



Stanford University

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

Date Submitted: March 20, 2015

STARS Version: 2.0

Table of Contents

Institutional Characteristics	3
Institutional Characteristics	3
Academics	13
Curriculum	13
Research	45
Engagement	57
Campus Engagement	57
Public Engagement	90
Operations	116
Air & Climate	116
Buildings	127
Dining Services	141
Energy	149
Grounds	160
Purchasing	170
Transportation	187
Waste	201
Water	215
Planning & Administration	226
Coordination, Planning & Governance	226
Diversity & Affordability	254
Health, Wellbeing & Work	272
Investment	282
Innovation	291
Innovation	291

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

Institutional Characteristics

Institutional Characteristics

The passthrough subcategory for the boundary

Credit
Institutional Boundary
Operational Characteristics
Academics and Demographics

Institutional Boundary

Criteria

This won't display

Submission Note:

Stanford University is one of the world's leading research universities. Stanford is known for its entrepreneurial character, drawn from the legacy of its founders, Jane and Leland Stanford, and its relationship to Silicon Valley. Research and teaching emphasize interdisciplinary approaches to problem solving. Areas of excellence range from the humanities to social sciences to engineering and the sciences. Stanford is located in California's Bay Area, one of the most intellectually dynamic and culturally diverse areas of the nation.

For more information, please visit:

<http://facts.stanford.edu/>

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

Institution type:

Doctorate

Institutional control:

Private non-profit

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

	Present?	Included?
Agricultural school	No	No
Medical school	Yes	Yes
Pharmacy school	No	No
Public health school	No	No
Veterinary school	No	No
Satellite campus	Yes	Yes
Hospital	Yes	No

Farm larger than 5 acres or 2 hectares	No	No
Agricultural experiment station larger than 5 acres or 2 hectares	No	No

Reason for excluding agricultural school:

Reason for excluding medical school:

Reason for excluding pharmacy school:

Reason for excluding public health school:

Reason for excluding veterinary school:

Reason for excluding satellite campus:

Reason for excluding hospital:

Stanford Hospital & Clinics and the Lucile Packard Children's Hospital are not included in the boundary for Stanford University's STARS submission. They are separate corporations with separate boards of directors and the university does not have operational control over either entity. These organizations are not included in Stanford's annual greenhouse gas emissions inventory for the same reasons. The School of Medicine, which is a part of Stanford University, is included in this STARS submission (and the GHG inventory).

Reason for excluding farm:

Reason for excluding agricultural experiment station:

Narrative:

Operational Characteristics

Criteria

n/a

Submission Note:

In December 2011, Stanford's Board of Trustees gave concept approval to the \$438 million Stanford Energy System Innovations (SESI) program, which is a collection of operationally distinct projects designed to meet the university's energy demand while reducing greenhouse gas emissions and water consumption. SESI represents a significant transformation of the university from 100% fossil-fuel-based cogeneration to a more efficient electric heat recovery system. SESI will result in immense benefits for Stanford University in the years to come. When completed in April 2015, the current set of projects anticipated under the SESI program will reduce campus greenhouse gas emissions 50% below 1990 levels, save 15% of campus potable water, open up the energy supply platform to future technologies, enable the campus to better manage its power portfolio, and yield utilities savings. In addition, in late 2014, Stanford's Board of Trustees gave approval for Stanford to procure 80% of the campus's electricity supply from renewable sources. This comes after a decision by the Provost in early 2014 to approve solar PV installation on campus parking structures and existing buildings. It is expected that this additional solar installation will meet at least 10% of the campus electricity demand.

The implementation of SESI began in 2012 and is on schedule to be fully complete in April 2015. All in all, the project required over twenty miles of hot water piping to be installed, which was completed in November 2014, along with conversions to the mechanical rooms of 155 buildings, with only 5 buildings remaining to be converted as of February 2015. This work was carefully sequenced in multiple phases to minimize disruption to campus life. The project also entailed construction of a new electrical substation, which was completed in early 2014, as well as a new state of the art Central Energy Facility (CEF), which is now ready for occupants to move in. Full plant commissioning began in Fall 2014. Once all phases of the hot water conversion are complete, a full transition from the existing cogeneration plant to the new heat recovery plant will be made, and the cogeneration plant will be decommissioned and removed.

For more details, please visit:

<http://sesi.stanford.edu>

http://sustainable.stanford.edu/sites/sustainable.stanford.edu/files/documents/Stanford_Energy_&_Climate_Plan_2nd_Edition.pdf

http://sustainable.stanford.edu/sites/sustainable.stanford.edu/files/documents/FactSheet_FAQ_SESI.pdf

<http://www.stanforddaily.com/2014/02/12/solar-panel-installation-approved-by-provost/>

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

Endowment size:

18,700,000,000 US/Canadian \$

Total campus area:

8,180 Acres

IECC climate region:

Mixed-Dry

Locale:

Urban fringe of large city

Gross floor area of building space:

14,562,639 Gross Square Feet

Conditioned floor area:

Floor area of laboratory space:

3,739,860 Square Feet

Floor area of healthcare space:

0 Square Feet

Floor area of other energy intensive space:

74,705 Square Feet

Floor area of residential space:

4,534,139 Square Feet

Electricity use by source::

	Percentage of total electricity use (0-100)
Biomass	0
Coal	0
Geothermal	0
Hydro	0
Natural gas	100

Nuclear	0
Solar photovoltaic	0
Wind	0
Other (please specify and explain below)	---

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

Currently, Stanford obtains the vast majority of its electricity from an onsite cogeneration facility that uses natural gas as its fuel source. Combined heat and power (CHP) facilities like Stanford's generally see efficiencies that can exceed 70%, making them a desirable method for converting carbon based fuels into usable energy. Stanford's cogeneration facility has been active since 1987, but it will be decommissioned in April 2015 once Stanford's new Stanford Energy System Innovations (SESI) plant comes online, allowing Stanford to use innovative heat recovery technology to make its campus energy system more efficient. Once this occurs, Stanford will purchase its electricity from the grid, significantly changing the composition of the university's energy supply and allowing for a clearer path to 100% renewable energy use in the future.

For more details, please visit:

http://lbre.stanford.edu/sem/central_energy_facility

<http://sesi.stanford.edu>

Energy used for heating buildings, by source::

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

Geothermal	0
Natural gas	100
Other (please specify and explain below)	---

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

The vast majority of campus building heating needs are met by steam generated from Stanford's cogeneration facility which is fueled by natural gas. The remainder is provided by natural-gas fired furnaces or boilers at the building level.

Stanford's cogeneration facility has been active since 1987, but it will be decommissioned in April 2015 once Stanford's new Stanford Energy System Innovations (SESI) plant comes online, allowing Stanford to use innovative heat recovery technology to make its campus energy system more efficient. Once this occurs, Stanford will use electricity to create hot water that will be used for building heating. Additionally, analysis shows that through heat recovery technology, the campus can recover up to 70% of the heat now discharged from the cooling system to meet at least 80% of simultaneous campus heating demands, significantly reducing fossil fuel and water use in the process. Due to the significant heat recovery and lower line losses of hot water compared to steam, the new energy system is 70% more efficient than the existing combined heat and power process provided by the current cogeneration plant.

