural communities, high quality examples of natural communities or ecosystems, or exceptional native diversity.

Other designated Environmentally Sensitive Areas are relevant to the campus's hydrology.

## **A brief description of identified species, habitats and/or environmentally sensitive areas:**

Environmentally sensitive areas designated in the Campus Master Plan include the following land use types:

Zone 1 wellhead protection areas, major stormwater infiltration areas, waterways, floodplains, and other natural habitat areas such as Millbrook Marsh, the Big Hollow corridor and Spring Creek Biodiversity Area. Also, surface areas that drain directly to wellheads; areas that drain to significant closed depressions; wastewater nutrient management areas; areas that surface drain to special protection streams (these areas are defined by PaDEP as High Quality Cold Water Fisheries, (HQ-CWF) and/or Exceptional Values (EV) streams); Natural Heritage Inventory areas; soils mapped as Opequon variations; and minor closed depressions.

## **A brief description of plans or programs in place to protect or positively affect identified species, habitats and/or environmentally sensitive areas:**

Natural Heritage Inventory areas are mapped in the Campus Master Plan, which stipulates that "these areas be kept as undeveloped landscapes, free of building and parking facilities, and reserved for resource protection and for the enjoyment by the public".

The Arboretum Ecological Restoration Group organizes work sessions in which volunteers help to stop the spread of nonnative shrubs such as honeysuckle, privet, and multiflora rose in the understory of the Hartley Wood, an historic woodlot in the Arboretum. These efforts have now been extended into other areas of the Arboretum in Big Hollow, which is one of the Biological Diversity Areas indicated on the Campus Master Plan. The vision for the Arboretum also includes restoring native habitat and providing educational outreach on the area's land use history. See

<http://www.arboretum.psu.edu/conservation/index.html>

The Millbrook Marsh Nature Center is a 62-acre protected area owned by Penn State and operated by the Centre Regional Recreation Authority. It is located on the edge of the University Park campus. The wetlands, forests and meadows are home to many species of plants and wildlife. This is mapped as a Biological Diversity Area on the Campus Master Plan.

<http://millbrook.centreconnect.org/>

In addition, Penn State has a variety of programs that protect and conserve wildlife habitat in and around the University Park campus. Specific practices and programs involve water resources management, wetland conservation, farm operations and forest management.

There are large tracts of undisturbed land along the fringes of the campus that attract a variety of wildlife. The University's stormwater program promotes the use of conservation design practices that preserve and use natural critical hydrologic areas to minimize the impact on the environment. It has identified nearly 500 acres of critical area as Water Resource Preservation areas. Preserving these natural land areas provides a habitat for a variety of wildlife.

<http://www.opp.psu.edu/about-opp/divisions/ee/engineering/eng-resources/Stormwater%20Magazine.p>

df

Farm Operations has a variety of practices that protect wildlife habitat in and around croplands. This includes diversifying crops, leaving some crop in the fields for winter, wildlife food plots and protecting trees for raptor habitat.

The Stone Valley Recreation Area is 700-acres of varied ecosystems within the 7,000-acre University Experimental Forest. Also include is the 72-acre Lake Perez. The site is located 17 miles from University Park.

[http://www.athletics.psu.edu/stonevalley/sv\\_about.shtml](http://www.athletics.psu.edu/stonevalley/sv_about.shtml)

Within Stone Valley, Penn State operates the Shaver's Creek Environmental Center. The Center extends the University's Outreach mission of instruction, service and research. It offer environmental education and training programs that enable people to learn how to live and interact harmoniously and sustainably with each other and the natural world.

<http://www.outreach.psu.edu/shaverscreek/>

**The website URL where information about the institution's biodiversity policies and programs(s) is available:**

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# 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.

<b>Credit</b>
Electronics Purchasing
Cleaning Products Purchasing
Office Paper Purchasing
Inclusive and Local Purchasing
Life Cycle Cost Analysis
Guidelines for Business Partners

## Responsible Party

**Mary Easterling**

Assoc Director, Analysis & Assessment  
Sustainability Institute

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## 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.

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### **Submission Note:**

Data on electronics purchases are not readily available due to the decentralized nature of IT-related purchases at Penn State. (At this time of our 2011 STARS report, computer hardware was sold through the on-campus Computer Store, which has since closed.) Most purchases now go through the Purchasing office or eBay; the later takes users directly to the supplier websites. Suppliers are given the option of flagging items that meet EPEAT or other "green" criteria; however most currently do not do this. Because of Penn State's policy that all such purchases be EPEAT-certified unless justification is provided for waiver of the policy, we assume that most if not all of electronics are EPEAT certified at some level.

Dell is Penn State's main supplier of computer hardware. All standard computer bundles, which account for most computer purchases at the University, are EPEAT certified at the gold or silver standard, with the exception of a single laptop model.

"---" 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:**

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**The electronics purchasing policy, directive, or guidelines :**

Penn State's Energy Conservation Policy AD-64 states that:

- Computers purchased with University funds are required to be ENERGY STAR and EPEAT labeled unless suitable justifications are approved by the appropriate budget executive.
- Office equipment purchased with University funds is required to be ENERGY STAR labeled unless approved by the responsible budget executive. See

<http://guru.psu.edu/policies/AD64.html>

In addition, Penn State's Purchasing Department guidelines state that:

"We encourage suppliers to identify products, services, or processes that promote environmental stewardship. In addition to the requested bid, suppliers are encouraged to offer an additional bid for products, services, or processes that are more environmentally friendly." See

<http://auth.abservices.psu.edu/Purchasing/stewardship.cfm>

for additional information

**A brief description of steps the institution has taken to ensure that the purchasing policy, directives, or guidelines are followed:**

Budget Executives in each administrative area are charged with responsibility for implementing AD 64, which includes language about EPEAT requirements. Purchasing staff also are expected to comply with the policy.

Purchasing includes Penn State's environmental policy and requirements on all our bids and purchase orders, and do not accept product or include vendors who do not meet these requirements.

<http://www.purchasing.psu.edu/environmental.shtml>

**Does the institution wish to pursue to pursue Part 2 of this credit (expenditures on EPEAT registered electronics)?:**

No

**Expenditures on EPEAT registered desktop and laptop computers, displays, thin clients, televisions, and imaging equipment::**

	Expenditure Per Level
EPEAT Bronze	---

<b>EPEAT Silver</b>	---
<b>EPEAT Gold</b>	---

**Total expenditures on desktop and laptop computers, displays, thin clients, televisions, and imaging equipment:**

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**The website URL where information about the institution's electronics purchasing policy, directive, or guidelines is available:**

<http://guru.psu.edu/policies/AD64.html>

# Cleaning Products Purchasing

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## Responsible Party

**Mary Easterling**

Assoc Director, Analysis & Assessment  
Sustainability Institute

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## 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

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### Submission Note:

Values include cleaning products, liners, TP, paper towels, and light bulbs. (The latter item does not really belong in this category but it was not possible to remove its value from the totals provided.)

"---" 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:**

[Penn State Blue Cleaning Manual.pdf](#)

**The green cleaning product purchasing policy, directive, or guidelines:**

Penn State's Purchasing website states that "we purchase environmentally friendly cleaning products whenever possible". A detailed manual entitled, "Blue Cleaning Guidelines" specifies the types of products that should be used. See

<http://www.opp.psu.edu/intranet/bg/processes/Penn%20State%20Blue%20Cleaning%20Manual.pdf>

**A brief description of steps the institution has taken to ensure that the purchasing policy, directives, or guidelines are followed:**

Both Purchasing and Custodial staff are aware of these guidelines. Training is provided to all custodial staff.

**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:**

1,789,822.32 US/Canadian \$

**Total expenditures on cleaning and janitorial products:**

3,574,728.68 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:**

Penn State's Office of Physical Plant has developed a program "ACE Blue Cleaning for Health and Environment" and produced a publication "Blue Cleaning Guidelines" that describes it. The main goal of the program is to "is to reduce the exposure of our personnel and building occupants to potentially hazardous products, equipment or procedures which could adversely affect human health and the environment, indoors and outdoors". Guidelines are summarized here:

<http://sustainability.psu.edu/sites/default/files/images/BlueCleaningGuidelinesSummary.pdf>

Key elements include the use of Environmentally Preferable Cleaning Products; the use of Maintenance Equipment as specified in LEED guidelines for Existing Buildings (LEED-EB); use of environmentally preferable paper and trash items; use of Environmentally Preferable Procedures; staff training; communications, and safety.

**A copy of the sections of the cleaning contract(s) that reference certified green products:**

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**The sections of the cleaning contract(s) that reference certified green products:**

See Penn State Blue Cleaning Manual at:

<http://www.opp.psu.edu/intranet/bg/processes/Penn%20State%20Blue%20Cleaning%20Manual.pdf>

Green products are referenced in the section on Cleaning Products and Dispensing Systems, which begins on page 4.

**The website URL where information about the institution's green cleaning initiatives is available:**

<http://www.opp.psu.edu/intranet/bg/processes/Penn%20State%20Blue%20Cleaning%20Manual.pdf/view>

# Office Paper Purchasing

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## Responsible Party

**Mary Easterling**

Assoc Director, Analysis & Assessment  
Sustainability Institute

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## 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.

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## Submission Note:

Numbers are for calendar year 2013.

"---" 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?:**

No

**A copy of the paper purchasing policy, directive or guidelines:**

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**The paper purchasing policy, directive or guidelines:**

Although Penn State does not have a formal policy that requires the use of recycled-content paper, Purchasing uses market incentives to encourage its use, and works actively to negotiate lower prices for recycled paper. Penn State General Stores, through which most office paper used on campus is purchased, offers 30, 50, and 100 percent recycled paper at competitive prices. The General Stores website allows one to search for recycled content paper and "green" paper (produced using FSC or SFI certified wood). The recycled paper is packaged in recycled brown kraft cartons instead of bleached cartons. Paper is purchased by the truckload for a bulk discount. The University uses 100 percent recycled paper in all of its University Park computer labs. See



**A brief description of steps the institution has taken to ensure that the purchasing policy, directives, or guidelines are followed :**

As stated above, Penn State uses price incentives to encourage the use of recycled-content paper, while still giving consumers a choice. In the online eBuy catalog, General Stores recycled paper is listed first. Purchasing actively promotes the use of these products by, for example, sending out "green" reminders to employees on its email list.

**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::**

	<b>Expenditure Per Level</b>
<b>10-29 percent</b>	0 US/Canadian \$
<b>30-49 percent</b>	73,792.63 US/Canadian \$
<b>50-69 percent</b>	347,840.95 US/Canadian \$
<b>70-89 percent (or FSC Mix label)</b>	0 US/Canadian \$
<b>90-100 percent (or FSC Recycled label)</b>	228,106.63 US/Canadian \$

**Total expenditures on office paper :**

847,321.54 US/Canadian \$

**The website URL where information about the paper purchasing policy, directive, or guidelines is available:**

<http://sustainability.psu.edu/live/what-penn-state-doing/infrastructure/green-purchasing>

# Inclusive and Local Purchasing

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## Responsible Party

**Mary Easterling**

Assoc Director, Analysis & Assessment  
Sustainability Institute

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## 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.

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### **Submission Note:**

The percentage provided below represents purchases from suppliers, and does not include contractor goods and services. Our Diverse dollar percentage (minority & woman-owned) includes Centralized Purchasing, ARL Purchasing, Housing/Foods Purchasing and Hershey Medical Purchasing.

"---" 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:**

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**The policy, guidelines or directive governing inclusive and local purchasing:**

Penn State has established the Supplier Diversity Program to ensure woman-owned, minority-owned, veteran-owned, and HUB Zone certified businesses have full opportunity to compete for the University's business. The Manager of Supplier Diversity & Environmentally [STARS Reporting Tool](#) | [AASHE](#)

Responsible Purchasing acts as a liaison between diverse suppliers and all University staff who have procurement responsibilities. To qualify as a minority-owned or women-owned business, a business must be at least 51 percent owned, controlled, and/or actively managed by one or more minorities or women. Publicly owned businesses must have at least 51 percent of its stock owned by one or more minorities or women. See

<http://www.supplierdiversity.psu.edu/SupplierDiversity/Supplier.cfm>

Penn State has a small business checklist where we are required to document our business with small, disadvantage, minority, women-owned and HUB zone businesses.

Penn State also has a contractor diversity program known as the OPP Design and Construction Division's Minority Business Enterprise and Women Business Enterprise Program (D&C MBE/WBE), administered by the Office of Physical Plant. The Program has instituted a variety of initiatives to identify and encourage MBEs and WBEs to participate in the University's procurement bidding process in an effort to ensure continued growth of business opportunities for those business enterprises. This program performs a key role by providing outreach, training, and educational programs. The D&C MBE/WBE Program forms a connecting link between the University, MBE/WBE business community, as well as the state, local, and federal agencies. See

<http://www.supplierdiversity.psu.edu/supplierdiversity/contractor.cfm>

**Does the institution wish to pursue Part 2 of this credit (inclusive and local expenditures)?:**

Yes

**The percentage of total purchases from disadvantaged businesses, social enterprises and/or local community-based businesses:**

5.17

**The website URL where information about the institution's inclusive and local purchasing policies and/or program is available:**

<http://www.supplierdiversity.psu.edu/SupplierDiversity/Supplier.cfm>

# Life Cycle Cost Analysis

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## Responsible Party

**Mary Easterling**

Assoc Director, Analysis & Assessment  
Sustainability Institute

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## 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.

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

**Does the the institution employ Life Cycle Cost Analysis (LCCA) as a matter of policy and practice when evaluating energy and water-using products and systems?:**

Yes

**Does the institution employ LCCA as a matter of policy and practice across the operations of the entire institution (i.e. all divisions)?:**

No

**A brief description of the LCCA policy(ies) and practice(s):**

Design Professionals are required to design systems for optimal operating efficiency, reliability, and flexibility with the lowest life cycle cost. This is specified in our Design and Construction Standards. For HVAC systems, the Design Professional shall carefully evaluate and properly select the most effective equipment type and to best suit the needs of the application with emphasis on minimizing operating and life cycle cost, rather than minimizing size and first cost. An Economic / LCCA is required to be performed and documentation submitted to confirm selection of base systems and potential options for alternate bids. In addition, at a minimum, facilities at Penn State are required to achieve at least 30% energy savings over the latest version of the ASHREA 90.1 standard. Documentation of compliance is required and verified.

Although there is no LCCA requirement that applies to all institutional purchases, Penn State's guidelines for suppliers state that: "We encourage suppliers to identify products, services, or processes that promote environmental stewardship. In addition to the requested bid, suppliers are encouraged to offer an additional bid for products, services, or processes that are more environmentally friendly... Benefits may include: Reduced life cycle costs, reduced energy consumption, recycled content, recyclability, extended product life, and decreased maintenance."

**The website URL where information about the institution's LCCA policies and practices is available:**

[http://www.opp.psu.edu/planning-construction/design\\_and\\_construction\\_standards/division-23-heat-ing-ventilating-hvac](http://www.opp.psu.edu/planning-construction/design_and_construction_standards/division-23-heat-ing-ventilating-hvac)



# Guidelines for Business Partners

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## Responsible Party

**Mary Easterling**

Assoc Director, Analysis & Assessment  
Sustainability Institute

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## 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.

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"---" 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?:**

Some

**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?:**

Some

**A copy of the policies, guidelines, and/or agreements with the institution's business partners (or a representative sample):**

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**The policies, guidelines, and/or agreements with the institution's business partners (or a representative sample):**

The University requires participating vendors on large and/or construction projects to provide their environmental policies for review. Quarterly or annual reports on the environmental status of companies on projects are also required.

Penn State has adopted and abides by the Global Sullivan Principles of Social Responsibility and includes it in our Purchase Order Terms and Conditions.

<http://www.purchasing.psu.edu/Purchasing/resources/terms.cfm>

The objectives of the Sullivan Principles are to support economic, social and political justice by companies where they do business; the text of the Principles can be found on the Penn State Purchasing website:

<http://www.purchasing.psu.edu/Purchasing/resources/sullivan-principles.cfm>

Also, in its information for suppliers, Penn State states:

"Environmental Alternatives: The University is committed to environmental stewardship, conserving natural resources and preserving the environment. We encourage suppliers to identify products, services, or processes that promote environmental stewardship. In addition to the requested bid, suppliers are encouraged to offer an additional bid for products, services, or processes that are more environmentally friendly. Such products or services should be bid as an alternate to the requested bid. Any exceptions or deviations from the original specifications must be clearly identified. The environmental benefits must be clearly identified with supporting data. Benefits may include: Reduced life cycle costs, reduced energy consumption, recycled content, recyclability, extended product life, and decreased maintenance."

Suppliers are encouraged to supply Energy Star products when available as all of our University Procurement Card holders are aware of PSU's commitment to purchase that standard of product.

Penn State Purchasing continues to actively promote environmentally responsible purchasing through working with both departments and suppliers. Purchasing staff increase University departments' awareness of environmentally friendly alternatives and encourage consideration of lifecycle costs vs. just the initial purchase price.

**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 requires participating vendors on projects to provide their environmental policies for review. Quarterly or annual reports on the environmental status of companies on projects are also required.

Suppliers are encouraged to supply Energy Star products when available as all of our University Procurement Card holders are aware of PSU's commitment to purchase that standard of product.

We commit to the goal of making environmentally and fiscally responsible purchasing choices where appropriate that consider life cycle costs, energy use, long-term implications, disposal and relative environmental harm of products.

Examples of instances where the guidelines have changed purchasing behavior:

The University's incandescent and fluorescent lamp bid was based on lifecycle costing – including consideration for TCLP compliance (low mercury), disposal costs and energy usage.

An award on an order for MicroFridges for residence halls was based on lifecycle costing and energy usage versus straight low bid price alone.

Requiring paper company to move out of endangered forests in order to provide University paper products.

Requiring FSC, SFI or recycled copier paper.

Requiring DELL to provide eco friendly packaging.

Requiring PEPSI to use less plastic in their bottled products.

Requiring the elimination of Styrofoam peanuts in the packaging of products sent to PSU.

Required vendors to provide additional discounts on environmental products sold through PSU General Stores.

Require vendors to take back old product and recycle when replaced with new product. (Ceiling tiles and Carpet)

**The website URL where information about the institution's guidelines for its business partners is available:**

<http://www.purchasing.psu.edu/>



# 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.

<b>Credit</b>
Campus Fleet
Student Commute Modal Split
Employee Commute Modal Split
Support for Sustainable Transportation

## Responsible Party

**Shelley McKeague**

Environmental Compliance Specialist  
Engineering Services

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## 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.

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### Submission Note:

Penn State's Office of Physical Plant's Fleet consists of 486 licensed vehicles. The campus also operates an in-house rental service for day and long-term vehicle rental by PSU staff and units. Fleet Services consists of 450 vehicles. It is Penn State policy for staff to utilize Fleet vehicles in lieu of personal vehicles for University business.

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

**Total number of vehicles in the institution's fleet :**

**Number of vehicles in the institution's fleet that are::**

	Number of Vehicles
Gasoline-electric, non-plug-in hybrid	6
Diesel-electric, non-plug-in hybrid	0
Plug-in hybrid	0
100 percent electric	3
Fueled with compressed natural gas (CNG)	55
Hydrogen fueled	1
Fueled with B20 or higher biofuel for more than 4 months of the year	90
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 University is working to sustainably manage its growing transportation demands by switching to alternative fuels, reducing oil consumption, increasing the fuel efficiency of fleet vehicles, and encouraging the use of public transportation.

**The website URL where information about the institution's support for alternative fuel and power technology is available:**

<http://sustainability.psu.edu/live/what-penn-state-doing/infrastructure/transportation>

# Student Commute Modal Split

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## Responsible Party

**Shelley McKeague**

Environmental Compliance Specialist

Engineering Services

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## 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.

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### Submission Note:

There is limited parking available in the core campus area. The majority of the commuter parking is located on the periphery, encouraging less vehicle movement, fewer pedestrian/vehicular conflicts, and a more walkable environment. Penn State operates a Campus Shuttle that loops through campus. In partnership with CATA (Centre Area Transportation Authority) there is a Campus Service. CATA also offers a Community Service with 23 routes serving students/staff who live in neighboring communities. In a partnership with Penn State, CATA also offers four campus routes.