For more details, please visit:

http://lbre.stanford.edu/sem/central_energy_facility

<http://sesi.stanford.edu>

Academics and Demographics

Criteria

n/a

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

Number of academic divisions:

7

Number of academic departments (or the equivalent):

87

Full-time equivalent enrollment:

15,606

Full-time equivalent of employees:

12,297

Full-time equivalent of distance education students:

0

Total number of undergraduate students:

6,999

Total number of graduate students:

8,958

Number of degree-seeking students:

15,957

Number of non-credit students:

1,392

Number of employees:

14,481

Number of residential students:

11,147

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.

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

Responsible Party

Moira Hafer

Sustainability Analyst
Office of Sustainability

Criteria

Part 1

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

Part 2

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

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

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

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

- A sustainability course is a course in which the primary and explicit focus is on sustainability and/or on understanding or solving one or more major sustainability challenge (e.g. the course contributes toward achieving principles outlined in the [Earth Charter](#)).
- A course that includes sustainability is primarily focused on a topic other than sustainability, but incorporates a unit or module on sustainability or a sustainability challenge, includes one or more sustainability-focused activities, or integrates sustainability issues throughout the course.

For guidance on conducting a course inventory and distinguishing between sustainability courses and courses that include sustainability, see *Standards and Terms* and the Credit Example in the [STARS Technical Manual](#). An institution that has developed a more refined approach to course classification may use that approach as long as it is consistent with the definitions and guidance provided.

Each institution is free to choose a methodology to identify sustainability courses that is most appropriate given its unique circumstances. Asking faculty and departments to self-identify sustainability courses and courses that include sustainability using the definitions outlined in *Standards and Terms* or looking at the stated learning outcomes and course objectives associated with each course may provide a richer view of sustainability course offerings than simply reviewing course descriptions, but it is not required.

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

Submission Note:

All courses where any section of the course had enrollment of 4 or fewer students have been removed, both from the list of sustainability courses and courses that include sustainability and from the total number of courses. Courses that were deemed as independent/individual study by the University's Institutional Research and Decision Support team have also been removed from both lists.

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

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

	Undergraduate	Graduate
Total number of courses offered by the institution	2,113	2,594
Number of sustainability courses offered	77	105
Number of courses offered that include sustainability	127	178

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

60

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

87

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):

[AC-1 Stanford List of Classes.pdf](#)

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

n/a -- please see uploaded list

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

<http://sustainable.stanford.edu/students>

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

For many years, the Earth Systems Program within Stanford's School of Earth Sciences has compiled and published a list of environmental courses (

<http://pangea.stanford.edu/programs/esys/academics/undergraduate-program/undergrad-courses>

). This list served as the starting point for the sustainability course inventory, and staff began the inventory process by reviewing this list and designating classes as sustainability classes, classes that include sustainability, or neither. However, since Stanford offers such a vast array of classes that fluctuate significantly year to year, Stanford staff and faculty felt it was important to re-evaluate the full list of Stanford class offerings in the 2012-2013 academic year in order to compile a truly complete list of Stanford's sustainability classes and classes that include sustainability.

To accomplish this, staff audited the entire 2012-2013 course bulletin and identified (based on course descriptions), whether or not courses should be included in the sustainability course inventory. Staff also worked closely with the university's Institutional Research and Decision Support (IRDS) team to determine the number of individual/independent study classes, classes with enrollment of 4 or fewer, and 1 unit classes, in addition to reviewing the total number of classes with and without sections. With the support of the IRDS, staff decided that individual/independent study classes and classes with enrollment of 4 or fewer should be removed from both the total number of classes and the sustainability course inventory. One-unit classes were kept in the inventory because these classes are often extremely substantive despite only being worth one unit of course credit. This detailed analytic process was performed very carefully and with the input of many campus stakeholders, including Stanford faculty, in order to ensure utmost accuracy.

After this decision-making and calculation process and consultation with Stanford faculty, staff generated a final list of sustainability courses and courses that include sustainability based on all of the above criteria. The new list has been uploaded to the Sustainable Stanford website and has been disseminated to several interested parties, including the Haas Center for Public Service and the School of Earth Sciences. Based on this thorough process, Stanford feels confident that it generated the most accurate and complete list possible of sustainability courses and courses that include sustainability at the university.

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

Each course was counted as a single course regardless of the number of offerings or sections

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

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

	Yes or No
Internships	No
Practicums	No

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

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

No

Does the institution designate sustainability courses on student transcripts?:

No

Learning Outcomes

Responsible Party

Moira Hafer

Sustainability Analyst
Office of Sustainability

Criteria

Institution's students graduate from degree programs that include sustainability as a learning outcome or include multiple sustainability learning outcomes. Sustainability learning outcomes (or the equivalent) may be specified at:

- Institution level (e.g. covering all students)
- Division level (e.g. covering one or more schools or colleges within the institution)
- Program level
- Course level

This credit includes graduate as well as undergraduate programs. For this credit, "degree programs" include majors, minors, concentrations, certificates, and other academic designations. Extension certificates and other certificates that are not part of academic degree programs do not count for this credit; they are covered in *EN 11: Continuing Education*. Programs that include co-curricular aspects may count as long as there is an academic component of the program. Learning outcomes at the course level count if the course is required to complete the program.

This credit is inclusive of learning outcomes, institutional learning goals, general education outcomes, and graduate profiles that are consistent with the definition of "sustainability learning outcomes" included in Standards and Terms.

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

Submission Note:

Stanford recently unveiled a series of Thinking Matters courses available to all members of the freshman class. Only freshmen can enroll in Thinking Matters courses, many of which have sustainability learning outcomes. One example is "Meeting the Global Sustainability Challenge" (

<http://explorecourses.stanford.edu/search?view=catalog&filter-coursestatus-Active=on&page=0&catalog=&q=THINK40>

). Other sustainability-related Thinking Matters courses offered in academic year 2013-2014 include "Energy: Understanding the Challenge, Developing Solutions" and "The Water Course." Evaluation of all Thinking Matters courses is currently underway and will significantly increase the percentage of students who graduate from degree programs with sustainability learning outcomes.

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

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

3,226

Total number of graduates from degree programs:

5,026

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

[AC Credit 2 Sustainability Learning Outcomes Stanford.pdf](#)

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

n/a--please see attached file

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

Please see the uploaded file for complete details, including website links, for degree programs included in the inventory for this credit. The two examples below are provided for quick reference.

Earth Systems - The Earth Systems Program is an interdisciplinary environmental science major. Students learn about and independently investigate complex environmental problems caused by human activities in interaction with natural changes in the Earth system. Earth Systems majors become skilled in those areas of science, economics, and policy needed to tackle the globe's most pressing environmental problems, becoming part of a generation of scientists, professionals, and citizens who approach and solve problems in a new way: a systematic, interdisciplinary way.

Bioengineering - Bioengineers are focused on advancing human health and promoting environmental sustainability, two of the greatest challenges for our world. Understanding complex living systems is at the heart of meeting these challenges. The mission of Stanford's Department of Bioengineering is to create a fusion of engineering and the life sciences that promotes scientific discovery and the development of new biomedical technologies and therapies through research and education.

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

Undergraduate Program

Responsible Party

Moira Hafer

Sustainability Analyst
Office of Sustainability

Criteria

Institution offers at least one:

- Sustainability-focused program (major, degree program, or equivalent) for undergraduate students

And/or

- Undergraduate-level sustainability-focused minor or concentration (e.g. a concentration on sustainable business within a business major).

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

"---" 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):

Earth Systems

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

The Earth Systems Program is an interdisciplinary environmental science major. Students learn about and independently investigate complex environmental problems caused by human activities in interaction with natural changes in the Earth system. Earth Systems majors become skilled in those areas of science, economics, and policy needed to tackle the globe's most pressing environmental problems, becoming part of a generation of scientists, professionals, and citizens who approach and solve problems in a new way: a systematic, interdisciplinary way.

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

<https://pangea.stanford.edu/programs/esys/>

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

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

The Civil and Environmental Engineering department is committed to finding solutions to our major sustainability challenges this century, and to educating and training the leaders who will have a large impact on our profession and on society.

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

<http://cee.stanford.edu/about/index.html>

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

Global Studies

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

Stanford's Global Studies Division (formerly International, Comparative and Area Studies) provides an arena for students and scholars to explore our increasingly complex world from multiple economic, political, social, technological and cultural perspectives. As Stanford educates the leaders of the future, we must prepare them to deal with the great issues facing the world – health, peace, prosperity, environmental sustainability – from a basis of cultural and historical understanding as well as a basis of scientific analysis. The School of Humanities and Sciences has established a division of International Comparative and Area Studies (ICA) to strengthen existing international programs and to expand the scope of our scholarship and education to include critically important regions and themes in today's world. It will have an enduring benefit not only for the students and faculty in the School of Humanities and Sciences, but for the other schools and institutes in the university whose applied work will derive its effectiveness from the basic scholarship in our departments spanning the humanities and arts, and the natural and social sciences.

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

<http://sgs.stanford.edu/>

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

There are numerous such programs offered for undergraduate-level degrees. Please see the complete list of undergraduate degree programs and website URLs in the uploaded back-up materials for AC-2.

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):

Urban Studies

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

The Urban Studies program treats urbanism as an interdisciplinary field; it brings together students, faculty, and outside specialists concerned with cities, and the impacts of cities on society and people's lives. The Urban Studies major encourages students to inquire deeply into the nature of cities and the techniques used to modify urban environments. It prepares students to address urbanization, and gives students a knowledge base and theoretical, analytical, and practical skills to understand urban social systems and effect social change.

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

<http://urbanstudies.stanford.edu/programs/minor.html>

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

Science, Technology & Society

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

The mission of the Science, Technology and Society (STS) Program is to provide Stanford undergraduates with intellectually stimulating education that will prepare them for life in the contemporary era, one in which science and technology are pervasive and potent forces for transformative social change. To that end, STS courses explore the evolving natures and interrelationship of science and technology, influences of science and technology on different kinds of societies, how societies manage and otherwise shape their scientific and technological endeavors and products, and ethical, social, cultural, and policy issues raised by scientific and technological innovations in contemporary societies. STS faculty believe that probing study of this vital subject matter provides an innovative form of liberal arts and pre-professional education, one that helps STS students fulfill their future civic and professional roles in an informed, responsible manner. STS is an interdisciplinary and multidisciplinary program. STS students learn to critically analyze the interplay of science and technology with human values and world views, political and economic forces, and cultural and environmental systems. To a set of core STS courses promoting such learning, Program majors add structured sets of pertinent disciplinary courses in the humanities, social sciences, natural sciences, and engineering.

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

<https://sts.stanford.edu/>

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

Human Biology

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

The Program in Human Biology is an interschool, interdepartmental undergraduate major and minor. The program's mission is to provide an interdisciplinary approach to understanding the human being from 7 biological, behavioral, social, and cultural perspectives. The curriculum provides a broad and rigorous introduction to the biological and behavioral sciences and their interrelationships, and explores how this knowledge, in conjunction with studies in other fields, can be applied to formulate and evaluate health, environmental, and other public policies that influence human welfare. Majors later pursue advanced training in professional or graduate programs, or work in diverse sectors.

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

<https://humbio.stanford.edu/>

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

There are numerous such programs offered for undergraduate-level minors, concentrations and certificates. Please see the complete list of undergraduate degree programs and website URLs in the uploaded back-up materials for AC-2.

Graduate Program

Responsible Party

Moira Hafer

Sustainability Analyst
Office of Sustainability

Criteria

Institution offers at least one:

- Sustainability-focused program (major, degree program, or equivalent) for graduate students

And/or

- Graduate-level sustainability-focused minor, concentration or certificate (e.g. a concentration on sustainable business within an MBA program).

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

"---" 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):

Emmett Interdisciplinary Program in Environment and Resources

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

Stanford's Emmett Interdisciplinary Program in Environment and Resources (E-IPER) trains the next generation of interdisciplinary scholars and leaders to address the world's most challenging environmental and sustainability problems. E-IPER students combine academic disciplines, including natural and earth sciences, engineering, economics, humanities, social sciences, law, health, policy, and business to yield new insights and novel solutions to urgent global problems, such as energy use, climate change, food security, freshwater availability, depletion of ocean resources, land degradation, and biodiversity loss.

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

<https://pangea.stanford.edu/programs/eiper/>

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

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

Our shared goal is to understand, predict, and respond to human-caused environmental change at local to global scales. To take on this challenge, we strive to investigate the complexity of the global system, including the interactions, synergies, and feedbacks that link the oceans, atmosphere, land surfaces, and freshwater systems. A global perspective has emerged that challenges the research community to view and study the planet as a singular, highly-interactive system, moving past disciplinary approaches to evaluate the interactions among chemical, biological, and physical processes across the Earth's surface. Through the graduate and undergraduate programs, we will train a new generation of scientists that comprehend the multiple facets of environmental processes, and who are able to think synthetically, evaluating change in our oceans, water, air and land processes as part of an integrated and connected system. This is the directive of the Environmental Earth System Science Department, carried forth by faculty representing many interdisciplinary areas, talented graduate students and postdoctoral scholars, and experienced and creative research staff. We are distributed in laboratories and offices across the Stanford campus, with the department headquarters based in the Yang and Yamazaki Environment and Energy building (Y2E2).

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

<https://pangea.stanford.edu/departments/eess/>

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

Geological and Environmental Sciences

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

The geological and environmental sciences are naturally interdisciplinary, and include the study of earth materials, earth processes, and how they have changed over Earth's 4.56 billion year history. More specifically, courses and research within the department address the chemical and physical makeup and properties of minerals and rocks (at pressures from the surface to the core), as well as of soils, sediments, and water; the formation and evolution of Earth and other planets; the processes that deform Earth's crust and mantle and that shape Earth's surface; the stratigraphic, paleobiological, and geochemical records of Earth history including changes in climate, oceans, and atmosphere; present-day, historical, and long-term feedbacks between the geosphere and biosphere, and the origin and occurrence of our natural resources. The department's research is critical to the study of natural hazards (earthquakes, volcanic eruptions, landslides, and floods), environmental and geological engineering, surface and groundwater management, the assessment, exploration, and extraction of energy, mineral and water resources, remediation of contaminated water and soil, geological mapping and land use planning, and human health and the environment.