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

## Total percentage of students that use more sustainable commuting options:

88

## 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)	12
Walk, bicycle, or use other non-motorized means	33
Vanpool or carpool	0
Take a campus shuttle or public transportation	55

**A brief description of the method(s) used to gather data about student commuting:**

The methodology for the data reported is as follows:

44,935 FTE

5,410 students with parking permits for commuting (12%). 14,801 live on campus and walking/biking is the most convenient mode of transportation (33%). 73 students have motorcycle permits (<1%). The remaining off-campus students that do not have permits and therefor cannot park on campus, must either walk/bike from housing close to campus or utilize CATA Bus\Shuttle Services to get to and around campus.(55%)

We do not have carpool/vanpool data for students so the assumption was made that each parking permit was for only one student and no carpool/vanpool data is reported.

**The website URL where information about sustainable transportation for students is available:**

<http://sustainability.psu.edu/live/what-penn-state-doing/infrastructure/transportation>

# Employee Commute Modal Split

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## Responsible Party

**Shelley McKeague**

Environmental Compliance Specialist

Engineering Services

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## 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.

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

## Total percentage of the institution's employees that use more sustainable commuting options:

38

## 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)	62
Walk, bicycle, or use other non-motorized means	29
Vanpool or carpool	3
Take a campus shuttle or public transportation	6
Use a motorcycle, scooter or moped	0
Telecommute for 50 percent or more of their regular work hours	0

**A brief description of the method(s) used to gather data about employee commuting:**

16,703 faculty/staff

10301 faculty/staff permits issued (62%)

991 Ride for 5 - CATA Bus Program (6%)

436 Vanpool/Carpool (3%)

There are going to be overlaps in data. For example, members of a carpool may all keep individual parking passes and get counted in the drive-alone category.

The remaining faculty/staff, 4,975 (29%), are assigned to the bike/walk category because they do not have parking permits, do not participate in a carpool/vanpool nor use public transportation on a regular basis (Ride for 5)

Penn State conducted a Travel Study in 2011. Results showed a higher use of carpool\vanpool (10%) and CATA Bus (15% faculty, 7% staff) than the above methodology shows. 12% of faculty indicated they biked to work.

**The website URL where information about sustainable transportation for employees is available:**

<http://sustainability.psu.edu/live/what-penn-state-doing/infrastructure/transportation#overview>

# Support for Sustainable Transportation

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## Responsible Party

**Shelley McKeague**

Environmental Compliance Specialist  
Engineering Services

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## 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

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"---" 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:**

There are many bike storage facilities on the Penn State Campus. Additionally, many buildings are equipped with showers and lockers for those who commute on bicycle. The University collaborated with the Borough of State College to develop a Bicycle Master Plan that will promote bicycle commuting and expand on-campus mobility for students and staff.

**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 600 bike racks on campus. Every occupied building on core campus has a bike rack. There is also covered bike parking throughout campus in convenient locations.

**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:**

There is a continuous network of shared roadway, shared pathway and dedicated bicycle paths on Campus. There are pedestrian sidewalks connecting all major buildings. Penn State bicycle paths connect to community bicycle paths. Transportation Services provides maps of Penn State and local bike paths on its website. Penn State has developed a Bicycle Master Plan as part of campus master planning. Penn State partners with the Centre Region Bicycle Coalition. CATA buses accommodate bicycles for students, faculty or staff who commute by public transportation but desire to get around campus and the local area via bike.

<http://www.opp.psu.edu/about-opp/divisions/cpd/images/Bicycle%20Master%20Plan.pdf>

<http://www.centrebike.org/who-we-are.html>

<http://www.transportation.psu.edu/transportation/alt-transportation/bicycles/>

**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:**

PSU Bike Share is a student-run, not-for-profit campus organization. Its goal is to bring a public bike sharing program to Penn State University Park that will offer an efficient, environmentally-friendly, and health-promoting form of transportation to the students, faculty, and staff.

Currently, the program is in a pilot phase, and operates out of Simmons Hall. Students who have registered are able to check-out bikes at the commons desk with their student ID.

The group maintains a website that offers information on the organization, as well as a registration form.

<http://www.clubs.psu.edu/up/psubikeshare/>

**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 League of American Bicyclists recognized Penn State University Park as a bronze level Bicycle Friendly University in 2012. The bronze level is valid for four years. The Bicycle Friendly University status is a result of Penn State's Bicycle Master Plan, which includes widening streets, expanding bike access on campus and offering bicycle registration online. Adding climbing lanes and building covered bike parking are also a part of the plan.

[http://www.transportation.psu.edu/transportation/news-story-detail.cfm?customel\\_dataPageID\\_1948](http://www.transportation.psu.edu/transportation/news-story-detail.cfm?customel_dataPageID_1948)

=51628

**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):**

Penn State offers reduced price transit passes through its Ride for Five program with the Centre Area Transportation Authority (CATA). CATA provides 23 routes on The Centre Line to those in the community or living off campus. Additionally, CATA provides 4 fare-free buses around campus (Blue Loop, White Loop, Red Link, Green Link) and many Centre Line routes have no fare if ridden within campus. All lines run weekdays through the academic year. Most routes run on weekends and during the summer.

<http://www.transportation.psu.edu/transportation/campus-transit/index.cfm>

<http://www.transportation.psu.edu/transportation/parking/faculty-staff/ride-for-five.cfm>

<http://www.catabus.com/>

Penn State also offers a free campus shuttle for faculty/staff, students, and visitors. The shuttle runs weekdays and provides service every 15 minutes from 7:00 AM until 6:00 PM.

<http://www.transportation.psu.edu/shuttle/>

**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:**

Participants in the Carpool and Vanpool program through CATA are offered the Ride Home Program. It is set up for carpool and vanpool participants who face unexpected emergencies such as illness, injury, disasters, company shutdowns or mandatory overtime. The program covers the first 50 miles, one-way via a taxi service. The \$15 annual fee is paid for by Penn State for employees that participate in a CATA registered vanpool or carpool.

**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:**

Penn State and Centre Area Transportation Authority (CATA) offer a RideShare program. This is a free ride-matching program that helps commuters find easy and economical ways to get to and from work. When one registers with RideShare, they get a list of convenient transportation options available and a RideMatch list with the names and telephone numbers of other members who live in or commute through their area.

<http://www.transportation.psu.edu/transportation/parking/faculty-staff/fac-staff-rideshare.cfm>

Students can also participate in the ride share.

[AlterNetRides.com](http://AlterNetRides.com)

has partnered with Penn State's Transportation Services to offer students an alternative to driving. They can find other students traveling to and from Penn State to give rides to or get rides from on weekends and/or holidays.

<http://www.transportation.psu.edu/transportation/parking/students/student-rideshare.cfm>

**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:**

ZipCar operates a location in State College Boro.

[http://www.transportation.psu.edu/transportation/news-story-detail.cfm?customel\\_dataPageID\\_1948](http://www.transportation.psu.edu/transportation/news-story-detail.cfm?customel_dataPageID_1948)

=70318

<http://www.zipcar.com/statecollege>

**Does the institution have one or more Level 2 or Level 3 electric vehicle recharging stations that are accessible to**

**student and employee commuters?:**

No

**A brief description of the electric vehicle recharging stations:**

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**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:**

The University's establishment of a telecommuting program assists in meeting the needs of a workforce that has diverse work and personal demands. Telecommuting can provide flexible work schedules to accommodate temporary situations such as a leave due to a contagious illness or a temporary disability (such as a cold or a broken leg), an unexpected school closing, etc. In addition, telecommuting can provide flexibility on a long-term basis.

A telecommuting program also allows the University to address emerging environmental compliance issues, such as the Clean Air Act and to comply with legislation such as the Americans with Disabilities Act. In addition, telecommuting provides alternate methods of addressing budget issues. Finally, a telecommuting program can strengthen management and employee relations.

Penn State has a Telecommuting Consulting Team (Office of Human Resources, Academic Services and Emerging Technologies, Telecommunications and Networking Services, and Environmental Health and Safety) for questions in developing telecommuting opportunities. Telecommuting is administered on a case-by-case basis by the unit with coordination through Human Resources. See Policy:

<http://guru.psu.edu/policies/OHR/hrg02.html>

**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:**

Penn State allows its employees to practice "flexible scheduling". The term "flexible scheduling" encompasses many variations from the standard work schedule. The more complicated the arrangements, the more record keeping and supervision of the program is required. In its simplest form, a flexible schedule involves allowing an employee to vary the span of the workday.

Flexible scheduling can be as simple as changing the work hours from an 8:00 a.m. - 5:00 p.m. workday to a 7:30 a.m. - 4:30 p.m. workday, changing the lunch break from one hour to one-half hour, or working an extra hour on Monday in order to leave an hour earlier on Tuesday.

Flexible scheduling can be more complicated, allowing an employee to establish her/his own start/end times and/or lunch break, within predetermined guidelines.

Even if a supervisor has not instituted a formal flexible scheduling program, employee requests for temporary changes in the workday such as to take a class, or to go to a doctor's appointment without charging sick leave, may be granted by the supervisor, provided such

requests are in accordance with the provisions of this guideline.

Although it is permissible, with the supervisor's approval, for a nonexempt staff employee to alter when the 40 hours are worked during the workweek, such employee cannot "bank" overtime hours worked in one workweek for use as time off in a future workweek. Further, the employee must understand that altered schedules cannot cause overtime to occur. While it is possible for an employee to agree to waive University overtime policies on work schedules to accommodate personal schedule preferences, Federal and State Wage and Hour laws cannot be waived.

**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:**

N/A

**Does the institution have other incentives or programs to encourage more sustainable modes of transportation and reduce the impact of student and employee commuting?:**

No

**A brief description of other sustainable transportation initiatives and programs:**

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**The website URL where information about the institution's sustainable transportation program(s) is available:**

<http://sustainability.psu.edu/live/what-penn-state-doing/infrastructure/transportation>

# 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.

<b>Credit</b>
Waste Minimization
Waste Diversion
Construction and Demolition Waste Diversion
Hazardous Waste Management

# Waste Minimization

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## Responsible Party

**Mary Easterling**

Assoc Director, Analysis & Assessment  
Sustainability Institute

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## 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*.

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### Submission Note:

Previous base year values have been adjusted to remove asphalt, C&D, electronics, and haz mat tonnage from all waste values (total, diverted, disposed), per STARS guidance.

Materials reused = Trash to Treasure amounts; internal reuse of furniture not available; items sold through Lion Surplus do not appear to be tracked as tonnage on the recycling report.

The employee FTE values given above are actually headcounts. FTE values are not tracked.

FTE of distance education students is entered as zero above, because these students are not included in the FTE enrollment values (thus there is no need to adjust for them when computing Weighted Campus Users).

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

## Waste generated::

	Performance Year	Baseline Year
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<b>Materials recycled</b>	2,502 Tons	2,295 Tons
<b>Materials composted</b>	4,535 Tons	1,955 Tons
<b>Materials reused, donated or re-sold</b>	113 Tons	77 Tons
<b>Materials disposed in a solid waste landfill or incinerator</b>	5,723 Tons	6,184 Tons

**Figures needed to determine "Weighted Campus Users"::**

	<b>Performance Year</b>	<b>Baseline Year</b>
<b>Number of residential students</b>	14,801	13,795
<b>Number of residential employees</b>	0	0
<b>Number of in-patient hospital beds</b>	0	0
<b>Full-time equivalent enrollment</b>	44,935	39,043
<b>Full-time equivalent of employees</b>	16,703	14,183
<b>Full-time equivalent of distance education students</b>	0	0

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

	<b>Start Date</b>	<b>End Date</b>
<b>Performance Year</b>	Jan. 1, 2013	Dec. 31, 2013
<b>Baseline Year</b>	Jan. 1, 2005	Dec. 31, 2005

**A brief description of when and why the waste generation baseline was adopted:**

2005 was adopted as the baseline year to be consistent with our previous STARS report. Waste data are collected and reported on a calendar year basis.

Enrollment/ employment data are most readily available as a fall snapshot; the values above are for Fall 2005 and Fall 2013. Distance education students are NOT included in the FTE enrollment figures; thus we do not provide a value for them above to allow a more accurate calculation of "Weighted Campus Users". Employee FTE was not available; instead we use employee headcount.

**A brief description of any (non-food) waste audits employed by the institution:**

Spot audits of trash bins are being conducted prior to a building's inclusion in the new office composting program, to establish a waste baseline against which the program's impact can be measured. Buildings with low diversion rates are re-audited after the office composting program has been in effect for several months. In addition, audits were conducted as part of a pilot program with Centre County Recycling & Refuse, to investigate the feasibility of adding miscellaneous plastics to the recycling stream. These plastics are now being recycled on campus and in the community.

**A brief description of any institutional procurement policies designed to prevent waste:**

The following procurement policies and initiatives were developed to reduce waste:

eBuy, the University's e-procurement system, reduces paper usage by electronically delivering purchasing orders and electronically processing invoices and payments.

Travel Services uses a paperless transaction process, including accepting electronic documents as official receipts for reconciliation and reimbursement.

The following vendor requirements have been implemented to reduce waste:

- Required DELL to provide eco friendly and more efficient packaging when shipping computers.
- Required PEPSI to use less plastic in their bottled products.
- Required the elimination of Styrofoam peanuts in the packaging of products sent to PSU.

For ceiling tiles and carpet, worked with vendors to implement recycling of old product when replaced with new product.

**A brief description of any surplus department or formal office supplies exchange program that facilitates reuse of materials:**

Penn State's Furniture Re-use Program collects and redistributes furniture among Penn State University offices.

Lion Surplus also operates a public sales store open to students, faculty, staff, and the general public. Lion Surplus disposes of University-owned equipment such as desks, chairs, filing cabinets, electronics, and scientific equipment through sales, bids, or auctions.

**A brief description of the institution's efforts to make materials available online by default rather than printing them:**

Course schedules and semester offerings can be found online at the University Registrar's Schedule of Courses website:

<http://schedule.psu.edu/>

Course and program descriptions are available online for undergrads

<http://bulletins.psu.edu/undergrad>

and graduate students.

<http://bulletins.psu.edu/graduate>

Classes are scheduled online using the student's Elion page.

<http://elion.psu.edu>

Additionally, the advising handbook for course sequencing can be found online and the student's degree audit and transcripts are online.

The Penn State directory is online and lists contact information for students, faculty, and staff. This can be found at:

<http://www.work.psu.edu/ldap/>

Electronic documents and data entry systems have replaced many that formerly relied on paper, including Time and Attendance reporting (ESSIC), online General Stores catalog, online OPP Stores catalog, electronic pay checks, mobile application in OPP's FAM to reduce printed work orders, electronic reporting, online data warehouses, etc.

**A brief description of any limits on paper and ink consumption employed by the institution:**

Students using lab and classroom printers managed by Information Technology Services (ITS) may print up to 110 black-and-white pages each semester without charge. Usage is tracked by a centralized system. Over the 110-page limit students must purchase additional sheets. Faculty and staff are also allotted a limited number of sheets on lab and classroom printers; additional sheets may be purchased by the employee's unit, or by the employee. See

<http://clc.its.psu.edu/ItAdminSupport/printing>

**A brief description of any programs employed by the institution to reduce residence hall move-in/move-out waste:**

Penn State's Trash to Treasure event (T2T) collects donated goods and sells them in a one day sale. The program raises approximately \$50,000 for the Centre County United Way and saves more than 60 tons of usable goods from going to a landfill. Beginning the week before finals, collection bins are placed in residence halls. Specific areas in the dorms are designated for rugs and furniture. Penn State staff and United Way volunteers sort the goods and man the sale held at Beaver Stadium in early June each year.

<http://sites.psu.edu/trash2treasure/>

**A brief description of any other (non-food) waste minimization strategies employed by the institution:**

Recycling sorting stations are conveniently located in all building on campus. A wide variety of materials are accepted, including: mixed paper & newspaper; glass; metal; plastic bottles and film; miscellaneous plastics, and compostables. By Spring 2015, all buildings at the University Park campus will have sorting stations that include miscellaneous plastics and composting bins. Special pick-up is available for additional recyclable items, including: CDs, DVDs, cassette and VHS tapes; batteries; fluorescent light tubes; unempty aerosol and paint cans; electronic equipment; corrugated cardboard; hardcover books, and polystyrene packaging.

Penn State has installed over 44 Water Bottle Refilling Stations at select "high traffic" locations on campus, to encourage the use of refillable bottles and reduce the use of disposables. Plans are in place for additional installations in the future.

<http://sustainability.psu.edu/mobius-hydration-stations>

Custodial services uses super concentrated cleaning products in automatic dispensers that reduces packaging and usage waste. Jumbo dispensers are used for paper towels and toilet tissue to reduce packaging and use.

**A brief description of any food waste audits employed by the institution:**

Spot audits of trash bins are being conducted prior to a building's inclusion in the new office composting program, to establish a waste baseline against which the program's impact can be measured.

Food Services conducts post-consumer waste audits periodically (usually semi-annually). Post-consumer waste is collected and weighed in an effort to quantify. The information is compared audit to audit to identify trends and evaluate the effectiveness of our reduction efforts.

**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:**

Penn State Food Services' Culinary Support Division continually evaluates the quantity of trim waste and spoilage. They then conduct training programs for our professional culinary staff and for our student employees with regard to reducing trim waste. To decrease the spoilage quantities, all of our employees (100%) must pass a certified food safety class. The increased knowledge from these classes with respect to proper storage and handling techniques reduces our spoilage factor tremendously.

**A brief description of programs and/or practices to track and reduce post-consumer food waste:**

Penn State Food Services has reduced the size of the plates used in the dining hall, which encourages smaller portion size and less food waste. Leftover food is donated to several local efforts nightly, including the Meals on Wheels program. Pre-production food stuffs are donated to Meals on Wheels at each school break or holiday period.

**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 pilot program to bring reusable carryout food containers to campus dining halls was conducted in the Pollack Dining Commons during spring 2014. The goal of this program was to reduce the number of disposable containers used and to demonstrate student participation. With the pilot's success, the program will be rolled out at all the dining halls on campus in Fall 2014.

**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):**

All dining units default to china and silverware as the first position of service. To-go packaging is the second position at the guest's request. Food Services also supports the university's overall mission of 85% diversion through recycling. Recyclables are captured on both the pre-consumer and post-consumer side of our operations. While not compostable, 95% of our packaging is recyclable. Our clear “plastics” are actually specified as PLA compostable, however our current compost facility does not process these items.

**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:**

All retail dining facilities have reusable coffee mugs and water bottles available for purchase. When individuals bring these reusable beverage containers back, they receive ~15% discount on their purchase. At many of the locations, a person can bring their own mug and receive the same discount.

**A brief description of other dining services waste minimization programs and initiatives:**

A "Green Meetings Guide", produced by Penn State, offers staff guidelines for providing a zero waste meal. Campus catering offers this service, which has encouraged some off-campus caterers to follow suit.

Ongoing efforts by Food Services to reduce waste include:

Portion size reductions on all serving lines.

Smaller serving utensils.

Mixed office paper recycling in all kitchens.

Recycling/compost training annually for all employees.

Unit chefs in all kitchens.

**The website URL where information about the institution's waste minimization initiatives is available:**

<http://www.sustainability.psu.edu/mobius>

## Responsible Party

**Mary Easterling**

Assoc Director, Analysis & Assessment  
Sustainability Institute

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## 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*.

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

## Materials diverted from the solid waste landfill or incinerator:

7,150 Tons

## Materials disposed in a solid waste landfill or incinerator :

5,723.20 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:

In 2013 Penn State rolled out a new program called "möbius" on its UP campus, which aims to "close the loop" on its solid waste. In addition to the paper, glass, plastic bottles, and metal recycling bins already in most buildings, organic waste and miscellaneous bins will be added to the sorting station. By the middle of 2015, every building on the UP campus will have one or more möbius stations. Custodial staff will no longer empty office trash cans. Rather, employees will be responsible for sorting the contents of their personal bins at the möbius stations. This is expected to enhance awareness, and shift custodial efforts from emptying personal bins to managing contents of the recycling/ composting bins. This initiative is expected to enable the University to divert 85% of the University's solid waste from the landfill.