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

<https://pangea.stanford.edu/departments/ges/>

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

There are numerous such programs offered for graduate-level degrees. Please see the complete list, including website URLs, in the back-up document uploaded for AC-2.

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):

Civil & Environmental Engineering

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

The Civil and Environmental Engineering department is committed to finding solutions to our major sustainability challenges this century, and to educating and training the leaders who will have a large impact on our profession and on society.

A PhD minor is a program in another department that complements the student's PhD program. A minor is not a requirement for any degree, but is available when agreed upon by the student and both major and minor departments. It is not available to students pursuing other graduate degrees.

Each department offering a PhD minor establishes the core, elective and examination requirements for the minor program. The major department determines acceptance of the minor as part of the student's total PhD program. Approval from both the major and the minor departments must appear on the student's Application for Candidacy for Doctoral Degree. The minor department must be represented on the university oral examination committee.

A student desiring a PhD minor in civil and environmental engineering must have a minor program advisor who is a regular CEE faculty member (member of Academic Council) in the program of the designated sub field. This advisor must be a member of the student's University oral examination committee and on the reading committee for the dissertation.

The program must include at least 20 units of graduate-level course work (that is, courses numbered 200 or above, excluding special studies and thesis) in CEE completed at Stanford University. Units taken for the minor cannot be counted as part of the 45 unduplicated units for the PhD major. The list of courses must form a coherent program and must be approved by the minor program advisor and the CEE chair. An average GPA of at least 3.0 must be achieved in these courses.

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

http://cee.stanford.edu/current/phd_minor.html

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

Management Science & Engineering

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

Management Science & Engineering's mission is, through education and research, to advance the design, management, operation, and interaction of technological, economic, and social systems. We support this mission through a diverse portfolio of world-class research activities, leveraging expertise across multiple disciplines and methodologies and through internationally renowned research centers. Our engineering research strength is integrated with a broad based educational program at the undergraduate, masters, and doctoral levels: graduates of our program are not only trained as engineers, but also as future leaders in technology, policy, and industry. Our research and teaching activities are complemented by an outreach program that encourages the transfer of ideas to the fertile environment of Silicon Valley and beyond.

Students pursuing a Ph.D. in another department who wish to receive a Ph.D. minor in Management Science and Engineering should consult the MS&E student services office.

A minor in MS&E may be obtained by completing 20 units of approved graduate-level MS&E courses, of which 6 units must be at the 300-level. Courses approved for the minor must form a coherent program, and must include one course from at least three of the ten MS&E M.S. core options. The program must include a minimum of 16 letter-graded units, and a minimum grade point average of 3.3 must be achieved in these courses.

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

<http://www.stanford.edu/dept/MSandE/cgi-bin/academics/phdMinor.php>

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

E-IPER Joint MS Program

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

As described in the section above, E-IPER is an interdisciplinary graduate program, rooted in the School of Earth Sciences. The E-IPER Joint MS allows professional degree students to take advantage of environment and resources courses, faculty, and programs on campus, earning an MS while jointly completing their professional degree in Stanford Law School, Graduate School of Business, or School of Medicine.

At Stanford, a Joint MS is a Masters of Science degree that is completed concurrently with another graduate or professional degree, allowing some coursework to count towards both degrees. E-IPER offers a Joint MS for selected students currently enrolled in Stanford's Graduate School of Business or Stanford Law School, and a dual MS for students at Stanford's School of Medicine, in which course units are not double-counted.

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

<https://pangea.stanford.edu/programs/eiper/admissions/joint-ms-faqs>

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

There are numerous such programs offered for graduate-level minors, concentrations, and certificates. Please see the complete list, including website URLs, in the back-up document uploaded for AC-2.

Immersive Experience

Responsible Party

Moira Hafer

Sustainability Analyst
Office of Sustainability

Criteria

Institution offers at least one immersive, sustainability-focused educational study program. The program is one week or more in length and may take place off-campus, overseas, or on-campus.

For this credit, the program must meet one or both of the following criteria:

- It concentrates on sustainability, including its social, economic, and environmental dimensions

And/or

- It examines an issue or topic using sustainability as a lens.

For-credit programs, non-credit programs and programs offered in partnership with outside entities may count for this credit. Programs offered exclusively by outside entities do not count for this credit.

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

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

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

Yes

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

Stanford offers numerous sustainability-focused immersive experiences:

(1) Students may elect to spend an academic quarter at Hopkins Marine Station, located in Monterey Bay. Here the coursework focuses on marine ecosystems and ocean sustainability. Course offerings have included “Marine Conservation Biology,” “Marine Ecology,” and “Ecology and Conservation of Kelp Forest Communities.” On alternating years Hopkins offers “Stanford at Sea,” a course which includes five weeks of sailing across the Pacific Ocean completing marine research.

<http://www.marine.stanford.edu/>

(2) Stanford in Washington is a quarter-long program in which students live and work in the nation's capital. Time is split between policy courses and an immersive policy internship. One of the focuses of the Stanford in Washington program is environmental policy. Internships have included Natural Resources Defense Council, Center for Ecotourism and Sustainable Development, and the Department of Energy. Courses include "Sustainable Development," "International Environmental Law and Policy," "Civil Rights Law," "Health and Environmental Regulatory Policy," and "Critical Health Issues in the US and Abroad."

<http://web.stanford.edu/dept/siw/cgi-bin/wordpress/>

(3) Stanford's Earth Systems in Hawaii program is a quarter-long immersion program based in the Hawaiian Islands. The program investigates the Earth sciences, life sciences, and Hawaiian culture to address environmental issues that arise from the interaction between man and nature. The program is designed for students interested in Earth systems, biology, geological and environmental sciences, and cultural anthropology. Course offerings have included "Earth Sciences of the Hawaiian Islands," "Ecology of the Hawaiian Islands," and "Heritage, Environment and Sovereignty in Hawaii." Students are also required to carry out their own independent research project as part of the program.

<http://gohawaii.stanford.edu/>

(4) Stanford's Bing Overseas Studies Program in Australia is a quarter-long program specifically designed around ecological and biological themes. It offers a unique opportunity to learn about Australian culture while studying the enormous diversity of coral reefs and rainforests. This program is ideal for students interested in environmental and ecological science and policy. The program consists of four modules: "Coral Reef Ecosystems," "Coastal Zone Management," "Coastal Forest Ecosystems," and "Australian Studies." Together these courses enhance student understanding of key global ecosystems, while emphasizing the challenges of human co-habitation and industry. Students also must design and carry-out their own research project as part of the program.

<https://undergrad.stanford.edu/programs/bosp/explore/australia>

(5) Students may elect to spend their Spring Break in an immersive class, known as "Alternative Spring Break." These trips are week-long, location-based immersive courses with social and community service themes. Examples of 2013-2014 Alternative Spring Break courses include "The Human Cost of Food: Migrant Farm Worker Health in the Central Valley," "Growing Change: Urban Food Solutions in the Bay Area," "The Silicon Classroom: Educational Equity in a Changing Digital World," "The Hands That Feed Us: Migrant Health in Underserved Agricultural Communities of the Central Valley," "Rural and American Indian Health Disparities," "Human Power, the Environment, and Alternative Transportation," and "Confronting HIV/AIDS in San Francisco," among others.