Intercollegiate Athletics is part of the möbius initiative as well. The new Pegula Ice Arena has möbius stations. At Beaver Stadium, the President's Suite and Legislative Suite will be showcases for möbius, with 100 percent compostable bio-products for their food service and customized collection stations.

A description of other recycling initiatives - including the STATERS student program, the Green Team's Terracycle initiative, the Construction & Demolition Program, the THON Four Diamonds Recycling Effort, use of the RediIndex, and the Blue and White Bag Programs for document and media shredding - can be found here:

Penn State Policy AD34, University Recycling Program, sets forth the University's policy and objectives for its Recycling/ Reuse program. See

<http://guru.psu.edu/policies/AD34.html>

**A brief description of any food donation programs employed by the institution:**

Any perishable food items are donated to Meals on Wheels prior to long semester breaks (winter and summer). The individual dining commons managers contacts Meals on Wheels to organize the pick-up. The amount of food each dining common is able to donate varies depending on the time of year and semester.

A student club, Waste Not, primarily concerns itself with acquiring perishable, leftover food from dining halls on University Park campus and delivering it to care homes, hospices, and halfway houses in the State College area.

**A brief description of any pre-consumer food waste composting program employed by the institution:**

Pre-consumer food is captured from the six on-campus dining commons, several outlets on campus such as the HUB and Bryce Jordan Center, as well as the hospitality centers (Nittany Lion Inn and Penn Stater) and catering service (Campus Catering). The hospitality employees source separate pre and post consumer food. Food service employees also source separate pre-consumer food.

Since 1997 Penn State's Organic Materials Processing and Education Center (OMPEC) has demonstrated continuous growth in quantity, quality and variety of organic materials captured, processed and utilized at the University Park Campus. The OMPEC site is operated as a captive facility. The primary inputs diverted from the waste stream are pre and post-consumer food residuals, leaves, landscape debris and lab animal cage wastes. Farm animal manure and crop residues are used to compliment the various feedstocks to create an optimal compost mix and to produce value added end products demanded by users.

The OMPEC facility fulfills operational needs of the University, provides research opportunities and serves as a model facility for the public and private organics processing sector to observe and learn organics processing procedures. Each year classes in Environmental Resource Management, Horticulture, Agro Ecology and Ag Engineering visit the site to learn about environmental design, production and equipment.

The program was developed as a collaboration between the College of Agricultural Sciences, Housing and Food Services, Hospitality Services and the Office of Physical Plant. The project has parallel goals of responding to the needs of handling organic residuals generated from within the university and enhancing teaching, research and extension/outreach programs of a land-grant university. The Office of Physical Plant coordinates collection and delivery of food residuals and the College of Agricultural Sciences is responsible for compost production.

**A brief description of any post-consumer food waste composting program employed by the institution:**

Post-consumer food is captured at the Nittany Lion Inn, Penn Stater and catering service (Campus Catering), and campus dining halls. With the roll-out of the new office composting program, post-consumer organic waste will be captured in all buildings on the University Park campus.

Since 1997 Penn State’s Organic Materials Processing and Education Center (OMPEC) has demonstrated continuous growth in quantity, quality and variety of organic materials captured, processed and utilized at the University Park Campus. The OMPEC site is operated as a captive facility. The primary inputs diverted from the waste stream are pre and post-consumer food residuals, leaves, landscape debris and lab animal cage wastes. Farm animal manure and crop residues are used to compliment the various feedstocks to create an optimal compost mix and to produce value added end products demanded by users.

The OMPEC facility fulfills operational needs of the University, provides research opportunities and serves as a model facility for the public and private organics processing sector to observe and learn organics processing procedures. Each year classes in Environmental Resource Management, Horticulture, Agro Ecology and Ag Engineering visit the site to learn about environmental design, production and equipment.

The program is a collaboration between the College of Agricultural Sciences, Housing and Food Services, Hospitality Services and the Office of Physical Plant. The project has parallel goals of responding to the needs of handling organic residuals generated from within the university and enhancing teaching, research and extension/outreach programs of a land-grant university. The Office of Physical Plant coordinates collection and delivery of food residuals and the College of Agricultural Sciences is responsible for compost production.

**Does the institution include the following materials in its waste diversion efforts?:**

	<b>Yes or No</b>
<b>Paper, plastics, glass, metals, and other recyclable containers</b>	Yes
<b>Food donations</b>	Yes
<b>Food for animals</b>	Yes
<b>Food composting</b>	Yes
<b>Cooking oil</b>	Yes
<b>Plant materials composting</b>	Yes
<b>Animal bedding composting</b>	Yes
<b>Batteries</b>	Yes
<b>Light bulbs</b>	Yes
<b>Toner/ink-jet cartridges</b>	Yes



<b>White goods (i.e. appliances)</b>	Yes
<b>Laboratory equipment</b>	Yes
<b>Furniture</b>	Yes
<b>Residence hall move-in/move-out waste</b>	Yes
<b>Scrap metal</b>	Yes
<b>Pallets</b>	Yes
<b>Motor oil</b>	Yes
<b>Tires</b>	Yes

**Other materials that the institution includes in its waste diversion efforts:**

OPP salvages motors, pumps, and electric gear that are either used for their parts or refurbished for reuse.

Carpet recycling: In 2010, Penn State's Office of Physical Plant, Procurement Services, and the Smeal College of Business collaborated to develop a new standard for carpet purchasing, installation and removal that reduced the first cost by 3-5%, the total cost of ownership by an estimated 20%, and ensures that 100% of Penn State carpet never sees a landfill.

# Construction and Demolition Waste Diversion

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## Responsible Party

**Mary Easterling**

Assoc Director, Analysis & Assessment  
Sustainability Institute

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## 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.

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### Submission Note:

Waste data reported is from major (>\$5m) construction/ renovation projects completed in 2013 (Pell Lab, Old Main reno, Pegula Ice Arena). Waste data from Penn State's Renovation Services projects is not available for 2013; however the target recycling rate for these smaller projects is similar to that for large ones (at least 75% diversion rate). Tracking of C&D from Renovation Services projects recommenced in 2014.

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

### Construction and demolition materials recycled, donated, or otherwise recovered:

4,989.73 Tons

### Construction and demolition materials landfilled or incinerated :

748.69 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:

Penn State's Construction and Demolition Program manages construction and demolition waste. It separates recycleable materials from non-recycleables and disposes of them appropriately.

<http://sustainability.psu.edu/construction-and-demolition-cd-program>

Penn State includes a Construction Waste Management requirement on all projects regardless of whether or not LEED certification is pursued. This requirement stipulates that the contractor recycle and/or salvage 75% of construction, demolition, and land clearing waste, and is detailed in Article 8.11 of General Conditions of the Contract

[http://www.opp.psu.edu/planning-construction/design\\_and\\_construction\\_standards/division-00-proc](http://www.opp.psu.edu/planning-construction/design_and_construction_standards/division-00-proc)

The following are mandatory requirements of Penn State's LEED policy:

- use materials with recycled content such that 10-20% of total cost of all materials is these materials
- use materials that have been harvested, recovered, manufactured within 500 miles of the project site for 10-20% of total cost of all materials
- use a minimum of 50% of wood-based materials and products certified with Forest Stewardship Council for wood building components.

In 2008 Penn State established a partnership with Armstrong Ceilings to recycle old ceiling tiles removed from renovation sites. Used tiles are removed and stored in a trailer provided by Armstrong until it reaches capacity, then are transported off-site to be remanufactured into new ceiling tiles.

# Hazardous Waste Management

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## Responsible Party

**Mary Easterling**

Assoc Director, Analysis & Assessment  
Sustainability Institute

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## 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.

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*"---" 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:**

Penn State has had a policy requiring the reduction in volume or toxicity of hazardous waste since 1988. See

<http://guru.psu.edu/policies/SY20.html>

"Departments that generate hazardous chemical wastes shall ensure that a waste reduction program is in effect and that it is being adhered to." The policy lists examples of ways to reduce by "making substitutions, purchasing smaller quantities, implementing a chemical inventory to prevent duplication, and integrating microscale techniques in inorganic and organic chemistry labs". The Senior Vice President for Finance and Business establishes and approves the policy and procedure for hazardous waste disposal within the environment of The Pennsylvania State University.

PSU also has several other policies that reduce universal and other non regulated waste. Other steps taken to reduce waste include:

- Chemical redistribution program
- Mercury Thermometer and Barometer exchange with non-hazardous equivalents

- Battery recycling
- Fluorescent bulb recycling
- Implemented university-wide chemical inventory software
- Microscale chemical use in all undergraduate chemical lab classes
- Laboratory chemical cleanouts
- Pesticide Program
- Solvent distillation units
- Beneficial use of coal ash

**A brief description of how the institution safely disposes of hazardous, universal, and non-regulated chemical waste:**

Penn State has contracts in place with fully licensed vendors for hazardous waste disposal, fluorescent lamp recycling, and waste oil recycling for the wastes generated at the University. The University works with our hazardous waste vendor to dispose of our waste, both hazardous and non-hazardous, using the following hierarchy in determining the disposal method; recycle, treat, stabilize, incinerate, landfill. The fluorescent lamp recycler recycles all parts (glass, metal, and mercury) of the fluorescent lamps. The waste oil recycler recycles our waste oil and also recycles or treats our glycol containing liquids, depending on the concentration of the glycol in the waste. The University has also started to use a compressed gas cylinder recycling company to recycle our “waste” compressed gases. Detailed information can be found here:

<http://www.ehs.psu.edu/hazmat/>

**A brief description of any significant hazardous material release incidents during the previous three years, including volume, impact and response/remediation:**

Three reportable incidents occurred on Penn State-University Park property during the previous 3 years:

On July 28, 2013 at the Water Treatment Plant, a transformer developed a leak and lost 233 gallons of Envirotemp FR3 oil into its vault. The oil was mixed with water for a total of about 450 gallons. Eagle Recovery pumped out the oil from the vault and the conduit where it exited down the hill and properly disposed of it. Some soil was also excavated which was properly disposed. The release was reported to Jack McKernan and Cheryl Sinclair of PADEP on 7/28-29/13.

On 4/12/11 at United Rentals, while performing excavation for a wash bay, an abandoned, underground, rusted out tank was discovered. The tank likely was an oil interceptor used to collect material that entered floor drains prior to discharge in the sanitary system. The bedrock had been over-excavated to allow the tank to fit into the space. 18 tons of contaminated soil was removed and properly disposed. Soil samples show that the cleanup was effective. The release was reported to Randy Farmerie at the PADEP on 4/12/11.

On 5/20/11 at ARL, machinery from the gear facility was drained into the parking lot releasing approximately 50 gallons of ethylene glycol to the storm drain basin (facility personnel thought it contained water). No material was believed to leave the basin and it was shop vacuumed out of the basin and properly disposed. The release was reported to Denny Right at PADEP on 5/20/11.

**A brief description of any inventory system employed by the institution to facilitate the reuse or redistribution of laboratory chemicals:**

PSU has implemented a university-wide, mandatory chemical inventory system – CHIMS. This is a software package purchased through Stanford. In addition, PSU coordinates a successful chemical redistribution program where faculty, through email, are provided a list of chemicals available from other laboratories. The University also encourages faculty that are leaving the University to give chemicals they are leaving behind to their colleagues at Penn State, as part of our laboratory close-out procedure.

**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):**

Lion Surplus collects all e-waste and wipes all drives. Hard drives are destroyed and computers are recycled through Creative Recycling. Penn State Lion Surplus also has an Electronics Recycling Day for Faculty, Staff, and Students.

**A brief description of steps taken to ensure that e-waste is recycled responsibly, workers' basic safety is protected, and environmental standards are met:**

Re-usable parts are distributed to computer maintenance companies, hospitals, Fortune 500 companies, wholesale distributors, or retail stores to be resold. In step one, all equipment is cleaned, tested and redistributed with a 90-day warranty. All identification as well as data is removed from each complete system or part. KSA hosts computer shows and live computer equipment auctions for products and any equipment not easily sold.

In step two, all equipment is cleaned, tested and redistributed with a 30-day warranty. All identification as well as data is removed from each complete system or part.

Any product left over is deemed unusable and is scrapped. Metals are sorted and distributed.

In step three, all equipment is redistributed with no warranty (as-is). All identification as well as data is removed from each complete system or part.

Throughout the three steps the focus is to treat each piece of equipment as a reusable commodity, redirecting the flow of outdated equipment back into the marketplace avoiding landfills.

**The website URL where information about the institution's hazardous and electronic-waste recycling programs is available:**

<http://www.ehs.psu.edu/hazmat/>

# 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.

<b>Credit</b>
Water Use
Rainwater Management
Wastewater Management

# Water Use

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## Responsible Party

**Shelley McKeague**

Environmental Compliance Specialist  
Engineering Services

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## 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.

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## Submission Note:

Vegetative grounds acreage derived from calculated impervious surface and total campus acreage using GIS. 2005 data is not available. Based on discussions with the stormwater engineer and other staff, there has been little change to total impervious surface. Most efforts to reduced paved areas in one location have been offset by new construction somewhere else.

Total water use comes from annual water withdrawal report. Potable water use comes from metered use.

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

## Level of water risk for the institution's main campus:

Medium to High

## Total water use::

	Performance Year	Baseline Year
Total water use	857,948,882 Gallons	1,007,532,387 Gallons

## Potable water use::

	Performance Year	Baseline Year
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<b>Potable water use</b>	680,274,594 <i>Gallons</i>	896,785,700 <i>Gallons</i>
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**Figures needed to determine "Weighted Campus Users"::**

	<b>Performance Year</b>	<b>Baseline Year</b>
<b>Number of residential students</b>	14,801	13,795
<b>Number of residential employees</b>	0	0
<b>Number of in-patient hospital beds</b>	0	0
<b>Full-time equivalent enrollment</b>	44,935	39,043
<b>Full-time equivalent of employees</b>	16,703	14,183
<b>Full-time equivalent of distance education students</b>	0	0

**Gross floor area of building space::**

	<b>Performance Year</b>	<b>Baseline Year</b>
<b>Gross floor area</b>	20,490,517 <i>Square Feet</i>	18,577,348 <i>Square Feet</i>

**Area of vegetated grounds::**

	<b>Performance Year</b>	<b>Baseline Year</b>
<b>Vegetated grounds</b>	6,875 <i>Acres</i>	6,875 <i>Acres</i>

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

	<b>Start Date</b>	<b>End Date</b>
<b>Performance Year</b>	Jan. 1, 2013	Dec. 31, 2013
<b>Baseline Year</b>	Jan. 1, 2005	Dec. 31, 2005

**A brief description of when and why the water use baseline was adopted:**

FY 2005/06 was adopted as the baseline to be consistent with previous STARS reporting.

**Water recycled/reused on campus, performance year:**

0 Gallons

**Recycled/reused water withdrawn from off-campus sources, performance year:**

0 Gallons

**A brief description of any water recovery and reuse systems employed by the institution:**

Penn State is currently installing "purple pipe" for future reuse systems. Penn State operated it's own Wastewater Treatment Plant. After treatment, effluent is spray irrigated on approximately 516 acres of farmland and forests near the University (Living Filter) and helps to recharge the groundwater system.

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

Water consumption is monitored closely at Penn State. The potable water system on the University Park campus is owned and operated by the University. It consists of 7 production wells, storage tanks, treatment systems, connections with the local water authority for exchange and over 26 miles of distribution pipe.

There are 435 metered connections. All building water use at University Park is metered. The majority of these are at the building-level, although some may be for clusters of buildings(ex: Farm Buildings). Meters are read monthly and consumption data is stored in the McKinstry Enterprise Energy Management (EEM) Suite.

**A brief description of any building retrofit practices employed by the institution, e.g. to install high efficiency plumbing fixtures and fittings:**

Retrofits that include high efficiency plumbing fixtures and fittings are part of the Energy Program. Projects have been implemented at various locations on campus including many residence halls.

**A brief description of any policies or programs employed by the institution to replace appliances, equipment and systems with water-efficient alternatives:**

n/a

**A brief description of any water-efficient landscape design practices employed by the institution (e.g. xeriscaping):**

Penn State is fortunate to have enough precipitation throughout the year that irrigation is typically not required except for a couple select locations on central campus and the display areas of the University's botanic garden, which is irrigated to meet visitor expectations and to protect a significant investment in plants. However, these systems are used primarily during late summer dry spells.

In general, plant species are strategically selected with their water requirements in mind. The increased reliance on rain gardens to handle storm water runoff requires the use of water-loving plants to perform a specific function to thrive and help absorb and filter water in these shallow basins.

**A brief description of any weather-informed irrigation technologies employed by the institution:**

n/a

**A brief description of other water conservation and efficiency strategies employed by the institution:**

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**The website URL where information about the institution's water conservation and efficiency initiatives is available:**

<http://www.fandb.psu.edu/fandb/keyinitiatives/Environmental-Stewardship.cfm>

## Responsible Party

**Shelley McKeague**

Environmental Compliance Specialist  
Engineering Services

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## 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.

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*"---" 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:**

The University monitors over two dozen stormwater facilities continuously and makes changes or improvements to them as required. Additionally, the University is always installing new and innovative facilities to reduce the quantity of runoff and improve the quality of runoff from its campuses. Example recent projects can be found on the web at:

**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:**

Penn State has comprehensive stormwater management strategies. Stormwater requirements are part of the Design and Construction standards. Our stormwater program includes six minimum control measures:

MCM#1 - Public Education and Outreach Program

MCM #2 - Public Involvement and Participation Program

MCM #3 - Illicit Discharge Detection and Elimination Program

MCM #4 - Construction Site Stormwater Runoff Control Standards

MCM #5 - Post Construction Stormwater Management Standards

MCM #6 – Pollution Prevention/Good Housekeeping Program

The MS4 program can be found at:

<http://www.opp.psu.edu/services/stormwater/ms4>

**A brief description of any rainwater harvesting employed by the institution:**

The Millennium Science Building utilizes rainwater harvesting which includes a cistern for storage and connection to the irrigation system for the landscape plants on the plaza.

The Childcare Center at Hort Woods also collects rainwater, includes a cistern for storage and will be used for toilet flushing. The tank at Hort Woods is 20,000 gallons.

**Rainwater harvested directly and stored/used by the institution, performance year:**

20,000 Gallons

**A brief description of any rainwater filtering systems employed by the institution to treat water prior to release:**

The University has several types of water quality inlets to remove specific pollutants from stormwater runoff . At University Park, several types of hydrodynamic storm structures are used. Water quality inlets that require regular replacement of filters are prohibited except in rare circumstances where their need is specifically documented. All of these facilities, in addition to regular inlets and subsurface

detention units are on a regular inspection and cleaning schedule. Oil/water separators are also used to remove contaminants from runoff . The University has about a dozen oil/water separators located around campus.

**A brief description of any living or vegetated roofs on campus:**

The University currently has five buildings with green roofs: the Forestry Building, the vegetable cellar, the Dickinson School of Law, the Health Services Building, and the Millennium Science Complex building.

The Penn State Center for Green Roof Research is located at the University Park Campus in the College of Agricultural Sciences.

**A brief description of any porous (i.e. permeable) paving employed by the institution:**

The University has had two porous "asphalt" pavement parking lots, both of which did not meet expectations. Porous "asphalt" pavement is now prohibited. The University has several other examples of porous pavement, which are structural soils.

**A brief description of any downspout disconnection employed by the institution:**

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**A brief description of any rain gardens on campus:**

The University uses Bioretention as a method of treating stormwater by pooling water on the surface and allowing filtering and settling of suspended solids and sediment at the mulch layer, prior to entering the plant/soil/microbe complex media for infiltration and pollutant removal. Rain gardens or bioretention techniques are used to accomplish water quality improvement and water quantity reduction. Many of these systems at University Park are structurally lined so that they do not infiltrate water into the subsoil.

**A brief description of any stormwater retention and/or detention ponds employed by the institution:**

The University owns over a dozen traditional stormwater management ponds and several ponding areas that simply flood during large runoff events. Most stormwater management ponds at University Park were designed as traditional detention ponds. However, because of the carbonate geology, many of these still infiltrate a significant amount of surface runoff from impervious areas resulting in discharging runoff only from larger rainfall or snow melt events. The University collects 5 minute data continuously from its larger stormwater ponds.

**A brief description of any bioswales on campus (vegetated, compost or stone):**

The University owns numerous grass lined swales, however, these swales cannot adequately provide long term stability for high flow or slope channels so stone swales are also used on campus.

**A brief description of any other rainwater management technologies or strategies employed by the institution:**

The University also uses the following as other methods of stormwater management on campus:

- dams
- surface ponds

- subsurface and detention facilities
- infiltration facilities
- wetlands
- storm drains
- water quality inlets
- oil/water separators
- energy dissipators and level spreaders

For details about these other strategies, please see the stormwater magazine:

<http://www.opp.psu.edu/services/eng-resources/Stormwater%20Magazine.pdf>

**The website URL where information about the institution's rainwater management initiatives, plan or policy is available:**

<http://www.opp.psu.edu/services/stormwater>

# Wastewater Management

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## Responsible Party

**Shelley McKeague**

Environmental Compliance Specialist  
Engineering Services

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## 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*.

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### Submission Note:

Wastewater total derived from monthly MGD values reported in annual Chapter 94 report.

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

### Total wastewater discharged:

619,477,000 Gallons

### Wastewater naturally handled:

619,477,000 Gallons

### A brief description of the natural wastewater systems used to handle the institution's wastewater:

Penn State owns and operates a Wastewater Treatment Plant (WWTP), and is permitted to treat up to 4 million gallons per day of wastewater. The plant is comprised of two treatment trains: activated sludge and trickling filters. The trickling filter processed water is sent through a Biological Nutrient Removal (BNR) process to reduce the nitrate levels in the wastewater. The disinfected treated water from these two parallel treatment trains is combined and spray irrigated on approximately 516 acres of farmland and forests near the University (Living Filter) and helps to recharge the groundwater system.

### The website URL where information about the institution's wastewater management practices is available:

<http://www.opp.psu.edu/services/eng-resources/living-filter-fact-sheet>



# 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.

<b>Credit</b>
Sustainability Coordination
Sustainability Planning
Governance

# Sustainability Coordination

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## Responsible Party

**Mary Easterling**

Assoc Director, Analysis & Assessment  
Sustainability Institute

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## 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.

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*"---" 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 Sustainability Institute and its predecessor organizations and committees - the Campus Sustainability Office, the Center for Sustainability, the Finance and Business Environmental Stewardship Key Initiative Committee, and the Strategic Sustainability Planning Committee - count the following among their accomplishments over the past three years (highlighting examples of those that involve planning and policies):

- completed a Sustainability Strategic Plan (SSP) for Penn State, that was adopted by the administration and Board of trustees in Fall 2012
- established the Sustainability Institute to facilitate implementation of the SSP
- began to help units integrate sustainability into their own strategic plans
- incorporated environmental stewardship into the master planning process
- established a new web-based hub for sustainability information
- and many more accomplishments that are documented throughout this STARS submission

### **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 Sustainability Institute's Executive Committee is comprised of the Provost and five vice presidents, representing Undergrad Education, Student Affairs, Finance and Business, Research/ the Graduate School, and Outreach. The role of this committee is to provide advice and feedback to the Sustainability Institute, and to foster two-way communication between the SI and each VP's constituents. This committee meets quarterly with the Sustainability Institute.

The Penn State Student Sustainability Advisory Council provides consultation and advice on Penn State sustainability planning, programs, and initiatives. The Council meets bi-monthly for discussions and planning. The Council is comprised of student leaders, appointed by the President, with experience and interest in studying, advancing, and promoting sustainability.

<http://studentaffairsblogs.psu.edu/sustainability-council/>

Some of Penn State's colleges have their own sustainability committee - for example, the Smeal College of Business has established the Smeal Sustainability Council.

<http://www.smeal.psu.edu/sustainability-council>

The Finance and Business Environmental Stewardship Key Initiative Committee carries over from the previous strategic planning cycle. In the past it has taken major steps to improve environmental consciousness among students, as well as attract national recognition for the University's commitment to green practices.

<http://www.fandb.psu.edu/fandb/keyinitiatives/Environmental-Stewardship.cfm>

**Members of each committee, including affiliations and role (e.g. staff, student, or faculty):**

Current (8/15/14) Sustainability Institute Executive Committee:

Nicholas Jones, Executive Vice President and Provost

David Gray, Senior Vice President for Finance and Business/ Treasurer

Robert Pangborn, Vice President and Dean for Undergraduate Education

Neil Sharkey, Interim Vice President for Research

Damon Sims, Vice President for Student Affairs

Craig Weidemann, Vice President for Outreach and Vice Provost for Online Education

The Penn State Student Sustainability Advisory Council currently consists of 19 student members, 6 student representatives from affiliated student groups, 6 faculty/ staff members, and a staff adviser.

Current Finance and Business Environmental Stewardship Key Initiative Committee Members (likely to change in Fall 2014):

TBA — Auxiliary & Business Services, Purchasing

Mark Bodenschatz — Intercollegiate Athletics

Duane Bullock — Auxiliary & Business Services, Purchasing  
Maurine Claver — Office of Physical Plant, Environmental Health & Safety  
Rob Cooper — Office of Physical Plant, Energy and Engineering Services  
Ed Dankanich — Penn State Harrisburg, Director of Business Services  
Rob DeMayo — Auxiliary & Business Services, Transportation  
Lee Erwin — Auxiliary & Business Services, Housing & Food Services  
Erik Foley — Sustainability Institute  
Joyce Haney — Auxiliary & Business Services, Purchasing  
David Manos — Auxiliary & Business Services, Housing  
Al Matyasovsky — Office of Physical Plant, Waste Management  
Alex Novak - Communications, Office of Physical Plant  
Gordon Turow — Office of Physical Plant, Campus Planning & Design

**The website URL where information about the sustainability committee(s) is available:**

<http://studentaffairsblogs.psu.edu/sustainability-council/>

**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:**

In November 2012 Penn State established the Sustainability Institute, merging the existing Campus Sustainability Office (operations-focused) and Center for Sustainability (academically-focused) into a single unit. The Institute is housed administratively at the top level of the University, in the Office of the President, and its director reports to the Provost.

The Sustainability Institute's mission is to lead and support Penn State in the pursuit of sustainability across all functions (teaching and learning, research and discovery, outreach and engagement, administration and operations), through building the capacities of faculty, staff, and students, and reducing institutional barriers to action.

To that end, the Sustainability Institute oversees programs for students, faculty, and staff to build institutional capacity to learn about and practice sustainability; works at the unit and institutional level to support the establishment of measurable goals in sustainability; provides seed funding for sustainability innovations on campus and beyond; and communicates internally and externally to highlight sustainability achievements, build collaboration, and inspire others.

**Full-time equivalent (FTE) of people employed in the sustainability office(s):**

12

**The website URL where information about the sustainability office(s) is available:**

<http://www.sustainability.psu.edu/>

**Does the institution have at least one sustainability officer?:**

Yes

**Name and title of each sustainability officer:**

All with the Sustainability Institute: Denice Wardrop, Director; Nancy Franklin, Dir. of Programs & Partnerships; Erik Foley, Dir. of Strategic Planning & Operations; Alex Novak, Dir. of Communications; David Riley, Sr Scholar, Dir. of Reinvention Fund

**A brief description of each sustainability officer position:**

Director - leads the Sustainability Institute;

Director of Programs & Partnerships: oversees student/ faculty/ staff engagement and educational programs, and community partnerships;

Director of Strategic Planning & Operations: oversees strategic planning support and acts as liaison with Finance & Business;

Director of Communications: oversees website and other external communications;

Senior Scholar in Residence and Director of Reinvention Fund: acts in an advisory capacity and oversees the Reinvention Fund

**The website URL where information about the sustainability officer(s) is available:**

<http://www.sustainability.psu.edu/staff>

## Responsible Party

**Mary Easterling**

Assoc Director, Analysis & Assessment  
Sustainability Institute

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## 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.

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### Submission Note:

As a large, complex research university, Penn State's institutional-level strategic plan tends to lay out broad goals, while specific strategies and objectives are often left to unit-level planning.

The timing of this STARS submission finds Penn State in the midst of unit-level strategic planning (scheduled for completion in June 2014), which in turn will contribute to institutional-level planning. Sustainability is expected to be a foundational principle of that plan.

Sustainability Institute staff have developed tools and resources to support Penn State strategic planning units' effective implementation of the guidelines for sustainability issued by the Provost.

"---" 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?:**

	<b>Current and Formal Plans (Yes or No)</b>	<b>Measurable Objectives (Yes or No)</b>
<b>Curriculum</b>	Yes	Yes
<b>Research (or other scholarship)</b>	Yes	Yes
<b>Campus Engagement</b>	Yes	No
<b>Public Engagement</b>	Yes	No
<b>Air and Climate</b>	Yes	Yes
<b>Buildings</b>	Yes	Yes
<b>Dining Services/Food</b>	Yes	No
<b>Energy</b>	Yes	Yes
<b>Grounds</b>	Yes	No
<b>Purchasing</b>	Yes	Yes
<b>Transportation</b>	Yes	No
<b>Waste</b>	Yes	Yes
<b>Water</b>	Yes	No

<b>Diversity and Affordability</b>	Yes	Yes
<b>Health, Wellbeing and Work</b>	Yes	No
<b>Investment</b>	No	No
<b>Other</b>	Yes	No

**A brief description of the plan(s) to advance sustainability in Curriculum:**

Penn State's Sustainability Strategic Plan (SSP) puts forth the following Strategy relevant to advancing sustainability in the curriculum:  
 Strategy 1.2: Develop and promote academic programs that address sustainability, including both online and residential offerings.

The Sustainability Institute, which is charged with facilitating implementation of the Penn State SSP, has the following as one of its strategic planning objectives:

Objective 1.2: Create a support system that fosters the incorporation of sustainability into the curriculum in ways that provide theoretical and experiential learning opportunities for students.

The Penn State Strategic Plan 2009-10 through 2013-14 states, as Strategy 7.8: Establish and Foster Sustainable Environments (p. 52)

<http://strategicplan.psu.edu/StrategicPlancomplete.pdf>

**The measurable objectives, strategies and timeframes included in the Curriculum plan(s):**

The Penn State Strategic Plan 2009-10 through 2013-14 identifies the following performance measures:

Number of Academic Offerings focused on sustainability education

Number of Academic Offerings that incorporate sustainability into the curriculum

See Appendix 5, Strategy Implementation Matrix

<http://strategicplan.psu.edu/StrategicPlancomplete.pdf>

**Accountable parties, offices or departments for the Curriculum plan(s):**

As identified in the Penn State Strategic Plan 2009-10 through 2013-14, these include the President's Council, Sr. VP for Finance and Business, University Faculty Senate, Academic Leadership Council

**A brief description of the plan(s) to advance sustainability in Research (or other scholarship):**



Several Strategies and Actions related to Research appear in Penn State's Sustainability Strategic Plan (SSP):

Goal 3: Penn State will lead higher education in transformational innovations in policy, practice, and knowledge that address critical, complex, and systems-level sustainability challenges.

Strategy 3.2 Develop means to readily recognize new frontiers in sustainability challenges and respond to them.

Strategy 3.3 Recognize and reward the innovations of students, staff, faculty, administrators, and alumni in the generation of sustainability solutions.

The Penn State Strategic Plan 2009-10 through 2013-14 states, as Strategy 7.8: Establish and Foster Sustainable Environments (p. 52)

<http://strategicplan.psu.edu/StrategicPlancomplete.pdf>

### **The measurable objectives, strategies and timeframes included in the Research plan(s):**

The Penn State Strategic Plan 2009-10 through 2013-14 identifies the following performance measures:

(Increase) Research focused on Sustainability, as measured by:

- No. of projects or grants;
- Dollar value of projects or grants

See Appendix 5, Strategy Implementation Matrix

<http://strategicplan.psu.edu/StrategicPlancomplete.pdf>

### **Accountable parties, offices or departments for the Research plan(s):**

As identified in the Penn State Strategic Plan 2009-10 through 2013-14, these include the President's Council, Sr. VP for Finance and Business, University Faculty Senate, Academic Leadership Council

### **A brief description of the plan(s) to advance Campus Engagement around sustainability:**

Several Strategies and Actions related to Campus Engagement appear in Penn State's Sustainability Strategic Plan (SSP):

Strategy 1.1: Incorporate sustainability learning opportunities into daily life across the University, including the built environment and service and program delivery.

Strategy 2.1: Identify obstacles to widespread adoption of sustainability best practices into daily life across the University.

Strategy 2.3: Create strategies and programs for the implementation of sustainability solutions within the Penn State community.

Also, from the Sustainability Institute's strategic plan:

Objective 1.3: Create a support system that fosters the ability of staff members and students to adopt sustainable practices in their work and personal lives.

Objective 1.4: Establish relationships to connect academic and theoretical approaches to sustainability with applied projects on campus and in the broader community.

**The measurable objectives, strategies and timeframes included in the Campus Engagement plan:**

Under development.

**Accountable parties, offices or departments for the Campus Engagement plan(s):**

Sustainability Institute

**A brief description of the plan(s) to advance Public Engagement around sustainability:**

From Penn State's Sustainability Strategic Plan:

Strategy 1.3: Create sustainability-focused programs and learning opportunities for external constituents, including alumni, corporate partners, and the general public.

Strategy 2.2: Create strategies and programs for the implementation of sustainability solutions beyond the Penn State community.

Strategy 2.4: Develop an effective infrastructure for communicating sustainability solutions to inspire the widespread adoption of sustainability practices.

Also, from the Sustainability Institute's strategic plan:

Objective 1.4: Establish relationships to connect academic and theoretical approaches to sustainability with applied projects on campus and in the broader community.

**The measurable objectives, strategies and timeframes included in the Public Engagement plan(s):**

Under development.

**Accountable parties, offices or departments for the Public Engagement plan(s):**

Sustainability Institute

**A brief description of the plan(s) to advance sustainability in Air and Climate:**

Penn State's Guiding Principles for Campus Master Planning include:

- Reduce environmental impact of transportation by reducing fuel consumption and greenhouse gas emissions.

The Penn State Strategic Plan 2009-10 through 2013-14 states, as Strategy 7.8: Establish and Foster Sustainable Environments (p. 52)

<http://strategicplan.psu.edu/StrategicPlancomplete.pdf>

Penn State's Finance & Business 2008-13 Strategic Plan identifies Environmental Stewardship as a continuing Key Initiative. This group has established a Greenhouse Gas Reduction Initiative which has developed a series of strategies for reducing campus GHG emissions.

See:

<http://sustainability.psu.edu/live/what-penn-state-can-do/energy-environment/energy-environment-strategies-projects>

**The measurable objectives, strategies and timeframes included in the Air and Climate plan(s):**

The Penn State Strategic Plan 2009-10 through 2013-14 includes the following performance measures:

- Greenhouse gas emission reductions

See Appendix 5, Strategy Implementation Matrix

<http://strategicplan.psu.edu/StrategicPlancomplete.pdf>

Penn State's Finance & Business 2008-13 Strategic Plan identifies Environmental Stewardship as a continuing Key Initiative. This Initiative was responsible for setting a goal to reduce its campus greenhouse gas emissions by 18% since 2005. That goal was met, and an ambitious new reduction goal of 35% by 2020 has been set.

**Accountable parties, offices or departments for the Air and Climate plan(s):**

As identified in the Penn State Strategic Plan 2009-10 through 2013-14, these include the President's Council, Sr. VP for Finance and Business, University Faculty Senate, Academic Leadership Council

**A brief description of the plan(s) to advance sustainability in Buildings:**

Penn State's Guiding Principles for Campus Master Planning include:

- Promote energy conservation through responsible planning, design, construction, and renovation of campus facilities.
- Invest wisely with an understanding of initial costs and life-cycle costs.
- Incorporate resource efficient and low polluting technologies into new and renovated facilities to reduce operating and societal costs, and to provide opportunities for research in this field.

Penn State's Finance & Business 2008-13 Strategic Plan identifies Environmental Stewardship as a continuing Key Initiative. One of its goals is to "Establish environmentally-responsible campus design and planning principles and practices." As a result, the University established a policy that all new and renewed facilities be LEED (Leadership in Energy and Environmental Design) certified. Penn State has developed its own customized LEED process. See

[http://www.opp.psu.edu/planning-construction/design\\_and\\_construction\\_standards/documents/LEED%20Policy.pdf](http://www.opp.psu.edu/planning-construction/design_and_construction_standards/documents/LEED%20Policy.pdf)

**The measurable objectives, strategies and timeframes included in the Buildings plan(s):**

All new or renewed facilities will be LEED certified.

**Accountable parties, offices or departments for the Buildings plan(s):**

Office of Physical Plant

**A brief description of the plan(s) to advance sustainability in Dining Services/Food:**

The Penn State Strategic Plan 2009-10 through 2013-14 states, as Strategy 7.8: Establish and Foster Sustainable Environments (p. 52). Penn State's Finance & Business 2008-13 Strategic Plan identifies Environmental Stewardship as a continuing Key Initiative. One of its goals is to (1) Minimize solid waste production. In Food Services, this goal has led to a number of initiatives to reduce waste, including increased recycling and composting, use of reusable containers, donation of leftover food, and support of local vendors.

**The measurable objectives, strategies and timeframes included in the Dining Services/Food plan(s):**

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**Accountable parties, offices or departments for the Dining Services/Food plan(s):**

Housing & Food Services, in conjunction with the Sustainability Institute

**A brief description of the plan(s) to advance sustainability in Energy:**

Penn State's Guiding Principles for Campus Master Planning include:

- Promote energy conservation through responsible planning, design, construction, and renovation of campus facilities.
- Reduce environmental impact of transportation by reducing fuel consumption and greenhouse gas emissions.

Penn State's Finance & Business 2008-13 Strategic Plan identifies Environmental Stewardship as a continuing Key Initiative. One of its goals is to "ensure efficient use and conservation of energy, water, and other resources".

**The measurable objectives, strategies and timeframes included in the Energy plan(s):**

Penn State's various strategies to alter energy supply and reduce energy demand, and timeframes for their implementation, can be found here under Strategies and Projects:

<http://sustainability.psu.edu/live/what-penn-state-can-do/energy-environment/energy-environment>

. These strategies are proposed in the context of reducing GHG emissions.

The measurable goal is a reduction in energy use. Penn State has put forth an informal goal of reducing energy use by 20% over the next 10 years.

**Accountable parties, offices or departments for the Energy plan(s):**

Office of Physical Plant

**A brief description of the plan(s) to advance sustainability in Grounds:**

Penn State's Guiding Principles for Campus Master Planning include:

- Preserve environmentally valuable open spaces and promote green infrastructure resources, such as wetlands, mature trees and groves, groundwater infiltration areas, and drainageways.
- Prevent environmental degradation through landuse and land development decisions and processes.

Penn State's Finance & Business 2008-13 Strategic Plan identifies Environmental Stewardship as a continuing Key Initiative. One of its goals is to "establish environmentally-responsible campus design and planning principles and practices."

**The measurable objectives, strategies and timeframes included in the Grounds plan(s):**

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**Accountable parties, offices or departments for the Grounds plan(s):**

Office of Physical Plant

**A brief description of the plan(s) to advance sustainability in Purchasing:**

The Penn State Strategic Plan 2009-10 through 2013-14 offers as Strategy 7.8: Establish and Foster Sustainable Environments. One of the performance measures in this area relates to purchasing (see below).

Penn State's Finance & Business 2008-13 Strategic Plan identifies Environmental Stewardship as a continuing Key Initiative. One of its goals is to "establish environmentally-responsible purchasing policies."