<http://www.stanford.edu/group/ASB/cgi-bin/prod/home>

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

Sustainability Literacy Assessment

Responsible Party

Moira Hafer

Sustainability Analyst
Office of Sustainability

Criteria

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

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

This credit includes graduate as well as undergraduate students.

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

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

0

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

70

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

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

R&DE Student Housing included the following question that draws upon students' knowledge of sustainability topics in its annual student housing survey:

"R&DE Student Housing is looking to enhance sustainability and conservation efforts. What opportunities do you think exist for Housing as a whole and/or within your specific community, and what programs would you like to see offered?"

Additionally, R&DE Stanford Dining included the following sustainability questions in its annual survey. To better serve the purposes of Stanford Dining, these questions focus more heavily on students' values regarding sustainable food. While these questions do not capture data on students' sustainability knowledge, they do compliment the question included in the Student Housing survey to provide R&DE with valuable information on both students' sustainability knowledge and their core values and behaviors.

From R&DE Stanford Dining:

(A) Using a scale of 1 - 4, where 4 is most important, please rate the importance to you of the following:

- (1) eating food that is locally grown or raised
- (2) composting your food scraps
- (3) eating grass-fed or pasture-raised meat
- (4) eating a more plant-based diet
- (5) eating food that is grown or raised on small family farms
- (6) eating humanely raised meat, eggs, and dairy products
- (7) "fairly traded" products

(B) The following six questions will ask you to rate the importance of various characteristics of the food you eat. Using a scale of 1 - 4, where 4 is most important, please rate the importance to you of the following:

- (1) taste and aroma
- (2) speed and convenience
- (3) appearance
- (4) environmental impact
- (5) social impact
- (6) familiarity

(C) The following five questions will ask you to rate how important various issues are to you, compared to other things in your life. Using a scale of 1 - 4, where 4 is most important, compared to other things in your life, how important is:

- (1) eating a healthful diet
- (2) staying physically fit
- (3) environmental sustainability
- (4) animal rights
- (5) social justice

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

A growing emphasis on sustainability as a campus priority has led to the inclusion of knowledge-based sustainability questions in the annual student housing survey. The annual student dining survey also includes sustainability questions that are more value-based. For both surveys, the questions were presented and discussed during monthly sustainability staff meetings, a series of coordination and planning meetings organized by the Office of Sustainability to connect staff working on sustainability throughout campus, including staff from Residential & Dining Enterprises. The question in the student housing survey was developed with the intention of utilizing students' knowledge of sustainability topics to enhance Stanford's Student Housing programs. On the other hand, the questions in the student dining surveys were primarily developed to gain a better understanding of the value students place on sustainable food in order to inform the actions of the Stanford Dining program.

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

An annual student housing survey is sent to all students who reside on-campus (graduate and undergraduate -- 70% of the enrolled student body). Both the housing and dining questions were administered electronically via online surveys.

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

The surveys were analyzed by R&DE staff to identify opportunities for program improvement and other trends in student sustainability preferences. Major themes that emerged can be characterized as follows:

- 24% of responses mentioned that convenience enhances/facilitates adoption of sustainable behaviors
- 28% of responses mentioned a strong desire for more outreach/education from R&DE

- 23% of students consider themselves self-motivated with respect to sustainability
- composting was frequently mentioned as a priority and personally important, and the new composting program in graduate housing was mentioned explicitly

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

Incentives for Developing Courses

Responsible Party

Moira Hafer

Sustainability Analyst
Office of Sustainability

Criteria

Institution has an ongoing program or programs that offer incentives for faculty in multiple disciplines or departments to develop new sustainability courses and/or incorporate sustainability into existing courses or departments. The program specifically aims to increase student learning of sustainability.

Incentives may include release time, funding for professional development, and trainings offered by the institution.

Incentives for expanding sustainability offerings in academic, non-credit, and/or continuing education courses count for this credit.

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

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

Yes

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

Stanford provides incentives for developing sustainability classes through multiple departments and institutes, including the Stanford Woods Institute for the Environment, Precourt Institute for Energy, and School of Earth Sciences. Affiliation with these organizations offers faculty who teach sustainability courses numerous professional development and other incentives.

The Stanford Woods Institute was founded in 2004 as part of The Stanford Challenge, a university-wide initiative to address the world's most pressing problems of the modern era, including the Initiative on the Environment and Sustainability. The Woods Institute supports environmental research, teaching, and learning at all levels of the university.

The Precourt Institute for Energy (PIE) serves as a hub for a number of centers, programs, and projects related to interdisciplinary energy research and learning at Stanford. PIE provides funding and associated support for cutting-edge energy research, creates and maintains avenues for effective communication and intellectual exchange among scholars and others seeking energy solutions, and develops energy-literate leaders and communities through educational programs and the dissemination of research results.

Stanford's School of Earth Sciences houses two of the university's largest interdisciplinary sustainability programs: the Earth Systems program and the Emmett Interdisciplinary Program in Environment and Resources. Both of these programs seek to educate the next generation of environmental leaders and scholars.

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

The Stanford Woods Institute and PIE have the ability to appoint their own faculty fellows. Faculty who accept affiliation with one of these programs have access to a range of resources and incentives for creating sustainability courses, including complimentary TAs for sustainability courses and professional development. PIE administers the ongoing Energy Seminar, a weekly lecture series in which professors and researchers are invited to speak about sustainability issues. Through the weekly Environmental Forum series, the Woods Institute holds academic interdisciplinary talks for Woods Faculty and Woods Affiliated Faculty throughout the academic year on a weekly basis.

The Woods Institute recently standardized the teaching of sustainability courses by creating its own course catalog designation, ENVRINST. Now, sustainability courses at Stanford need not be confined by the designation of a particular department, but instead can be taught under the Woods Institute designation. This enables and incentivizes non-traditional faculty, such as staff and Institute Fellows, to teach sustainability courses.

Throughout 2010 and 2011, the university launched the Study of Undergraduate Education at Stanford, which sought to re-evaluate how the undergraduate curriculum and requirements are determined. The full text of the report, which addresses sustainability courses, can be found online:

http://www.stanford.edu/dept/undergrad/sues/SUES_Report.pdf

Over the past three years, Stanford has created university-wide momentum for teaching more sustainability courses. As stated in President Hennessy's 2011 Annual Report, "the Stanford Challenge also provided essential facilities to support groundbreaking research and teaching. By the campaign's conclusion, 26 new buildings — including 10 that support multidisciplinary research and teaching — had been constructed. Many replaced buildings that were more than 50 years old and completely unable to support modern research or teaching." An opportunity to teach in a world-class facility has incentivized faculty members to develop sustainability and other multidisciplinary courses.

Finally, faculty members who develop and teach classes above and beyond the typical schedule are financially compensated for their additional effort. Therefore, there is a financial incentive to develop and offer new courses at Stanford, and some faculty have developed sustainability courses in order to take advantage of this incentive. For example, two new Thinking Matters courses, "Sustainability and Collapse," and "A Transition Towards Sustainability" qualified for this financial incentive.