**The measurable objectives, strategies and timeframes included in the Purchasing plan(s):**

The Penn State Strategic Plan 2009-10 through 2013-14 includes one performance measure related to Purchasing:

- quantity of environmentally-responsible purchases versus standard purchases

See Appendix 5, Strategy Implementation Matrix

<http://strategicplan.psu.edu/StrategicPlancomplete.pdf>

**Accountable parties, offices or departments for the Purchasing plan(s):**

As identified in the Penn State Strategic Plan 2009-10 through 2013-14, these include the President's Council, Sr. VP for Finance and Business, University Faculty Senate, Academic Leadership Council

**A brief description of the plan(s) to advance sustainability in Transportation:**

Penn State's Guiding Principles for Campus Master Planning include:

- Develop facilities that support an effective and efficient intermodal transportation system and reduce dependence on cars.
- Reduce environmental impact of transportation by reducing fuel consumption and greenhouse gas emissions.

Penn State's Intermodal Transportation Plan 2013 lays out a strategy for developing a 10-year comprehensive plan that is environmentally responsible, customer focused, financially sustainable, and supports a balanced mix of travel choices to serve the diverse needs of the University community. This plan contains a plethora of strategies and metrics; however at this stage it is a plan to create a plan.

One of the Guiding Principles in the Bicycle Master Plan for the UP campus is:

4. Improve the quality of life for visitors, faculty, staff, and students through increased exercise, recreation, and environmental sustainability.

Penn State's Finance & Business 2008-13 Strategic Plan identifies Environmental Stewardship as a continuing Key Initiative. One of its goals is to "Establish environmentally-responsible transportation practices."

**The measurable objectives, strategies and timeframes included in the Transportation plan(s):**

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**Accountable parties, offices or departments for the Transportation plan(s):**

Transportation Services

**A brief description of the plan(s) to advance sustainability in Waste:**

Penn State's Finance & Business 2008-13 Strategic Plan identifies Environmental Stewardship as a continuing Key Initiative. One goal under this Initiative is to "Minimize solid waste production".

**The measurable objectives, strategies and timeframes included in the Waste plan(s):**

In addition to existing waste management strategies that involve recycling, reuse, and reduction, Penn State's new Mobius program which increases composting of organic material is anticipated to achieve a total waste diversion rate of 75 percent once it is fully implemented in 2014.

**Accountable parties, offices or departments for the Waste plan(s):**

**A brief description of the plan(s) to advance sustainability in Water:**

Penn State's Guiding Principles for Campus Master Planning include:

- Protect the quality of water resources and the natural environment by establishing protected environmental resource areas.
- Develop a comprehensive campus stormwater management approach to mitigate impacts of campus development and improve water quality.

The Campus Master Plan has a section under land use planning recommendations: 5.1.16 Establish Environmental Resource as a Landuse to Maintain Environmental Quality, that addresses the protection of areas designated as Environmental Resources and Environmentally Sensitive Areas

[http://www.opp.psu.edu/planning-construction/master-plans/university-park-campus-master-plan/un](http://www.opp.psu.edu/planning-construction/master-plans/university-park-campus-master-plan/university-park-campus-master-plan-1/5.0-master-plan-recommendations)

[iversity-park-campus-master-plan-1/5.0-master-plan-recommendations](http://www.opp.psu.edu/planning-construction/master-plans/university-park-campus-master-plan-1/5.0-master-plan-recommendations)

**The measurable objectives, strategies and timeframes included in the Water plan(s):**

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**Accountable parties, offices or departments for the Water plan(s):**

Office of Physical Plant

**A brief description of the plan(s) to advance Diversity and Affordability:**

The Penn State Strategic Plan 2009-10 through 2013-14 has as Goal 4: Maintain Access/ Affordability and Enhance Diversity, followed by specific strategies to accomplish this goal.

<http://strategicplan.psu.edu/StrategicPlancomplete.pdf>

In addition, Penn State has a separate strategic plan for diversity, A Framework to Foster Diversity at Penn State: 2010-15.

<http://equity.psu.edu/framework>

. The framework directs units to develop their own strategic plans for diversity, with related performance measures.

**The measurable objectives, strategies and timeframes included in the Diversity and Affordability plan(s):**

Performance measures in the Penn include the following.

- Percentage of students receiving need-based institutional scholarships

- Percentage of full-time faculty/ staff by demographic group
- Percentage of undergraduate/ graduate enrollment by demographic group
- First-year and third-year retention rates by demographic group
- Average time-to-degree for graduate students by demographic group
- Tenure success rate of faculty by demographic group

See Appendix 5, Strategy Implementation Matrix

<http://strategicplan.psu.edu/StrategicPlancomplete.pdf>

In addition, individual units are expected to develop their own performance measures as part of their unit-level strategic plans for fostering diversity.

**Accountable parties, offices or departments for the Diversity and Affordability plan(s):**

Varies by specific Strategy. See Appendix 5, Strategy Implementation Matrix

<http://strategicplan.psu.edu/StrategicPlancomplete.pdf>

**A brief description of the plan(s) to advance sustainability in Health, Wellbeing and Work:**

Penn State's Guiding Principles for Campus Master Planning include:

- Advance the health, wellbeing, and comfort of the campus community by promoting access to daylight and views.

One of the Objectives of the 3-year 2014-2016 Human Resources/ Benefits Strategic Plan is to "promote a culture of employee responsibility and wellness".

**The measurable objectives, strategies and timeframes included in the Health, Wellbeing and Work plan(s):**

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**Accountable parties, offices or departments for the Health, Wellbeing and Work plan(s):**

Human Resources

**A brief description of the plan(s) to advance sustainability in Investment:**

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**The measurable objectives, strategies and timeframes included in the Investment plan(s):**

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**Accountable parties, offices or departments for the Investment plan(s):**

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**A brief description of the plan(s) to advance sustainability in other areas:**

The Campus Master Plan has a section under land use planning recommendations: 5.1.16 Establish Environmental Resource as a Landuse to Maintain Environmental Quality, that addresses the need to protect areas designated as Environmental Resource and Environmentally Sensitive Areas to protect water quality, natural resources, and scenic quality. See

<http://www.opp.psu.edu/planning-construction/master-plans/university-park-campus-master-plan/university-park-campus-master-plan-1/5.0-master-plan-recommendations>

**The measurable objectives, strategies and timeframes included in the other plan(s):**

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**Accountable parties, offices or departments for the other plan(s):**

Office of Physical Plant

**The institution's definition of sustainability:**

Sustainability is the simultaneous pursuit of human health and happiness, environmental quality, and economic well being for current and future generations.

**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:**

As noted above, Penn State's Sustainability Strategic Plan is the key guiding document for sustainability at Penn State. Sustainability also will be an element of all unit-level plans, scheduled for completion by June 2014. The University's next institutional strategic plan, targeted for completion in June 2015, is expected to include sustainability as one of four "foundational principles".

In June 2013 the Provost issued “Unit Strategic Planning Guidelines for 2014-15 through 2018-19” to the budget executives of all strategic planning units. These guidelines ask all units to include, as one of the elements in their strategic plans, the following:

8. Discussion of how the unit is contributing toward Penn State's goals for sustainability. Please describe the progress made and future plans, that align with the University's efforts to integrate sustainability across all of its functions. Please consider questions such as the following, appropriate to the context of your unit. For example:

- A. What will be done to incorporate sustainability into teaching, research, and/or community outreach and engagement efforts?
- B. How will the unit address sustainability in operations? That may involve buildings, office spaces, labs, professional development, performance evaluation, and so on.
- C. How will planning integrate work toward sustainability across functions -e.g., using communities and campuses as "living labs" for conducting research on community sustainability solutions and/or as a teaching tool for courses?

**The website URL where information about the institution’s sustainability planning is available:**

<http://www.sustainability.psu.edu/sustainability-strategic-plan>

## Responsible Party

**Lydia Vandenberg**

Assoc. Dir. Employee Engagement & Education  
Sustainability Institute

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## 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.

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**Submission Note:**

Penn State's highest governing body is its Board of Trustees.

<http://www.psu.edu/trustees/governance.html>

*"---" 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:**

There are three student government associations at Penn State:

1. University Park Undergraduate Association (UPUA)

<http://pennstateupua.com/>

2. Graduate and Professional Student Association (GPSA)

<http://gpsa.psu.edu/>

3. Council of Commonwealth Student Governments

<http://ccsg.psu.edu/>

Each group elects officers who in turn represent their constituents on various Penn State governance bodies, including the Board of Trustees.

Currently there are currently four student representatives on the Board of Trustees: the president of the University Park Undergraduate Association (UPUA), the president and vice president of the Council of Commonwealth Student Governments (CCSG), and the president of the Graduate Student Association (GSA). These students have a non-voting seat at Board meetings and on four of its standing committees: Academic Affairs and Student Life; Finance, Business and Capital Planning; Governance and Long-Range Planning; and Outreach, Development and Community Relations. See

<http://news.psu.edu/story/148328/2012/06/19/added-alumni-employee-student-leaders-invited-trust>

[ees-meetings](#)

The Student Sustainability Advisory Council was created in 2011. Students are selected through a competitive application/interview process and are commissioned by the President to serve on the SSAC, which acts as an advisory team to the President and the University Administration on sustainability issues.

<http://sites.psu.edu/ssac/>

There also are student representatives on other university governance bodies, such as Faculty Senate, the Alumni Associations, Student Activity Fee Board, and Facilities Fee Board.

**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:**

As noted above, there are four non-voting student representatives on the Board of Trustees, each of whom is elected by members of the group they represent: the University Park Undergraduate Association (UPUA), the Graduate Student Association, and the Council of Commonwealth Student Governments.

In addition, the Penn State Board of Trustees is considering changes to its charter and bylaws that would create a permanent seat for a student trustee. For four decades, the governor has opted to designate one of the six governor-appointed seats on the 32-member board as a student trustee, but this tradition has not been codified. The proposed action would specifically designate a trustee to represent the student body, with a two-year term unless the student trustee ceases to meet the criteria set forth in the bylaws. The criteria spelled out for a student trustee is that he or she be an undergraduate, graduate, professional or World Campus student in a degree-seeking program and in good academic standing. The change will require a vote of the full board to be enacted.

<http://progress.psu.edu/resource-library/story/board-considers-permanent-seat-for-student-repre>

[sentative](#)

**Do students have a formal role in decision-making in regard to the following?:**

	Yes or No
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	---

**A brief description of the formal student role in regard to each area indicated, including examples from the previous three years:**

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**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:**

Penn State encourages staff to become involved in University policy-making through a variety of committees. The broadest oversight is that of the University Staff Advisory Council (USAC), which exists to facilitate open and equitable deliberations over the policies, procedures and programming that impact Penn States staff. All full-time staff employees are eligible to serve. Appointments to USAC are made in an effort to provide a diverse representation of employees in exempt and nonexempt (including non-supervisory) positions from a variety of University units and locations. In addition, many of the University's colleges and organizations have their own advisory councils on which staff and faculty serve. For examples, visit

<http://ohr.psu.edu/university-staff-advisory-council/resources/>

**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?:**

No

**A brief description of non-supervisory staff representation on the governing body, including how the representatives are selected:**

Members of the Staff Advisory Council are seated at Committee and full Board of Trustees meetings. Although these may be non-supervisory staff, they are not necessarily so.

**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:**

Because elected representatives of the Staff Advisory Council are seated at committee and full Board of Trustees meetings, staff have a potential voice (though a non-voting role), in all of the decisions that the Board makes, which includes all of the areas listed above.

The Faculty Senate and the Staff Advisory Council were involved with the recent overview of employee health policies and benefits for Penn State.

<http://senate.psu.edu/agenda/2013-2014/apr2014/apps.htm>

Prior to that initiative, the Council had created an Ad Hoc Committee to review issues relating to Penn State's Flexible Scheduling Policy and Telecommuting policy. From the committee's analysis, they recommended language clarification and consistency, and broader

education about the program through the website and training.

Another topic of focus for this committee was Domestic Partner Benefits eligibility.

**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:**

The University Faculty Senate is the representative body of Penn State's faculty with legislative authority on all matters pertaining to the educational interests of the University and all educational matters that concern the faculties of more than one college. In addition, the Senate is recognized by the University as an advisory and consultative body to the President on all matters that may affect the attainment of the University's educational objectives.

The Senate represents more than 5,600 full-time faculty at 23 Penn State campuses. The Senate is comprised of faculty senators who are elected from each college and campus. In 2011, the Senate legislated a fixed-size of 200 elected faculty seats. Senate seats are allocated proportionately by unit, based on the ratio of full-time unit faculty to the total number of full-time University faculty. "Faculty" includes all persons who hold full-time academic appointments, and who hold one of the following ranks: Lecturer, Instructor, Senior Lecturer, Senior Instructor, Research Assistant, Senior Research Assistant, Senior Scientist, Research Associate, Senior Research Associate, Professor of Practice, Assistant Librarian, Associate Librarian, Librarian, Assistant Professor, Associate Professor, or Professor. Other Senate representation includes undergraduate/graduate student senators, ex officio, and members appointed by the President. Senate committee chairs invite other members of the University community to participate in the work of the committees as resources.

<http://www.senate.psu.edu/index.html>

**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?:**

No

**A brief description of faculty representation on the governing body, including how the representatives are selected:**

The Chair, Chair-elect, and Secretary of the Faculty Senate are seated at Committee and full Board of Trustees meetings. Although teaching and research faculty are eligible to hold these positions (and, in fact, this year's Secretary is a Senior Lecturer), there is no required representation of faculty in these ranks. In addition, the Chair of the Senate Committee on University Planning is seated at Board Committee Meetings.

**Do faculty have a formal role in decision-making in regard to the following?:**

	Yes or No
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<b>Establishing organizational mission, vision, and/or goals</b>	Yes
<b>Establishing new policies, programs, or initiatives</b>	Yes
<b>Strategic and long-term planning</b>	Yes
<b>Existing or prospective physical resources</b>	Yes
<b>Budgeting, staffing and financial planning</b>	Yes
<b>Communications processes and transparency practices</b>	Yes
<b>Prioritization of programs and projects</b>	Yes

**A brief description of the formal faculty role in regard to each area indicated, including examples from the previous three years:**

Because elected representatives of the Faculty Senate (the Chair, Chair-elect, and Secretary) are seated at committee and full Board meetings, faculty have a potential voice (though a non-voting role), in all of the decisions that the Board makes, which include all of the areas listed above.

In addition, the Faculty Senate has standing committees, other committees, and special committees that act as advisory bodies to the Office of the President.

[http://senate.psu.edu/about\\_senate/committees.asp](http://senate.psu.edu/about_senate/committees.asp)

The purview of these committees, in particular the University Planning Committee, includes the decision-making areas listed above. The Committee on University Planning solely and in consultation with other committees, reports on and/or proposes action on matters of university planning that affect the academic, development, physical and aesthetic resources, issues, and policies of the University. In accordance with the Constitutional advisory and consultative roles of the Senate, specific areas of responsibilities include but are not limited to: the allocation of resources among units and functions as they relate to educational policy; academic planning development planning, and campus and physical planning.

[http://senate.psu.edu/about\\_senate/committees/up/up.html](http://senate.psu.edu/about_senate/committees/up/up.html)

The Faculty Senate and the Staff Advisory Council were involved with the recent overview of employee health policies and benefits for Penn State.

<http://senate.psu.edu/agenda/2013-2014/apr2014/apps.htm>

**The website URL where information about the institution's governance structure is available:**

<http://www.psu.edu/this-is-penn-state/leadership-and-mission>

# 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.

<b>Credit</b>
Diversity and Equity Coordination
Assessing Diversity and Equity
Support for Underrepresented Groups
Support for Future Faculty Diversity
Affordability and Access

# Diversity and Equity Coordination

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## Responsible Party

**Mary Easterling**

Assoc Director, Analysis & Assessment  
Sustainability Institute

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## 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
- 

### Submission Note:

Value for the number of employees includes Educational Equity (80), Affirmative Action (10), and Graduate Educational Equity (about 5)..

Extensive information about diversity resources at Penn State, by audience, is available here:  
<http://equity.psu.edu/diversity-resources/diversity-resources#commissions>

"---" 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

<b>Student diversity and equity</b>	Yes
<b>Employee diversity and equity</b>	Yes

**A brief description of the diversity and equity committee, office and/or officer, including purview and activities:**

Penn State has several offices that support and enhance diversity and equity on campus:

Office of the Vice Provost for Educational Equity

<http://equity.psu.edu/>

Affirmative Action Office

<http://www.psu.edu/dept/aaoffice/>

Office of Graduate Educational Equity Programs

<http://www.gradsch.psu.edu/index.cfm/diversity/>

Created in July 1990, the Office of the Vice Provost for Educational Equity (OVPEE) is charged with fostering diversity and inclusion at Penn State and creating a climate of diversity, equity, and inclusion throughout the University's faculty, staff, leadership, and student body. This mission encompasses leadership for the University-wide strategic planning for diversity and inclusion, student academic success services and Federal TRIO Programs for underrepresented students, and support of educational access for targeted groups of low-income, potential first-generation college students both here at Penn State and at sites throughout the state. This mission also includes serving as a catalyst and advocate for Penn State's diversity and inclusion initiatives by providing University-wide leadership to increase our capacity for diversity.

More information on the OVPEE can be found here:

<http://equity.psu.edu/>

The Affirmative Action Office is a service organization that supports and enhances the University's commitment to diversity, providing expert advice and leadership to colleges, departments, faculty and staff in their efforts to recruit and retain a diverse workforce and ensure an environment free from discrimination and harassment.

<http://www.psu.edu/dept/aaoffice/>

The Office of Graduate Educational Equity Programs leads the Graduate School's efforts to foster diversity and to provide a welcoming climate for both prospective and current graduate students of underrepresented groups.

<http://www.gradsch.psu.edu/index.cfm/diversity/>

The largest of the above coordinating offices - the Office of Educational Equity - includes a number of units and programs that are described in detail here:

<http://equity.psu.edu/units-and-programs>

It also supports the following key commissions/ committees:

The Commission for Women identifies areas of concern for the women faculty, exempt and non-exempt staff, technical service and administrative, as well as graduate and undergraduate students of Penn State.

<http://www.equity.psu.edu/cfw/>

The Commission on Racial/Ethnic Diversity (CORED) was formed in 1989 as a University-wide advisory body to the President of Penn State in matters relating to racial and ethnic diversity. CORED also serves as a resource for all University departments and individuals seeking to improve Penn State's climate for diversity.

<http://www.equity.psu.edu/cored/>

The Commission on Lesbian, Gay, Bisexual, and Transgender Equity was created in 1991 as an advisory group to the President. The purpose of the Commission is to improve the climate for diversity within Penn State and specifically to address issues affecting the welfare of lesbian, gay, bisexual, and transgender (LGBT) members of the University community.

<http://www.equity.psu.edu/clgbte/>

The Equal Opportunity Planning Committee (EOPC) was formed in 1983 to promote greater equity for historically underrepresented groups within the University and/or those groups that have been historical targets of discrimination. The primary task of EOPC is overseeing the allocation of institutional funding to Penn State units for developing and implementing programs and activities intended to advance the diversity mission of the University.

<http://www.equity.psu.edu/eopc/>

The Administrative Council on Multicultural Affairs is a long-standing group convened by the Vice Provost for Educational Equity (senior executive for diversity, equity, and inclusion) and consisting of the multicultural officer from each college as well as representatives from Undergraduate Admissions, Graduate Educational Equity, the Honors College, recruitment centers, the Career Center, Student Aid, Multicultural Resource Center, and Penn State Campuses other than University Park.

The Campus Environment Team, formed in 1987, is comprised of high-ranking staff representing various offices including Educational Equity, University Strategic Communications, Affirmative Action, Student Affairs, University Police, Undergraduate Education and Human Resources that works to address diversity issues, acts of intolerance, and related issues.

In addition to the groups listed above, the University Faculty Senate Standing Committee on Educational Equity and Campus Environment, in conjunction with other Senate Committees and other bodies outside of the University Faculty Senate, recommends policy and advises the University on activities to improve the campus environment and educational equity across the entire University at all of its campuses.