For more information, please visit:

<http://annualreport.stanford.edu/2011/>

<http://woods.stanford.edu/>

<http://pie.stanford.edu/>

<http://www.stanford.edu/dept/undergrad/sues/>

<https://undergrad.stanford.edu/programs/thinking-matters/teach/propose-new-course>

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

Responsible Party

Moira Hafer

Sustainability Analyst
Office of Sustainability

Criteria

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

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

This credit includes substantive work by students and/or faculty (e.g. class projects, thesis projects, term papers, published papers) that involves active and experiential learning and contributes to positive sustainability outcomes on campus (see the Credit Example in the [STARS Technical Manual](#)). On-campus internships and non-credit work (e.g. that take place under supervision of sustainability staff or committees) may count as long as the work has a learning component.

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

Submission Note:

The attached URL links to a report on President Hennessy's address to the Academic Council in April 2014. The address focused on sustainability at Stanford and featured a panel of four campus sustainability experts: Pamela Matson, dean of the School of Earth Sciences; Shirley Everett, senior associate vice provost of Residential and Dining Enterprises; Joseph Stagner, executive director of sustainability and energy management; and Fahmida Ahmed, associate director of sustainability and energy management. Hennessy's

remarks--as well as the brief presentations by each panelist--featured the sustainability initiatives at Stanford that truly make the campus a living laboratory.

<http://news.stanford.edu/news/2014/april/academic-council-sustainability-041714.html>

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

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

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

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

Stanford Energy System Innovations (SESI) is an example of the campus operations serving as a living laboratory for impact on air and climate. Upon its completion in 2015, SESI will reduce campus carbon emissions 50% below 1990 levels. The SESI program began with the development of the Energy and Climate Plan, which was a high-priority study that incorporated various industry and faculty peer reviews from inception to approval. SESI studies have also engaged graduate student researchers to verify models and assist with other assessments. For instance, the Department of Sustainability and Energy Management (SEM) partnered with the Stanford Solar and Wind Energy Project, a student group, to carry out studies on the campus solar potential. The Precourt Institute for Energy (PIE) hosted one of its prestigious Energy Seminars on SESI on October 29, 2012. For more information, visit:

<http://energyseminar.stanford.edu/node/481>

<http://sesi.stanford.edu>

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

The Center for Integrated Facility Engineering (CIFE) is an academic research center for Virtual Design and Construction of Architecture/Engineering/Construction (AEC) industry projects. The Center supports exceptionally reliable engineering and management practices to plan, design, construct and operate sustainable facilities. To accomplish these objectives, CIFE brings together faculty members, researchers, students, and industry participants from diverse domains, such as civil engineering, architecture, computer science, business, and law. CIFE also regularly interacts with Stanford's Facilities Energy Management (FEM) team within the Department of Sustainability and Energy Management (SEM). FEM team members serve as guest speakers for CIFE courses, help review student projects and provide feedback on research needs regarding the operation of high-performance buildings. Please visit

<http://cife.stanford.edu/>

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:

Stanford Residential and Dining Enterprises (R&DE) hires student interns to manage Stanford Dining Hall Gardens that are an integral part of R&DE's Sustainable Food education and outreach program. Each student intern manages one of the dozen campus gardens across campus for the entire duration of the academic year, growing and providing organic produce to the Stanford Dining Halls and reporting to the Sustainable Food Program Manager. Throughout this internship, these student interns learn not only sustainable farming/gardening practices, but also accountability and time management skills. Finally, these student interns have the opportunity to work on various other Sustainable Food Program projects as well in order to learn and expand on the fundamentals of organic gardening, to meet and work with

other people interested in sustainable food, and to be involved in educational and community outreach events. Visit

<http://www.stanford.edu/dept/rde/cgi-bin/drupal/dining/node/215>

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

The Office of Sustainability works with the Woods Institute for the Environment to organize a class, last offered in Winter Quarter 2012, entitled “Creating a Green Student Workforce to Help Implement Stanford’s Sustainability Vision.” The class is jointly offered through the Civil and Environmental Engineering and Earth Systems departments and focuses on practical training on energy efficiency and conservation measures for students to implement across campus. The course description reads, “Examination of program-based local actions that promote resource conservation and an educational environment for sustainability. Examination of building-level actions that contribute to conservation, lower utility costs, and generate understanding of sustainability consistent with Stanford’s commitment to sustainability as a core value. Overview of operational sustainability including energy, water, buildings, waste, and food systems. Practical training to enable students to become sustainability coordinators for their dorms or academic units.” An example of a class project in 2012 was to audit and install smart power strips and programmable timers in the Blume Earthquake Center on campus. The Office of Sustainability also leads a training entitled “Sustainable Office Spaces” that is open to students, staff and faculty that trains attendees on energy efficiency measures that they can take in their offices, workspaces, or dorms. This training is offered twice each fall as part of the university’s Cardinal Green Buildings campaign. For more information on this training, visit:

<http://sustainable.stanford.edu/trainings>

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:

Stanford engages students in its landscape and grounds in several ways. First, Stanford offers several classes at the Stanford Community Farm, which is located on campus. For instance, in “Principles and Practices of Sustainable Agriculture,” offered through the Earth Systems and Environmental Earth Systems Sciences departments, students engage in field-based training in ecologically sound agricultural practices at the Stanford Community Farm. Projects and coursework revolve around working with a team to apply sustainable farming techniques to an independent section of the farm, with each team held accountable for the crops it grows. The food produced through this class is regularly donated to Stanford Dining, where it is used in meal production in dining halls.

Secondly, Stanford constructed teaching gardens in the recently completed Science and Engineering Quad. These gardens mirror the landscaping of Stanford’s original main quad, but were designed specifically as teaching gardens for the interdisciplinary staff residing in each of the four quad buildings to utilize during their classes. Each of the four gardens has a different theme: plants used for dyes, medicinal plants, local and drought tolerant plants, and plants traditionally used by the Ohlone tribe in the Bay Area. Additionally, Stanford’s Building and Grounds Maintenance department constructed a separate Waterwise Demonstration Garden on campus that serves as an example for students and local residents of how to employ alternatives to thirsty residential landscapes. It also has a water meter on display to illustrate its low water consumption and showcases drip irrigation and California native plants. More information on the Waterwise garden is available here:

<http://bgm.stanford.edu/groups/grounds/special/waterwise>

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

The One Less, Save More campaign conducted by the Office of Sustainability made it easy and rewarding for employees to purchase goods and services in ways that minimize negative impacts on the environment. Stanford's Sustainable Purchasing Guidelines outline the university's criteria for sustainable purchasing, and the Office of Sustainability developed this campaign to augment these guidelines. The campaign suggested three ways for employees to contribute to sustainable purchasing: (1) consider consuming less; (2) consider consolidating orders; and (3) choose reusable products and/or high recycled content products from SmartMart (Stanford's online purchasing platform). The campaign asked employees to get involved by making a pledge, choosing environmentally-friendly paper, and consolidating and reducing departmental orders. By providing employees with the tools to make a difference in their purchasing behaviors, Stanford sets a positive example for students and other campus stakeholders. Visit

http://sustainable.stanford.edu/be_cardinal_green_smartbuys

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:

To reduce traffic congestion and vehicle emissions, Stanford launched Capri (Congestion and Parking Relief Incentives) in April 2012 as a collaborative effort between Stanford researchers and Stanford's Department of Parking and Transportation. This innovative research pilot project uses radio-frequency identification technology to track when participating commuters enter and exit campus and reward off-peak commutes. The project, led by Electrical Engineering and Computer Science professor Balaji Prabhakar, has also benefited from the input of graduate student researchers. Visit

<http://news.stanford.edu/news/2012/april/traffic-incentive-study-040212.html>

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:

Waste:
Stanford's Recycling Center, PSSI, worked with several student interns over the course of the 2013-2014 academic year to improve waste and recycling at Stanford. Student interns work in the areas of café composting, video marketing, outreach, zero waste, and planning and execution of Recyclemania, a national recycling competition among schools in higher education. All interns gain experience in the field of waste reduction, recycling and composting in addition to a deeper understanding of the challenges of achieving a sustainable zero waste society. Visit

<http://sustainable.stanford.edu/internships>

In addition, PSSI is currently working with graduate students from the Institute of Design at Stanford (the d.school) to research the possibility of selling animal feed created through a proprietary food waste program to farms with whom Stanford partners for its meat

products.

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:

On March 25, 2014, Stanford broke ground on a new wastewater facility entitled the William and Cloy Codiga Resource Recovery Center. The facility is a collaborative effort among university water resource specialists in the Department of Sustainability and Energy Management (SEM) and faculty researchers from the Department of Civil and Environmental Engineering, the Woods Institute for the Environment and the Stanford-led Engineering Research Center for Re-inventing the Nation's Urban Water Infrastructure (ReNUWIt). Faculty and student researchers will use the facility to test promising technologies for both recovery of clean water and energy from wastewater. Visit

<http://news.stanford.edu/news/2014/march/water-recovery-facility-032414.html>

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:

In 2013, Stanford's Office of Sustainability was tasked with a large coordination and planning effort revolving around the structure of its year-round sustainability campaigns. The structure of these sustainability promotions needed to be reevaluated in order to increase the overall visibility of sustainability on campus and streamline the participation process for the campus community. In order to plan for a new campaign structure, it was necessary to learn what types of incentives were most appealing to students. To study this, a student intern in the Office of Sustainability prepared and distributed a survey for students to determine what types of rewards motivated them most, from gift cards to apparel to cash rewards. After receiving a couple hundred responses, the student intern analyzed the results and submitted recommendations to the Office of Sustainability. Based on the positive outcome of this student's work, she then helped the Office of Sustainability reorganize the incentive structure for sustainability campaigns, resulting in a high level of success of subsequent campaigns, such as the Cardinal Green Buildings campaign and the Recyclemania competition.

Additionally, to aid in planning for Stanford's response to the California drought in 2014, a team of graduate students worked with Residential & Dining Enterprises staff to conduct a study of the effectiveness of various types of signage in promoting the washing of full loads of laundry in Stanford's undergraduate laundry rooms. This study provided results that will be incorporated into R&DE's overarching water conservation strategies and plan in the 2014-15 academic year.

Finally, elected students serve on the Sustainability Working Group (SWG) committee, which prepares policy and program recommendations to advance and implement sustainability practices on campus. As with all members of SWG, these students are asked to provide input into key sustainability challenges on campus and are tasked with action items from the committee when appropriate.

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:

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:

BeWell at Stanford serves as the overarching health and wellness resource for Stanford University. By facilitating a culture of wellness at Stanford, BeWell encourages individuals, departments and families to adopt and maintain healthy lifestyle behaviors. The program begins with the Stanford Health and Lifestyle Assessment, an online health risk assessment for employees. Employees then go through a wellness screening and advising session, where they compile a wellness plan. Then, employees are able to accrue "berries" for attending workshops and performing other activities that promote healthy behaviors. Employees receive incentives both after completing the wellness profile after accruing 6 berries in a calendar year.

Stanford's BeWell program launched a wellness program for students on October 1, 2013 to expand upon the wellness program it has offered to employees since 2008. As one example of student involvement in this program, BeWell developed a new online student wellness magazine called Student Health 101, which features articles written by Stanford students and staff. Visit

<https://bewell.stanford.edu/ppl/students>

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:

Stanford's Advisory Panel on Investment Responsibility and Licensing (APIR-L) contains two undergraduate student members and two graduate student members. These students contribute to all of the committee's activities and are elected by the Associated Students of Stanford University (ASSU). Along with other committee members, student responsibilities include (1) developing and/or amending core social issue policy statements and proxy voting guidelines for shareholder resolutions; (2) receiving, reviewing, and providing analysis on Requests for Reviews and making recommendations to Stanford University's President and Board of Trustees on future action; (3) Researching and presenting written reports and providing background information on support of the Panel's action recommendations; and (4) Monitoring, researching, and reporting on issues and trends in Investment Responsibility. For example, in May 2014, acting on a recommendation of Stanford's APIR-L, the Board of Trustees announced that Stanford will not make direct investments in coal mining companies. The Board of Trustees concurred with the advisory panel that divesting from coal is consistent with the university's Statement on Investment Responsibility given the current availability of alternatives to coal that have less harmful environmental impacts.

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:

Stanford offers many courses that transform the campus into a living laboratory for public engagement. For instance, the course Sustainable Cities, offered through the Earth Systems and Urban Studies departments, is a service-learning course that exposes students to sustainability concepts and urban planning as a tool for determining sustainable outcomes in the Bay Area. The course focuses on the relationship of land use and transportation planning to housing and employment patterns, mobility, public health, and social equity. Topics include government initiatives to counteract urban sprawl and promote smart growth and livability, political realities of organizing and building coalitions around sustainability goals, and increasing opportunities for low-income and communities of color to achieve sustainability outcomes. Students participate in team-based projects in collaboration with local community partners and take part in significant off-site fieldwork. In the past five years, Stanford students have completed 23 projects for the Sustainable Cities class in collaboration with Bay Area non-profit organizations and government agencies, including Redwood City, the SF Bicycle Coalition, Friends of Caltrain, the San Mateo County Health Department, and many others.

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:

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

<http://news.stanford.edu/news/2014/april/academic-council-sustainability-041714.html>

Research

This subcategory seeks to recognize institutions that are conducting research on sustainability topics. Conducting research is a major function of many colleges and universities. By researching sustainability issues and refining theories and concepts, higher education institutions can continue to help the world understand sustainability challenges and develop new technologies, strategies, and approaches to address those challenges.

Credit
Academic Research
Support for Research
Access to Research

Responsible Party

Moira Hafer

Sustainability Analyst
Office of Sustainability

Criteria

Part 1

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

Part 2

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

Any level of sustainability research is sufficient to be included for this credit. In other words, a researcher who conducts both sustainability research and other research may be included.

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

Each institution is free to choose a methodology to identify sustainability research that is most appropriate given its unique circumstances. For example, an institution may distribute a survey to all faculty members and ask them to self-identify as being engaged in sustainability research or ask the chairperson of each department to identify the sustainability research activities within his or her department. The research inventory should be based on the definition of "sustainability research" outlined in Standards and Terms and include, at minimum, all research centers, laboratories, departments, and faculty members whose research focuses on or is related to sustainability.