**The full-time equivalent of people employed in the diversity and equity office:**

95

**The website URL where information about the diversity and equity committee, office and/or officer is available:**

<http://www.equity.psu.edu/>

**Does the institution make cultural competence trainings and activities available to all members of the following groups?:**

	Yes or No
<b>Students</b>	Yes
<b>Staff</b>	Yes
<b>Faculty</b>	Yes
<b>Administrators</b>	Yes

**A brief description of the cultural competence trainings and activities:**

The Affirmative Action Office's Diversity Education Services develops and delivers a wide range of educational programming for faculty and staff, designed to promote understanding and support for diversity throughout the University. In conjunction with the Human Resources Development Center, this office offers over 20 standing diversity trainings available to Penn State departments, teams, and groups upon request at no cost. Examples include:

- Understanding and Valuing Diversity
- Sexual Harassment: Awareness and Prevention
- Climate Control: Promoting Mutual Respect

The full list can be found here:

<http://www.psu.edu/dept/aaoffice/dsec.htm>

Annually, the Forum on Black Affairs holds a reception for all University African-American faculty and staff, which is held in conjunction with the Senior Faculty Mentor reception, to which all University faculty of color are invited. This provides an opportunity for new African-American faculty and staff and new faculty of color to be welcomed and meet their more established colleagues. The Center for Workplace Learning & Performance (CWLP) offers online diversity training through Skillport:

<http://ohr.psu.edu/learning/>

The Office of the Vice Provost for Educational Equity holds periodic workshops titled, "Best Practices in Diversity Strategic Planning."

The workshops enhance the knowledge and skills of administrators, faculty, and staff who are centrally involved in their unit's diversity strategic planning efforts. See the following for more information: Best Practices in Diversity Strategic Planning Workshops:

<http://equity.psu.edu/workshop>

The LGBT Support Network identifies supportive persons within the University community to prominently identify themselves. Members displaying the Network placard are provided with extensive resources and informational materials as training. See the following for more information: The Lesbian, Gay, Bisexual, Transgender Support Network:

<http://www.sa.psu.edu/lgbt/network/index.htm>

New Faculty Orientation: Information about diversity, diversity strategic planning, and resources for diversity are shared and discussed during the annual orientation held for all new faculty members. In addition, a Promotion and Tenure workshop, targeted to early tenure-line faculty from underrepresented groups, including women, is organized by the Equity Commissions:

<http://equity.psu.edu/pec/pt>

<http://news.psu.edu/story/288920/2013/09/24/pre-tenure-symposium-planned-oct-25>

Information about diversity, and diversity resources, are provided during the New Staff Orientation sessions, which are required of all new staff members.

**The website URL where information about the cultural competence trainings is available:**

<http://www.psu.edu/dept/aaoffice/dsec.htm>



# Assessing Diversity and Equity

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## Responsible Party

**Mary Easterling**

Assoc Director, Analysis & Assessment  
Sustainability Institute

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## 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
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## Submission Note:

In 2013 an independent research/ analytics firm was contracted to conduct a comprehensive assessment of diversity and inclusion at Penn State, at the midpoint of the third iteration of the University's strategic plan, "A Framework to Foster Diversity at Penn State: 2010-15". The analysis was based on a review of over 3,000 pages of documentation across all of Penn State's strategic planning units, and a two-day site visit. The firm found that Penn State ranks in the top four in comparison to peer institutions for diverse undergraduate student enrollment, diverse student graduation rates and new minority faculty hire numbers. Penn State is "definitely at the high end of its peers" in terms of the University's diversity master plan and its organizational capacity, effectiveness and impact. See <http://equity.psu.edu/workshop/fall13-quality-advocates-session>

A news article about the results can be found here:

<http://news.psu.edu/story/297576/2013/12/09/administration/diversity-inclusion-analysis-shows-university-wide-progress>

Penn State's Framework to Foster Diversity has undergone comprehensive review at the start, midpoint and end of each planning cycle. The Framework was first launched in 1998 and is now closing its 3rd iteration of 5 year planning cycles and is currently merging into the University's overall planning process. The assessment results are used to identify strengths and weaknesses to update the Framework. A detailed description of the process and all materials associated with it (unit plans and updates; review team feedback; unit responses, university recommendations and analysis, and best practices) can be found online at the link below. The public accessibility of diversity strategic planning materials and outcomes is unique to Penn State and one of the strengths and accountability factors of the process. <http://equity.psu.edu/framework/updates>

Programs funded by Penn State's Equal Opportunity Planning Committee (which can be in relation to any of the 7 Challenges of A Framework to Foster Diversity at Penn State, the University's diversity strategic plan), are evaluated based on program outcomes assessment.

In October 2013, Penn State was selected as a recipient of the 2013 Higher Education Excellence in Diversity Award by INSIGHT into Diversity magazine. The University was one of 56 higher education institutions in the nation to be recognized for exceptional having strategies and programs in place to help achieve diversity and inclusion across campus.

"---" 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) :**

[See Notes section for a description of the most recent assessment of diversity and equity, including campus climate, and how the results are used.]

The Assessment examined Penn State's progress in two areas of campus climate, "Developing a shared and inclusive understanding of diversity" and "creating a welcoming campus climate". Findings indicated that, in both areas, Penn State showed evidence of "sustained action and practice".

#### **Faculty/Staff Survey**

Penn State conducts a comprehensive employee satisfaction survey on approximately a four year cycle. The most recent survey was conducted in 2008. (The survey was not administered in 2012 because a survey of Values & Culture was administered instead.) The Faculty/Staff Survey contained a bank of questions regarding diversity that provide a University-wide assessment of attitudes about diversity. Additionally, the responses to all of the questions are disaggregated according to a number of demographic factors, including those reflecting diversity.

In 2012 an assessment was conducted of Penn State Values & Climate by an independent firm, the Ethics Resource Center. The goal of this survey was to create inclusive statement of shared values that will help guide to actions when issues of ethics arise; gain a better understanding of the community's awareness of University standards of conduct; and create a clearer picture of the climate for the reporting of wrongdoing at Penn State.

Additionally, units gather information and data about climate in a variety of ways. These methods include informal town-hall-style discussions, discussions over meals, focus groups, and formal surveys.

### **Has the institution assessed student diversity and educational equity?:**

Yes

### **A brief description of the student diversity and educational equity assessment(s):**

A diversity/ inclusion benchmarking assessment was conducted by an independent research and analytics firm in 2013. See Notes for a description of the assessment, and how the results are used.

The Assessment looked at Penn State's progress in "recruiting and retaining a diverse student body". Results indicate that Penn State ranks in the top 4 in comparison to peer institutions for diverse undergraduate student enrollment and diverse student graduation rates.

Programs funded by the Equal Opportunity Planning Committee (which can be in relation to any of the 7 Challenges of A Framework to Foster Diversity at Penn State), the University's diversity strategic plan, are evaluated based on program outcomes assessment.

A recent report prepared by the Penn State Commission for Women looked at the status of women - both students and employees - at Penn State over the ten year period from 2001 to 2011.

<http://equity.psu.edu/cfw/docs/cfw-status-report-2001-2011>

Penn State annually monitors student enrollment by race/ ethnicity using the following stratifications: overall enrollment, first-time freshmen, historical, historical as a percent of total, graduation rates, and retention rates. Results can be found in the Penn State Fact Book:

<http://budget.psu.edu/Factbook/>

### **Has the institution assessed employee diversity and employment equity?:**

Yes

### **A brief description of the employee diversity and employment equity assessment(s):**

A diversity/ inclusion benchmarking assessment was conducted by an independent research and analytics firm in 2013. See Notes for a description of the assessment, and how the results are used.

Results show that Penn State was ranked in the top 1 or 2 among peer institutions for the number of new minority hires.

Penn State's 2008 Faculty/Staff Survey, sponsored by the Office of the President and coordinated by the Penn State Office of Human Resources, received responses from over 8,400 full-time faculty and staff for a 51.4% return rate. The survey featured several new questions in addition to items used in previous surveys in order to measure overall satisfaction and engagement among faculty and staff. The major sections in the survey were Attitudes and Practices, Diversity, Administrative Practices and Activities, and Overall Impressions.

Overall results are shared with the University community on the Office of Human Resources Web site and through a series of articles published on the Penn State newswires (which reach all University employees and students), one of which focused around diversity. Comprehensive results for each unit, disaggregated by demographic factors, are shared with the unit executive.

The Faculty/ Staff survey was first administered in 1988, and repeated at 4 year intervals, most recently in 2008. It was scheduled to be repeated in 2012, but was preempted by a survey of Values & Culture. Overall results and articles about the 2008 Faculty/Staff survey are available at

<http://facultystaffsurvey.psu.edu/>

A recent report prepared by the Penn State Commission for Women looked at the status of women - both students and employees - at Penn State over the ten year period from 2001 to 2011.

<http://equity.psu.edu/cfw/docs/cfw-status-report-2001-2011>

Penn State annually monitors the number of full-time employees by race/ ethnicity; results are presented in the Penn State Fact Book:

<http://budget.psu.edu/factbook/>

**Has the institution assessed diversity and equity in terms of governance and public engagement?:**

Yes

**A brief description of the governance and public engagement assessment(s):**

A diversity/ inclusion benchmarking assessment was conducted by an independent research and analytics firm in 2013. See Notes for a description of the assessment, and how the results are used.

In the Assessment's evaluation of Penn State's progress toward its goal of "Diversifying University Leadership & Management", this appeared to be one of the areas where progress has been made, but further improvement is needed. However the assessment lauded Penn State's efforts in diversity strategic planning and goal setting, and its organizational capacity, effectiveness, and impact.

The assessment did not specifically address diversity and equity in public engagement.

Although it has not recently conducted an assessment, the Penn State Forum on Black Affairs is a community/University group focused on improving conditions for black members of the University and surrounding community

<http://www.foba.psu.edu/>

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

<http://equity.psu.edu/workshop/fall13-quality-advocates-session>

# Support for Underrepresented Groups

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## Responsible Party

**Mary Easterling**

Assoc Director, Analysis & Assessment  
Sustainability Institute

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## 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.

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"---" 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:**

Penn State sponsors a plethora of programs, offices, and centers that support underrepresented groups, in addition to the key coordinating bodies described in the previous Credit PA-5. A list of most of these programs can be found at:

<http://equity.psu.edu/diversity-resources>

and

<http://www.gradsch.psu.edu/index.cfm/diversity/>

College Multicultural Programs: Each University Park-based college has a college multicultural office that provides support for underrepresented/underserved students within their college.

<http://equity.psu.edu/diversity-resources/college-multicultural-programs>

FastStart is a mentoring program that helps first-year students from African American, Latino/Hispanic, Asian and Asian/Pacific American backgrounds, as well as those students who simply want to get their college careers off to a fast start.

<http://alumni.psu.edu/network-mentor/faststart>

GradStart is a new mentoring program designed to help underrepresented graduate students make the most of their graduate school career. Students are matched with an alumnus/ alumna and/or a faculty mentor.

<http://www.gradsch.psu.edu/diversity/gradstart.html>

Summer Research Opportunities Program (SROP) is an eight-week research program designed to interest talented undergraduate students from underrepresented groups in academic careers and to enhance their preparation for graduate study through intensive research experiences with faculty mentors.

<http://www.gradsch.psu.edu/index.cfm/diversity/srop/>

Office for Disability Services provides services to students with disabilities at University Park and acts in an advisory capacity to the Disability Contact Liaisons at other Penn State locations.

<http://www.equity.psu.edu/ods/>

Ronald E. McNair Post-Baccalaureate Achievement Program (McNair Scholars) works with undergraduate students from disadvantaged backgrounds to prepare them to pursue advanced studies in the disciplines of their choosing.

<http://www.gradsch.psu.edu/diversity/mcnair.html>

Multicultural Resource Center (MRC) provides undergraduate students of color at University Park with academic and personal support. Within the MRC are the Comprehensive Studies Program (CSP), Asian American Students In Action (AASIA), Blends of Traditional Heritages (B.O.T.H.), and the Black Male Empowerment Group.

<http://equity.psu.edu/mrc>

Student Support Services Program (SSSP) provides a variety of services to enhance academic performance and ultimately increase the retention and graduation rates of low-income, first-generation college students and those with disabilities.

<http://www.equity.psu.edu/sssp>

Office of Veterans Programs Office of Veterans Programs is a comprehensive, direct service unit for veterans and Department of

Veterans Affairs benefits recipients.

<http://www.equity.psu.edu/veterans>

The College Assistance Migrant Program (CAMP) is a federally funded program designed to assist first-year college students from migrant and seasonal farm worker families, in their pursuit of higher education.

<http://equity.psu.edu/camp>

Pennypacker Experience is a scholarly and diverse living/learning community, which aims to create a supportive educational and social environment for incoming first-year students while simultaneously promoting diversity in gender, race, and ethnic background.

<http://www.science.psu.edu/diversity/pennypacker-experience/BWPPEXperience.htm>

Commission for Adult Learners is composed of faculty, staff, and students from several University locations, dedicated to improving the adult learner experience at Penn State.

<http://cal.psu.edu/>

Center for Women Students provides advocacy, information, educational programming, services, and referrals for women students.

<http://studentaffairs.psu.edu/womenscenter/>

The Paul Robeson Cultural Center provides programs and services that encourage the appreciation of the diverse perspectives, experiences, and cultures of many under-represented communities that comprise the student, faculty, staff, and community population of University Park and State College, Pennsylvania.

<http://studentaffairs.psu.edu/cultural/>

Sponsored by the Paul Robeson Cultural Center and formerly known as S-Plan, the BLUEprint Program focuses on offering cultural, social, and academic support to students of color, specifically those who are first-year or transfer/change-of-campus students, through peer mentoring.

<http://studentaffairs.psu.edu/cultural/programs/>

The Center for Ethics and Religious Affairs offers a welcoming, safe, inclusive environment for the Penn State community to explore a multitude of faith traditions in a compassionate, open-minded setting.

<http://studentaffairs.psu.edu/spiritual/>

The Lesbian, Gay, Bisexual, Transgender, and Allies Student Resource Center provides a comprehensive range of programming, education, information, and advocacy services, and works to create and maintain an open, safe, and inclusive environment.

<http://www.sa.psu.edu/lgbt/>

The Minority Undergraduate Laboratory Research Experience gives first-year students, sophomores, and junior students from underrepresented populations a chance to do research for pay while investigating various fields of study.

<http://pa.spacegrant.org/mure>

Individual colleges at the University Park campus also offer programs to support underrepresented groups, for example the Women's Leadership Initiative in the College of Health and Human Development.

<http://www.hhd.psu.edu/wli>

The Senior Faculty Mentor program provides a variety of supportive services to tenure track faculty members belonging to underrepresented racial/ethnic groups to facilitate attainment of tenure and promotion.

<http://equity.psu.edu/sfm>

**The website URL where more information about the support programs for underrepresented groups is available:**

<http://equity.psu.edu/diversity-resources>

**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:**

Penn State has a written protocol for responding to bias, described in "Penn State's Protocol for Responding to Bias Motivated Incidents":

[http://equity.psu.edu/reportbias/reports/copy2\\_of\\_final\\_protocol.pdf](http://equity.psu.edu/reportbias/reports/copy2_of_final_protocol.pdf)

The document outlines detailed procedures, points of contact, and resources for response by either the targeted individual, or by a campus-designated support person responding on the targeted individual's behalf.

The protocol is posted on a website "Report Bias", managed by the Office of the Vice Provost for Educational Equity. The website provides students, faculty, staff, alumni, and guests with a Penn State User ID with a Web form for reporting acts of hate or intolerance that occur at Penn State. Students may use the form to report any act of intolerance they experience themselves or observe directed against anyone else. A Statement of Confidentiality and instructions for alternative means of submitting a report through the Lion Support Help Line are also included. Incidents are reported to the Office of the Vice Provost for Educational Equity, the Campus Environment [STARS Reporting Tool](#) | [AASHE](#)



Team, and the MRC Counselor/Diversity Advocate for Students.

Penn State has a formal policy prohibiting intolerance, AD29 Statement on Intolerance.

<http://guru.psu.edu/policies/AD29.html>

**The website URL where more information about the institution's discrimination response policy, program and/or team is available:**

<http://equity.psu.edu/reportbias>

**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?:**

Yes

# Support for Future Faculty Diversity

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## Responsible Party

**Mary Easterling**

Assoc Director, Analysis & Assessment  
Sustainability Institute

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## 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.
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"---" 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:

Summer Research Opportunities Program (SROP) is an eight-week research program designed to interest talented undergraduate students from underrepresented groups in academic careers and to enhance their preparation for graduate study through intensive research experiences with faculty mentors.

<http://www.gradsch.psu.edu/diversity/srop.html>

The Penn State Sloan Scholars program provides funding for underrepresented students to pursue doctorates in mathematics, science, and engineering. Faculty members who have proven track records in graduating underrepresented students from their doctoral programs are selected each year to mentor incoming fellows.

<http://www.gradsch.psu.edu/index.cfm/diversity/sloanfellows/>

The McNair Scholars Program is designed to help prepare talented undergraduates to enter graduate school and to receive their doctoral degree.

<http://www.gradsch.psu.edu/diversity/mcnair.html>

GradStart is a new mentoring program designed to help underrepresented graduate students make the most of their graduate school career. Students are matched with an alumnus/ alumna and/or a faculty mentor.

<http://www.gradsch.psu.edu/diversity/gradstart.html>

The annual Professional Development and Retention Conference at Penn State provides an opportunity for new and returning graduate students from underrepresented groups to meet faculty and staff.

<http://www.gradsch.psu.edu/index.cfm/diversity/pdrc/>

Penn State is a member of the NSF-funded Northeast Alliance for Graduate Education and the Professoriate (NEAGEP), which aims to increase the number of domestic students receiving doctoral degrees and entering the professoriate in the sciences, technology, engineering, and mathematics (STEM). The NEAGP is particularly interested in recruiting, supporting and mentoring students of those population groups underrepresented in STEM fields

The Penn State Millennium Scholars Program is open to academically strong high school seniors whose future plans include pursuing a doctoral degree in science or engineering, and to increasing the diversity of researchers in science and engineering.

**The website URL where more information about the faculty diversity program(s) is available :**

<http://www.gradsch.psu.edu/index.cfm/diversity/>

# Affordability and Access

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## Responsible Party

**Mary Easterling**

Assoc Director, Analysis & Assessment  
Sustainability Institute

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## 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
- 

"---" 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:**

In addition to scholarships (listed below), programs offering emergency loans, and bookships (assistance to support book purchases) help to defray costs for low-income students. The commission on Racial/Ethnic Diversity convened a task force to examine the implications of and possible interventions for cases where students have holds placed on their academic records due to outstanding financial balances. Educational Equity has convened a strategic planning committee to explore the wider array of factors involved in helping low-income students manage costs for attendance and to better align the University's targeted recruiting efforts with potential students' financial ability to be successful at Penn State. Efforts include making available a "cost calculator" tool on-line so that prospective students and their families can gain an idea of the potential financial aid profile, cost of attendance, and unmet need might be.

**A brief description of any programs to equip the institution's faculty and staff to better serve students from low-income backgrounds:**

The Administrative Council on Multicultural Affairs, convened by the Vice Provost for Educational Equity (Chief Diversity Officer) and consisting of the multicultural officer from each college as well as representatives from Undergraduate Admissions, Graduate Educational Equity, the Honors College, recruitment centers, the Career Center, Student Aid, Multicultural Resource Center, and Penn State Campuses other than University Park, meets monthly to discuss issues pertaining to underrepresented/underserved students, including specific attention to low-income students.

The Vice Provost for Educational Equity sits on the President's Council, and the Academic Leadership Council to ensure that issues pertaining to underrepresented/underserved students, including students from low-income backgrounds, are considered and addressed.

The annual Enrollment Management Conference brings together those at Penn State who work with students within the enrollment process. Several sessions directly address the challenges faced by low-income students and approaches to better serving them.

The Vice Provost for Educational Equity monitors for students who have difficulty in meeting the deadlines for tuition payment to identify students who would benefit from intervention from staff who provide targeted advising, counseling, and academic support services.

The Schreyer Institute for Teaching Excellence has presented workshops and speakers that profile characteristics of the student body, including first generation low-income students.

**A brief description of any programs to prepare students from low-income backgrounds for higher education:**

Penn State offers a number of outreach programs that help prepare low-income students for higher education.

The Student Support Services Program provides a variety of services to enhance academic performance and ultimately increase the retention and graduation rates of low-income, first-generation college students and those with disabilities. SSSP also aims to foster an institutional climate supportive of the success of program participants.

<http://equity.psu.edu/sssp>

- The Equal Opportunity Center, Philadelphia helps adults age 19 or older to begin or to continue a program of postsecondary education. Adults assisted by EOC programs across the country are low-income individuals whose parents did not graduate from college.

<http://www.equity.psu.edu/eocphila/>

- Talent Search helps eligible youth and adults to continue in and complete secondary education or its equivalent and to enroll in or

re-enter a college or training program. This program is based at University Park and serves schools in the Western Pennsylvania communities of Aliquippa, Clairton, New Kensington, Farrell, and Sharon.

<http://www.equity.psu.edu/ts/>

- Upward Bound is a federally funded program that helps high-school students gain academic skills and motivation to continue their education beyond high school. At Penn State, the Upward Bound Program serves at least 116 students each year from six target high schools in five counties - Clearfield, Dauphin, Huntingdon, Mifflin, and Perry.

<http://www.equity.psu.edu/ub/>

- Upward Bound Math and Science assists participating students in recognizing and developing their potential to excel in math or science and encourages them to pursue postsecondary degrees in these fields. Penn State UBMS serves eligible students from Harrisburg, Reading and Philadelphia, Pennsylvania and in six target high schools located in urban school districts in the state.

<http://www.equity.psu.edu/ubms/>

- Upward Bound Migrant (UBM) assists 9th through 12th grade students with migrant farmworker backgrounds gain academic skills and motivation in preparation for precollege and postsecondary success. Services include academic instruction in critical reading and writing, mathematics, and sciences as well as English language acquisition support, tutoring, mentoring, and counseling where appropriate. Penn State's Upward Bound Migrant program serves students from Hazleton, Lebanon, and Reading School Districts.
- Equal Opportunity Planning Committee grants provide central funding to support a number of outreach programs throughout Penn State. Lists of funded programs are available at

<http://www.equity.psu.edu/eopc/programs.asp>

Additionally, there are outreach programs based in the colleges and campuses. For example:

- Summer College Opportunity Program in Education (S.C.O.P.E.) is a four week academic intensive program for high school sophomores from multicultural backgrounds interested in a career in teaching, counseling, special education, rehabilitation, or educational administration during which students: Live on Penn State's main campus in University Park; Take college courses; Prepare for the SAT; Learn time management and other study skills.

<http://www.ed.psu.edu/educ/multicultural-programs/summer-program>

- The BOSS program in the Smeal College of Business' Opportunities Summer Session

<http://www.smeal.psu.edu/uge/diversity/business-opportunities-summer-session-boss>

## **A brief description of the institution's scholarships for low-income students:**

Information on scholarships can be found on the Office of Student Aid's website:

<http://studentaid.psu.edu/types-of-aid/scholarships/university-wide>

and the Educational Equity website

<http://equity.psu.edu/giving>

These include:

**Bunton-Waller Scholarships:** Full-time students in resident instruction who have the highest financial need are considered for the Bunton-Waller Scholarship. The annual award is \$3200, renewable for up to four years, provided the student maintains a 2.50 GPA.

The Renaissance Fund, created in 1969, continues to provide scholarship support to “the brightest of the neediest” students.

Penn State’s Board of Trustees established the Trustee Matching Scholarship Program for low-income students. To date, more than 4,000 students have received Trustee Scholarship funds, with a significant percentage being students of color and/or those who are the first generation in their family to attend college.

The recently completed "For the Future: Campaign for Penn State Students" development campaign sought to help alleviate the amount of debt that many students must incur for a Penn State education. Overall, more than 603,000 donors made more than 2.1 million gifts to the historic University-wide effort, including approximately \$519 million pledged for undergraduate student scholarships, the top priority of the campaign.

The Brook J. Lenfest Scholarship Program reaches students from selected Philadelphia public high schools to provide, in combination with other student aid programs, full support for tuition, fees, room, and meals. This program has recently been significantly expanded.

Educational Equity administers scholarships that support low-income, first-generation students. A full time development officer and an Educational Equity development advisory board are dedicated to securing donations for diversity scholarships.

<http://www.equity.psu.edu/giving.asp>

Additional need-based scholarships are available through the student’s college or campus.

The provost's Opportunity Fund Initiative has been modified to include targeting selected high need students.

There are scholarships though Educational Equity specifically for veterans and for students with disabilities.

## **A brief description of any programs to guide parents of low-income students through the higher education experience:**

Educational Equity's Student Services Programs (see above) may work with parents in understanding higher education and navigating through the admission process and applying for financial aid. FERPA guidelines prohibit discussion of specific information about students. CAMP in particular works closely with parents. Upward Bound and Upward Bound Math Science also provide some guidance.

Undergraduate Admissions offers a section of its website dedicated to parents and families.

<http://admissions.psu.edu/info/parents/>

The Penn State Parents Program

<http://www.parentprogram.psu.edu/>

helps to ensure student success, provide opportunities for parent engagement with the University, and educates parents about resources and services available within the University community. A page of the program's website is devoted to "Money Matters", with information and links to financial resources on campus. The program also offers a "Parents and Families Guide" which provides information and resources to guide parents through the higher education experience. The guide includes sections on money matters and financial aid.

<http://www.parentprogram.psu.edu/documents/ParentsandFamiliesGuide2010.pdf>

New Student Orientation works with Educational Equity programs to best support parents of program students through the orientation process.

### **A brief description of any targeted outreach to recruit students from low-income backgrounds:**

Penn State Recruitment Centers are based in Philadelphia, Pittsburgh, New Jersey, New York, and Washington, DC. They provide information sessions and individual counseling to prospective students and families about Penn State academic programs, admissions procedures, student financial aid and other services. While not specifically targeted to prospective students from low-income backgrounds, the centers maintain a relationship with Educational Equity and are equipped to assist low-income prospective students with information about financial aid and available support programs for which they may be eligible.

<http://admissions.psu.edu/pennstate/representative/>

Spend a Summer Day is a campus open house for Prospective First Year Students to learn about admissions, academics, and student life at Penn State. Prospective students and their families are invited to join us at any of our 20 undergraduate campuses. Bus trips are organized from urban areas to assist families for whom transportation would be a difficulty.

<http://admissions.psu.edu/sasd/>

The Student Minority Advisory and Recruitment Team (SMART) assists the Office of Undergraduate Admissions with the recruitment and retention of underrepresented student populations at the Pennsylvania State University. Through the use of campus recruitment trips, tours, student panels and overnight visits, SMART relies on the experiences of students at the University Park Campus to provide prospective students with an accurate and positive portrayal of campus life. SMART members are living and walking examples of success stories of underrepresented students' here Penn State. Events include:

- Achiever's Weekend: High achieving, academically eligible, students with offers of admission are invited to participate in a purposeful weekend in which students can meet current students, faculty, staff and alumni. Ultimately, Achiever's Weekend helps students make an informed decision about attending Penn State.

- La Experiencia: La Experiencia is an event at Penn State University Park sponsored by the Undergraduate Admissions Office and [STARS Reporting Tool](#) | [AASHE](#)



SMART that reaches out to high school students of Latino or Hispanic descent. La Experiencia includes a presentation about Penn State's multicampus system. Students also have an opportunity to learn from and interact with current Penn State students who identify as Latino or Hispanic.

- Spend a Fall Day: Every fall semester, minority high school students are invited to attend Spend a Fall Day at Penn State University Park. Students in attendance learn about Penn State's multicampus system. In addition to providing important application information, Spend a Fall Day also gives students an opportunity to interact with current undergraduates during a panel session and a tour in which S.M.A.R.T. students share their stories of success with the visitors.

<http://admissions.psu.edu/smart/about/>

Other targeted recruitment efforts:

Educational Opportunity Center, Philadelphia

<http://equity.psu.edu/eocphila>

Also, Upward Bound, Upward Bound Math Science, Upward Bound Migrant, and Talent Search.

**A brief description of other admissions policies or programs to make the institution accessible and affordable to low-income students:**

See the Undergraduate Admissions Web site for information about admissions policies and programs:

<http://admissions.psu.edu/>

**A brief description of other financial aid policies or programs to make the institution accessible and affordable to low-income students:**

See the Office of Student Aid Web site for more information about financial aid policies and programs:

<http://www.psu.edu/studentaid/index.shtml>

**A brief description of other policies and programs to make the institution accessible and affordable to low-income students not covered above:**

Penn State's new president, Dr. Eric Barron, outlined six priorities during his first report to the University's Board of Trustees, one of which is "to deliver to students the highest-quality education at a cost that ensures access for Pennsylvania's citizens".

<http://news.psu.edu/story/320398/2014/07/11/administration/barron-outlines-priority-student-access-affordability-report>

ess-affordability-report

**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:**

A number of scholarships and other types of financial aid are available to adult students, many of whom attend part-time. Detailed information on these opportunities can be found at:

<http://ceup.psu.edu/financial-aid-scholarships>

Scholarships include:

The Osher Foundation Re-entry Scholarship provides support for students returning to school to complete their first bachelor degree, after a gap in enrollment or educational pursuits of 5 years or more, are the ages of 25-50 years old, and have completed the online scholarship application.

The State College Woman's Club Centennial Scholarship seeks to award students enrolled either half or full-time at Penn State University Park who manifest the promise of outstanding academic success, demonstrated financial need, as defined by the FAFSA, and have graduated from a high school in Centre County, Pennsylvania.

The Fund for Adult Continuing Education Support (FACES) is supported by Continuing Education employees and former and current students who are dedicated to helping adult learners in Continuing Education programs succeed through supplemental financial support for books, tuition, or other emergency needs.

The Adult Learner Opportunity Fund managed by the Office of Student Affairs provides financial support for non-traditional aged students pursuing their undergraduate degree at University Park.

<http://studentaffairs.psu.edu/adults/giveto.shtml>

**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:**

Penn State's Office of Human Resources offers a child care subsidy program for qualifying low-income undergraduate student parents enrolled in a degree program at all 24 Penn State University locations. Funding for graduate student families is available at the University Park campus location. Information is available at:

<http://ohr.psu.edu/child-care-subsidy/>

There are two child care facilities located on the core University Park campus: the Bennett Family Center and the Child Care Center at Hort Woods. Fees for care are on a sliding fee scale based on household income. In addition, the facilities serve student parents who receive UPAC or CCAMPIS grant funds for child care as well as low-income families eligible for child care assistance through the Department of Public Welfare and Child Care Information Services of Centre County. These child care centers are both overseen by Penn

State's Office of Human Resources.

A third day care center, Daybridge Child Development Center, is located in Innovation Park, a 118-acre business park operated by Penn State, and located several miles from the core campus. This Center is operated in partnership with Penn State by an independent contractor.

In October 2013 President Erickson commissioned a Presidential Task Force on Child Care at Penn State, which produced a March 2014 report that recommended, among other things, providing additional funds for lower-income student family support.

The Office of Human Resources maintains a website with information on child care resources in the area:

<http://ohr.psu.edu/employee-and-family-resources/your-family/child-care-resources/>

### **A brief description of other policies and programs to support non-traditional students:**

The Office of Student Affairs provides online resources for Adult Students:

<http://studentaffairs.psu.edu/adults/>

and has produced an Adult Learner Handbook

[http://studentaffairs.psu.edu/adults/pdf/adult\\_learner\\_guide.pdf](http://studentaffairs.psu.edu/adults/pdf/adult_learner_guide.pdf)

Continuing Education provides information for adult students on their website:

<http://ceup.psu.edu/>

They also provide various other resources through an adult student support team, including career fairs, a program "Transitions: College and Career Prep", a free math improvement course, and access to one-on-one academic advising, career counseling, and financial aid counseling.

<http://ceup.psu.edu/events-workshops>

### **Does the institution wish to pursue Part 2 of this credit (accessibility and affordability indicators)?:**

Yes

### **Indicators that the institution is accessible and affordable to low-income students::**

	<b>Percentage (0-100)</b>
<b>The percentage of entering students that are low-income</b>	9

<b>The graduation/success rate for low-income students</b>	77
<b>The percentage of student financial need met, on average</b>	60
<b>The percentage of students graduating with no interest-bearing student loan debt</b>	26

**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:**

18

**The website URL where information about the institution's affordability and access programs is available:**

<http://www.equity.psu.edu/>

# 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.

<b>Credit</b>
Employee Compensation
Assessing Employee Satisfaction
Wellness Program
Workplace Health and Safety

# Employee Compensation

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## Responsible Party

**Lydia Vandenberg**

Assoc. Dir. Employee Engagement & Education  
Sustainability Institute

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## 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.

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**Submission Note:**

Due to lack of data on compensation paid by on-campus contractors, we made the conservative assumption that they do not pay sustainable compensation. (Only about 50 employees are paid by on-campus contractors.)

Graduate students who receive financial assistance are paid by their College.

The Graduate School emphasizes to all colleges that an institutional goal is to appoint GAs at no less than a grade 12, and preferably a grade 13 (\$18,225 for Fall/Spring for 2013/14). This is formalized in the Strategic Plan for the Graduate School (draft submitted to the Provost), and colleges are asked to work towards their programs meeting this target.

For Centre County, PA, the location of the University Park campus, which is where the majority of Ph.D. students (who hold the majority of assistantships) are enrolled, a living wage is calculated at \$18,469 in 2014 (

<http://livingwage.mit.edu/counties/42027>

). For academic year 2013/14, the numerical average stipend amount of all ½-time fall/spring assistantships (93% of all the assistantships are ½-time) was \$18,488, and most GAs receive some form of summer support on top of this, so we are on average providing more than a living wage in terms of the stipend plus summer support.

In addition to the stipend, every assistantship includes full graduate tuition, a university contribution to the GA's health insurance premium (for individual GAs, the University pays 80% of the premium; for a spouse/partner, the University pays 75% of the premium; and for children the University pays 76% of the premium), and for students appointed to a fall/spring GA, qualifies the student for up to 9 credits of summer tuition at no cost to the graduate student in the subsequent summer. In addition to the stipend, the value of these other forms of compensation total approximately \$54,116 for GAs who are PA-residents, and approximately \$71,937 for GAs who are non-PA residents.

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

**Number of employees:**

20,628

**Number of staff and faculty covered by sustainable compensation standards, guidelines, or policies; and/or collective bargaining agreements:**

18,327

**Does the institution have employees of contractors working on-site as part of regular and ongoing campus operations?:**

Yes

**Number of employees of contractors working on campus:**

50

**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:**

In 2008, Penn State used a consulting firm to do research and create the pay band structure. All pointers that address the ability of employees to meet the basic needs such as poverty guidelines, local cost of living indicators, and labor market assessments were taken into account in the design of our pay structure. The objective was to ensure that we provide a living wage to our employees while at the same time maintain a competitive position within the market. The local union negotiates wages for the University's technical service employees working for the physical plant. Annually, these bands are adjusted for cost of living increases.

**Does the institution wish to pursue Part 2 of this credit (assessing employee compensation)?:**

Yes

**Number of staff and faculty that receive sustainable compensation:**

18,327

**Number of employees of contractors that receive sustainable compensation:**

0

**A brief description of the standard(s) against which compensation was assessed:**

Penn State used a consulting firm to do research and create the pay band structure. All pointers that address the ability of employees to meet the basic needs such as poverty guidelines, local cost of living indicators, and labor market assessments were taken into account in the design of our pay structure. The objective was to ensure that we provide a living wage to our employees commensurate with skills, experience and knowledge, while at the same time maintain a competitive position within the market. Annually, these bands are adjusted for cost of living increases.

**A brief description of the compensation (wages and benefits) provided to the institution's lowest paid regular, full-time employees:**

All FT employees and all those working 24 hours per week or more are paid more than the minimum wage. The lowest paid FT employee at Penn State is paid \$9.93 per hour (\$20,664 per year) plus retirement, medical and educational benefits. The health benefits premiums are scaled to wages, so in essence, the higher paid employees subsidize the lower paid ones.

**A brief description of the compensation (wages and benefits) provided to the institution's lowest paid regular, part-time employees:**

Part-time employees are paid the same hourly wage as their full-time counterparts in the same job, but adjusted for the number of hours. Once they have worked 750 hours over two sequential years, they receive medical and retirement benefits and paid time-off and holidays. The health benefits premiums are scaled to wages. Higher paid employees pay more than lower paid ones.

**A brief description of the compensation (wages and benefits) provided to the institution's lowest paid temporary (non-regular) staff:**



The lowest paid, temporary staff are paid Pennsylvania's minimum wage which is \$7.25 per hour. However, it is unclear how many people receive the minimum because it depends on the job. Out of almost 21,000 employees, only 2,251 are in the non-student, temporary category and many of them are paid \$9 to \$10 per hour, well above the \$7.25 minimum wage.

**A brief description of the compensation (wages and benefits) provided to the institution's lowest paid temporary (non-regular, adjunct or contingent) faculty:**

The pay for adjunct and non-regular faculty is the same as part-time employees described above, except that they do not qualify for paid time off.

**A brief description of the compensation (wages and benefits) provided to the institution's lowest paid student employees (graduate and/or undergraduate, as applicable):**

Penn State employs over 5,000 students in various sectors of the University, from sports referees and desk monitors, to library proctors, camp assistants, dining hall cashiers, and RAs. Although some are paid the Pennsylvania minimum wage (\$7.25/hr) many of them are paid \$8 to \$11, depending on their experience and skill level. See notes below for graduate student assistantships.

**The local legal minimum hourly wage for regular employees:**

*7.25 US/Canadian \$*

**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://ohr.psu.edu/recruitment-and-compensation>

# Assessing Employee Satisfaction

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## Responsible Party

**Lydia Vandenberg**

Assoc. Dir. Employee Engagement & Education  
Sustainability Institute

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## 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.

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

## **Has the institution conducted an employee satisfaction and engagement survey or other evaluation that meets the criteria for this credit?:**

Yes

## **The percentage of employees (staff and faculty) assessed, directly or by representative sample:**

100

## **A brief description of the institution's methodology for evaluating employee satisfaction and engagement:**

Every four years, all Penn State full time faculty and staff are invited to complete a comprehensive employee satisfaction survey. In addition to a summary of University-wide results, each college, campus and administrative area receives a report for their area. These reports profile organizational strengths and improvement priorities, and each area is expected to adapt their strategic and annual plans based on consideration of the survey results.

## **A brief description of the mechanism(s) by which the institution addresses issues raised by the evaluation (including examples from the previous three years):**

The survey results are used by human resources to evaluate their policies. The Staff Advisory Council reviews the information and makes suggestions for changes.

**The year the employee satisfaction and engagement evaluation was last administered:**

2,008

**The website URL where information about the institution's employee satisfaction and engagement assessment is available:**

[http://www.psu.edu/ur/archives/intercom\\_2000/Feb17/survey.html](http://www.psu.edu/ur/archives/intercom_2000/Feb17/survey.html)

# Wellness Program

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**Responsible Party**

**Lydia Vandenberg**

Assoc. Dir. Employee Engagement & Education  
Sustainability Institute

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**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
<b>Students</b>	Yes
<b>Staff</b>	Yes
<b>Faculty</b>	Yes

**A brief description of the institution’s wellness and/or employee assistance program(s):**

Penn State's Human Resources Department offers a Health Matters Program that focuses on the six dimensions of wellness: spiritual, intellectual, physical, emotional, social and occupational, and encompasses three levels of delivery: awareness, lifestyle change and supportive environment.

Students, faculty and staff can take advantage of movement classes, nutritional counseling, weight watchers program, health care and other counseling assistance, and more.

Students can take advantage of health services, emotional counseling, nutritional assistance, and exercise/yoga classes through the University Health Services and Intercollegiate Athletics Departments.

<http://studentaffairs.psu.edu/health/>

**The website URL where information about the institution's wellness program(s) is available:**

<http://ohr.psu.edu/health-matters>

# Workplace Health and Safety

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## Responsible Party

**Lydia Vandenberg**

Assoc. Dir. Employee Engagement & Education  
Sustainability Institute

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## 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.

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

**Please enter data in the table below::**

	Performance Year	Baseline Year
<b>Number of reportable workplace injuries and occupational disease cases</b>	471	532
<b>Full-time equivalent of employees</b>	15,115	15,036

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

	Start Date	End Date
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<b>Performance Year</b>	Jan. 1, 2013	Dec. 31, 2013
<b>Baseline Year</b>	Jan. 1, 2009	Dec. 31, 2009

**A brief description of when and why the workplace health and safety baseline was adopted:**

The baseline year of 2009 was chosen because this is the first year that Penn State used the OSHA recordkeeping standards as the basis for tracking work-related injuries and illnesses.

**A brief description of the institution’s workplace health and safety initiatives:**

The Pennsylvania State University focuses on three key areas which drive our workplace health and safety efforts: Environmental Protection, Occupational Health and Safety, and Radiation Protection.

- Environmental Protection includes infectious and chemical waste management, accidental release of hazardous materials (response and cleanup), lead-based paint management, emergency response planning, underground/above ground storage tank management, and environmental assessments of property transactions.
- Occupational Health and Safety includes asbestos management, biological and laboratory safety, indoor air quality, ergonomics, fire prevention, industrial hygiene and chemical safety, and safety/accident prevention.
- Radiation Protection includes the use of radioactive materials, waste disposal of radioactive materials, and the use of radiation-producing machines, such as x-ray units and lasers.

The involvement of University faculty, staff, and technical service employees is critical to the success of our health and safety programs. Penn State established a University Safety Council over thirty years ago to represent academic and administrative units in program development and implementation. Numerous safety committees have also been established throughout the University which focus on health and safety issues within specific units and departments.

The Department of Environmental Health and Safety (EHS) is responsible for the initial development of health and safety programs. EHS routinely forms “focus groups” to obtain input from a variety of employees during the development process to ensure programs are comprehensive and effective.

All employees are encouraged to report any health or safety concerns to the appropriate University contact points. A variety of mechanisms have been established to ensure employees can efficiently report safety concerns or suggestions.

**The website URL where information about the institution’s workplace health and safety initiatives is available:**

<http://www.ehs.psu.edu/>

# 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.

<b>Credit</b>
Committee on Investor Responsibility
Sustainable Investment
Investment Disclosure



# Committee on Investor Responsibility

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## Responsible Party

**Mary Easterling**

Assoc Director, Analysis & Assessment  
Sustainability Institute

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## 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.

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## Submission Note:

Penn State currently does not have a Committee on Investor Responsibility.

In September 2000, Penn State's Board of Trustees established the Penn State Investment Council to provide direct oversight of the University's endowment and long-term investment program. The Penn State Investment Council, appointed by the Board of Trustees, includes the: Senior Vice President for Finance and Business/Treasurer of the University (Chair); Executive Director, Office of Investment Management; and five to nine non-University members (at least one of whom is a member of the Board of Trustees).

"---" 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:**

N/A

**Members of the CIR, including affiliations and role (e.g. student, faculty, alumni):**

N/A

**Examples of CIR actions during the previous three years:**

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**The website URL where information about the CIR is available:**

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## Responsible Party

**Mary Easterling**

Assoc Director, Analysis & Assessment  
Sustainability Institute

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## 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

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

**Total value of the investment pool:**

3,201,664,330.75 US/Canadian \$

**Value of holdings in each of the following categories::**

	Value of Holdings
<b>Sustainable industries (e.g. renewable energy or sustainable forestry)</b>	119,922,012.58 US/Canadian \$
<b>Businesses selected for exemplary sustainability performance (e.g. using criteria specified in a sustainable investment policy)</b>	0 US/Canadian \$
<b>Sustainability investment funds (e.g. a renewable energy or impact investment fund)</b>	0 US/Canadian \$
<b>Community development financial institutions (CDFIs) or the equivalent</b>	0 US/Canadian \$
<b>Socially responsible mutual funds with positive screens (or the equivalent)</b>	0 US/Canadian \$
<b>Green revolving loan funds that are funded from the endowment</b>	---

**A brief description of the companies, funds, and/or institutions referenced above:**

"Sustainable industries" were defined as those listed on the Dow Jones Sustainability Index. The companies in the DJSI were matched against those held in the Equities component of Penn State's Long Term Portfolio (investment pool) to determine value held in sustainable industries. For the Private Capital component of the Portfolio, information on sustainable investments was provided by Penn State's consultant Franklin Park, based on an internal database they maintain.

**Does the institution have a publicly available sustainable investment policy?:**

No

**A copy of the sustainable investment policy:**

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**The sustainable investment policy:**

---

**Does the institution use its sustainable investment policy to select and guide investment managers?:**

No

**A brief description of how the policy is applied, including recent examples:**

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**Does the institution's sustainable investment policy include negative screens?:**

No

**A brief description of the negative screens and how they have been implemented:**

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**Approximate percentage of the endowment that the negative screens apply to:**

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**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:**

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**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:**

---

**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:**

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**The website URL where information about the institution's sustainable investment efforts is available:**

<http://www.psu.edu/oim/reports.htm>

# Investment Disclosure

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## Responsible Party

**Mary Easterling**

Assoc Director, Analysis & Assessment  
Sustainability Institute

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## 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.

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### Submission Note:

Although Penn State does not provide information on specific holdings to the general public, it does produce semi-annual reports on its investment pool performance and general characteristics. See

[www.psu.edu/oim/reports.htm](http://www.psu.edu/oim/reports.htm)

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

**Does the institution make a snapshot of its investment holdings available to the public?:**

No

**The percentage of the total investment pool included in the snapshot of investment holdings:**

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**A copy of the investment holdings snapshot:**

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**The website URL where the holdings snapshot is publicly available:**

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# 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.

<b>Credit</b>
Innovation 1
Innovation 2
Innovation 3
Innovation 4



## Responsible Party

**Mary Easterling**

Assoc Director, Analysis & Assessment  
Sustainability Institute

---

## Criteria

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3. Outcomes, policies, and practices that are innovative for the institution's region or institution type are eligible for innovation credits.
4. The innovative practice, policy, program, or outcome must have occurred within the three years prior to the anticipated date of submission.
5. The innovative practice or program has to be something that the institution has already done; planned activities do not count.
6. The innovative practice or program should originate from an area within the defined institutional boundary.
7. An institution can only claim a particular activity as an innovation credit once. When re-submitting for a STARS rating, an innovation credit that the institution submitted previously cannot be re-submitted. An institution that has made significant advancements to a project or program that was previously submitted as an innovation may resubmit based on those advancements if the project or program is still considered innovative.
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10. While the practices that led to receiving an award may be appropriate for an innovation credit, winning awards and/or high sustainability rankings in other assessments is not, in and of itself, grounds for an innovation credit. When the innovation is part of a partnership, the summary provided must clearly describe the institution's role in the innovation.

To help ensure that the policy, practice, program, or outcome that the institution is claiming for an innovation credit is truly innovative, institutions must submit a letter of affirmation from an individual with relevant expertise in the associated content area. The letter should affirm how the innovation meets the criteria outlined above.

For example, if an institution claims an innovation credit for water use reduction, the institution might solicit a letter from a hydrologist or a water expert from another campus or organization to verify that the strategy is innovative. An innovation may be affirmed internally by campus personnel who are independent of the policy, practice, program, or outcome. Please note that it is not required that the individual be employed in the higher education sector to submit a letter of verification.

The letter should be specific to a single innovation credit. If an institution is claiming three innovation credits, it would solicit and submit three separate letters, with each letter speaking to the specific innovation credit it addresses.

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### Submission Note:

The SCC program relates primarily to Curriculum and Public Engagement; however individual PROJECTS conducted under the SCC programmatic framework may relate to any of the other categories listed above.

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

**Title or keywords related to the innovative policy, practice, program, or outcome:**

Sustainable Communities Collaborative

**A brief description of the innovative policy, practice, program, or outcome :**

The Sustainable Communities Collaborative (SCC) is the University's strategic platform and opportunity to develop innovative University/community-based collaborations that engage PSU faculty and students in existing courses from across the University through real world, community-identified sustainability projects. Through the SCC, Penn State is partnering with selected communities in Pennsylvania to meet their sustainability goals. These community entities may include government, business, schools, non-profits, and other organizations. Each project is a facilitated effort, involving interdisciplinary faculty expertise and students, co-led by a key community leader and the University's SCC staff, to help develop and support thriving, healthy communities and advance student learning and the scholarship of sustainability.

State College Borough served as the community partner for the initial year of the program. Examples of projects include:

Evaluation of Borough's Residential Composting Program

Focused on the evaluation of the borough residential composting program.

Sustainable Asset Management: Proposed and implemented sustainable material management practices for inventory and surplus goods in the Borough.

Biking in the Region: Looked into the barriers that prevent community members from the Centre Region, in all demographics, from bicycling for exercise, recreation and commuting and developed a health promotion campaign to reduce barriers to cycling.

Way-finding in Community Design and Planning (Reducing Auto Emissions):

Part 1 - Explore and develop a way-finding plan to more efficiently direct people to various parking options available in town so as to decrease auto emissions.

Part 2 - Study bicycle and pedestrian linkages for design and planning of the West End to reduce auto dependency and increase cycling and pedestrian transportation modes.

**A brief description of any positive measurable outcomes associated with the innovation (if not reported above):**

This program has been enthusiastically received by both the State College Borough and Penn State administration, as documented in the news article attached below. It has provided students with experiential learning opportunities, faculty with class projects, and the Borough with fresh ideas and "person-power" that extends their capacity beyond existing employees..

Since this program is still in its infancy, documentation of positive outcomes is mostly anecdotal. Three assessments have been developed to formally evaluate the experiences of students, community, and faculty. Data have been collected for the first round of projects, and analysis and interpretation are underway.

**A letter of affirmation from an individual with relevant expertise:**

**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
<b>Curriculum</b>	Yes
<b>Research</b>	---
<b>Campus Engagement</b>	---
<b>Public Engagement</b>	Yes
<b>Air &amp; Climate</b>	---
<b>Buildings</b>	---
<b>Dining Services</b>	---
<b>Energy</b>	---
<b>Grounds</b>	---
<b>Purchasing</b>	---
<b>Transportation</b>	---
<b>Waste</b>	---
<b>Water</b>	---
<b>Coordination, Planning &amp; Governance</b>	---
<b>Diversity &amp; Affordability</b>	---
<b>Health, Wellbeing &amp; Work</b>	---
<b>Investment</b>	---

**Other topic(s) that the innovation relates to that are not listed above:**

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**The website URL where information about the innovation is available :**

<http://sustainability.psu.edu/sustainable-communities>

### Responsible Party

**Mary Easterling**

Assoc Director, Analysis & Assessment  
Sustainability Institute

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### Criteria

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For example, if an institution claims an innovation credit for water use reduction, the institution might solicit a letter from a hydrologist or a water expert from another campus or organization to verify that the strategy is innovative. An innovation may be affirmed internally by campus personnel who are independent of the policy, practice, program, or outcome. Please note that it is not required that the individual be employed in the higher education sector to submit a letter of verification.

The letter should be specific to a single innovation credit. If an institution is claiming three innovation credits, it would solicit and submit three separate letters, with each letter speaking to the specific innovation credit it addresses.

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### Submission Note:

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

**Title or keywords related to the innovative policy, practice, program, or outcome:**

Reinvention Fund

**A brief description of the innovative policy, practice, program, or outcome:**

Penn State's Reinvention Fund is an internal competitive grants program designed to "provide resources to innovative teams seeking to pursue interdisciplinary and holistic solutions to sustainability challenges in a way that fosters cross functional integration of Penn State's teaching, research, outreach, operation, and administration expertise, so that our university community can link and leverage our depth and build our collective capacity in pursuit of sustainability".

This year the Fund awarded almost \$750,000 to faculty/staff teams and about \$100,000 to student teams located across the University's colleges, campuses and administrative units. Resources for the Fund were "contributed from all of Penn State's major functional units - Student Affairs, Undergraduate Education, Research, Outreach, and Finance and Business - and represent an institutional commitment to sustainability," according to Provost Nick Jones.

Three types of proposals were solicited:

- Development of new solutions to sustainability challenges
- Demonstration of measurable value that can be captured through the implementation of sustainability initiative and solutions
- Enhancement of learning across Penn State communities

The theme of the 2013 Reinvention Fund is "Building the Living Laboratory." It refers an immersive learning environment that utilizes the physical spaces, relationships, policies and processes of campuses and communities as hands-on learning opportunities. Internal and external reviewers assessed proposals through a multi-step merit review process. Grants were awarded based on recommendations for priority ranking and availability of funds.

Examples of faculty/staff projects include:

- Community Solar on State - Create an outreach and educational platform that will allow our community to proceed with a pilot community PV project, capture the best practices learned, and enable prospective future solar projects.
- Development of Sustainable Social Network and Social Marketing Resources for Promoting University-based Activity Transportation.
- Making Penn State Athletics Events More Sustainable - Learn more about available ways to increase sustainability of athletics events, then put those solutions into place.
- Infusing Concepts of Sustainability throughout the Recreation, Parks and Tourism Management Curriculum.

Examples of student projects include:

- Affordable Greenhouse Venture Cameroon – Refine current affordable greenhouse technology in preparation for large-scale dissemination through a network of distributed micro-enterprises throughout West Africa.
- Pride Pantry – Create an on-campus food pantry for low-income students to overcome restrictions to students at the State College Area Food Bank.
- Remote Wind Power – Participate in the DOE's Collegiate Wind Competition to design and build a portable wind energy generation system, including market research and financial analysis to support the viability of the product.
- Increasing Local Foods at Penn State – Make the food system more sustainable by bringing more locally grown and produced food to the dining commons and restaurants at University Park.

**A brief description of any positive measurable outcomes associated with the innovation (if not reported above):**

At the proposal stage, each project was required to propose metrics by which its success would be measured. In addition, metrics are being developed to evaluate the success of the program as a whole. Overall, we anticipate that the projects collectively will lead to a variety of new sustainability practices, initiatives, and demonstrations on campus; enhanced sustainability in the curriculum; and some reductions in waste, energy, and greenhouse gases on campus.

**A letter of affirmation from an individual with relevant expertise:**

[STARS Reinvention Fund Letter.5-2-14.docx](#)

**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	Yes
Research	Yes
Campus Engagement	Yes
Public Engagement	Yes
Air & Climate	Yes
Buildings	Yes
Dining Services	Yes
Energy	Yes
Grounds	Yes
Purchasing	Yes
Transportation	Yes
Waste	Yes
Water	Yes

<b>Coordination, Planning &amp; Governance</b>	Yes
<b>Diversity &amp; Affordability</b>	Yes
<b>Health, Wellbeing &amp; Work</b>	Yes
<b>Investment</b>	Yes

**Other topic(s) that the innovation relates to that are not listed above:**

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**The website URL where information about the innovation is available:**

<http://sustainability.psu.edu/reinvention>



### Responsible Party

**Mary Easterling**

Assoc Director, Analysis & Assessment  
Sustainability Institute

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### Criteria

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**Title or keywords related to the innovative policy, practice, program, or outcome:**

Mobius - office composting program

**A brief description of the innovative policy, practice, program, or outcome:**

In 2013 Penn State rolled out a new waste management program called "Mobius". Its main feature is the addition of organic waste collection bins to all recycling stations on campus. To our knowledge Penn State is one of the first schools of its size to offer campus-wide composting. This program is expected to increase solid waste diversion by an additional 10%, to 75%. Employees will no longer have their trash cans emptied by custodial staff. Rather they are expected to sort their own waste at the mobius station. This is expected to raise awareness of the amount of waste produced, as well as reduce labor by custodial staff who instead will be managing material from the mobius stations. Compostable waste is transported to the Penn State Organic Materials Processing and Education Center, where it is ground, blended with organic matter from grounds maintenance and animal operations, composted, and either used by campus landscaping or sold to the public.

The program's unusual name refers to Penn State's desire to "close the loop" on waste and view it as a system that, like the Mobius loop, has no beginning or end.

**A brief description of any positive measurable outcomes associated with the innovation (if not reported above):**

This program is expected to solid waste diversion by an additional 10%.

**A letter of affirmation from an individual with relevant expertise:**

[brantley Mobius email.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
<b>Curriculum</b>	---
<b>Research</b>	---
<b>Campus Engagement</b>	Yes
<b>Public Engagement</b>	---
<b>Air &amp; Climate</b>	---
<b>Buildings</b>	---

Dining Services	---
Energy	---
Grounds	---
Purchasing	---
Transportation	---
Waste	Yes
Water	---
Coordination, Planning & Governance	---
Diversity & Affordability	---
Health, Wellbeing & Work	---
Investment	---

**Other topic(s) that the innovation relates to that are not listed above:**

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**The website URL where information about the innovation is available:**

<http://sustainability.psu.edu/mobius/recycle#office-composting>

### Responsible Party

**Mary Easterling**

Assoc Director, Analysis & Assessment  
Sustainability Institute

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### Criteria

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### Submission Note:

This innovation will likely lead to unit-level goals that will affect other topics listed above.

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

**Title or keywords related to the innovative policy, practice, program, or outcome:**

Unit-level Sustainability Strategic Planning

**A brief description of the innovative policy, practice, program, or outcome:**

As part of a plan to fully integrate sustainability throughout Penn State's teaching, research and outreach missions, and its campus operations, the Sustainability Institute (SI) has taken an innovative approach that might serve as a model for other institutions. This approach was developed as the University entered a new strategic planning cycle, which seemed to be an ideal time to encourage strategic planning units (e.g., colleges and support units) to embed sustainability into their own strategic plans.

First, the SI worked with upper-level administration to encourage the inclusion of sustainability goals in the unit-level planning guidelines issued by the Provost.

Second, the SI produced a series of resources to guide units in their planning, including the "Sustainability Planning Guidebook for Teams" (available online), the online "Opportunity Finder" survey, and the "Sustainability Strategy Framework and SMART Strategy Builder". One of the key messages in the guidance is for each unit to consider its core mission and focus on its unique contribution to Penn State's sustainability vision and mission. This encourages units to move beyond standard sustainability goals (e.g., increase recycling) and to think creatively about how they might best make a contribution. Sustainability Institute staff worked closely with some units to facilitate this process.

As an example: Penn State Public Media, WPSU, served as one of the early pilots for this approach. Their initial sustainability planning focused on stereotypical actions, such as encouraging recycling, composting, etc. However, a review of their draft plan revealed that many of the actions proposed were already being addressed at the institutional level. The WPSU planners then began to think more broadly about their unit's mission and unique capabilities, and came up with the proposed goal of creating media and learning objects to help people understand sustainability. A recent production "Water Blues" is an example of their contribution.

This approach to strategic planning, we feel, is likely to have a larger impact than a top-level sustainability strategic plan alone. It encourages broader participation, creativity, and ownership of sustainability goals.

**A brief description of any positive measurable outcomes associated with the innovation (if not reported above):**

See example above.

**A letter of affirmation from an individual with relevant expertise:**

[STARS Innovation Credit Sustainability Ltr \(for Mary E\).docx](#)

**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
--	-----------

<b>Curriculum</b>	---
<b>Research</b>	---
<b>Campus Engagement</b>	---
<b>Public Engagement</b>	---
<b>Air &amp; Climate</b>	---
<b>Buildings</b>	---
<b>Dining Services</b>	---
<b>Energy</b>	---
<b>Grounds</b>	---
<b>Purchasing</b>	---
<b>Transportation</b>	---
<b>Waste</b>	---
<b>Water</b>	---
<b>Coordination, Planning &amp; Governance</b>	Yes
<b>Diversity &amp; Affordability</b>	---
<b>Health, Wellbeing &amp; Work</b>	---
<b>Investment</b>	---

**Other topic(s) that the innovation relates to that are not listed above:**

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**The website URL where information about the innovation is available:**

<http://sustainability.psu.edu/strategic-planning>