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

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

346

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

1,350

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

66

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

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

[AC 9 - Stanford Faculty in Sustainability Research.pdf](#)

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

Please see attached documentation, which includes information from both the Woods Institute for the Environment and the Precourt Institute for Energy faculty research databases, among others.

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

All tenure line faculty at Stanford conduct research. The inventory consists of information from both the Woods Institute for the Environment and the Precourt Institute for Energy faculty research databases, among others.

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

Please note that there are many examples of faculty accomplishments in the Sustainability at Stanford: A Year in Review publication, available online:

<http://sustainable.stanford.edu/sites/sustainable.stanford.edu/files/documents/Sustainability-a>

[t-Stanford-2012-13.pdf](#)

The website URL where information about sustainability research is available:

<https://woods.stanford.edu/research>

Support for Research

Responsible Party

Moira Hafer

Sustainability Analyst
Office of Sustainability

Criteria

Institution encourages and/or supports sustainability research through one or more of the following:

- An ongoing program to encourage students in multiple disciplines or academic programs to conduct research in sustainability. The program provides students with incentives to research sustainability. Such incentives may include, but are not limited to, fellowships, financial support, and mentorships. The program specifically aims to increase student sustainability research.
 - An ongoing program to encourage faculty from multiple disciplines or academic programs to conduct research in sustainability topics. The program provides faculty with incentives to research sustainability. Such incentives may include, but are not limited to, fellowships, financial support, and faculty development workshops. The program specifically aims to increase faculty sustainability research.
 - Formally adopted policies and procedures that give positive recognition to interdisciplinary, transdisciplinary, and multidisciplinary research during faculty promotion and/or tenure decisions.
 - Ongoing library support for sustainability research and learning in the form of research guides, materials selection policies and practices, curriculum development efforts, sustainability literacy promotion, and e-learning objects focused on sustainability.
-

"---" 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:

RISING ENVIRONMENTAL LEADERS PROGRAM

<http://woods.stanford.edu/ideas/rising-environmental-leaders-program.html>

The Rising Environmental Leaders Program provides graduate students and postdoctoral scholars with leadership and communications skills as well as guidance on how to use those skills and their research for the greatest impact. Participants are also extended professional development opportunities including introductions to global leaders from government, NGOs, think tanks and business.

GOLDMAN HONORS PROGRAM

<https://woods.stanford.edu/educating-leaders/education/goldman-honors-program>

The Goldman Honors Program supports undergraduate students who want to write environmental theses. The program brings upper division undergraduate students from Stanford University's schools of Humanities and Sciences, Engineering, and Earth Sciences together into small group seminars to analyze important environmental problems. Requirements include three quarters of seminar participation, the preparation of an honors thesis, and, where relevant, field study related to the student's thesis topic.

UNDERGRADUATE INTERDISCIPLINARY RESEARCH PROGRAM

<http://woods.stanford.edu/uirp.php>

The Undergraduate Interdisciplinary Research Program from the Woods Institute for the Environment provides full- and part-time student stipends to Stanford undergraduates to conduct interdisciplinary environmental research during the summer term. Faculty are welcome to apply on behalf of undergraduates at all levels and from all departments. Funding priority goes to Woods Institute fellows, lecturers and affiliated faculty. Students wishing to initiate a project will need to approach a faculty member who is willing to apply on the student's behalf.

DC BOOT CAMP

<https://woods.stanford.edu/sites/default/files/documents/2014-DC-Boot-Camp-Agenda.pdf>

The Stanford Woods Institute for the Environment's DC Boot Camp is a one-week hands-on program where graduate students learn the "do's and don'ts" of funding environmental research and how to have impact in the policy environment of Washington DC. Twenty graduate students and postdocs garner first-hand knowledge about national policy development, partnership building and public service, leadership and communications skills and how to use those skills and their research for the greatest impact.

SES SUMMER UNDERGRADUATE RESEARCH PROGRAM

<http://pangea.stanford.edu/faculty-research/undergraduate-research/summer-research-program>

Through the School of Earth Sciences Summer Undergraduate Research Program, undergraduate students work with faculty, post-docs, and graduate students throughout the School of Earth Sciences. Their research projects span the breadth of the four departments (Energy Resources Engineering, Environmental Earth System Science, Geophysics, and Geological and Environmental Sciences), interdisciplinary programs (Earth Systems and IPER), and associated research institutes (Precourt Energy Efficiency Center, Woods Institute for the Environment, and the Carnegie Institute). The Summer Undergraduate Research Program in the School of Earth Sciences has been in place since 2001, and many undergraduate students have been involved over that time.

THE GREEN FUND

http://sustainable.stanford.edu/green_fund

The Stanford Student Green Fund provides grants for innovative student-driven projects designed to create a more sustainable campus. A total of \$30,000 per academic year is available to fund projects. Projects must aim to reduce Stanford's ecological footprint, have a clearly defined, measurable outcome, incorporate publicity, education or outreach, and include direct student involvement. Projects funded in the 2013-2014 academic year include Graduate School of Business Students designing a "Climate Act @ GSB" initiative, a Students for a Sustainable Stanford (SSS) program piloting environmentally friendly cleaning practices in student residences, the purchase and installation of a water bottle filling station on campus, and several projects run by R&DE Student Housing interns.

MEL LANE GRANT PROGRAM

<https://woods.stanford.edu/mel-lane-program.php>

Mel Lane Student Program Grants are provided to student driven and managed environmental projects that make a measureable impact on an issue through action or applied research. Preference is given to projects that focus on environmental sustainability within one of the following topic areas: built environment, climate, food security and supply, natural capital, ocean and coasts, public health, sustainable development and water. In addition, projects should involve Stanford students and provide an educational experience for students and a broader community. Proposals are accepted twice a year during fall and winter terms. The institute has an annual budget of \$10,000 to support projects.

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

<https://woods.stanford.edu/educating-leaders/education>

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:

WOODS INSTITUTE FOR THE ENVIRONMENT

The Ward W. and Priscilla B. Woods Institute for the Environment (

<http://woods.stanford.edu/>

) harnesses the expertise and imagination of leading academics and decision-makers to create practical solutions for people and the planet. The Institute played a critical role in Stanford's Initiative on the Environment and Sustainability, and is one of just a few campus Institutes given the ability to appoint faculty Fellows. Faculty interested in conducting sustainability research can become Fellows at the Woods Institute either in addition to departmental status or as an exclusive appointment.

In addition, the Woods Institute manages a special research grant program for sustainability projects. Environmental Venture Projects (EVP) are seed grants awarded annually to Stanford faculty for innovative research that focuses on finding solutions to key environmental and sustainability challenges, such as protecting endangered species in California to delivering clean drinking water in Africa. Since 2004, the Stanford Woods Institute has awarded over \$6M in EVP grants to 44 interdisciplinary research teams from all seven Stanford schools and 26 departments for projects in the United States and abroad.

For more information, please visit:

<https://woods.stanford.edu/research/environmental-venture-projects>

PRECOURT INSTITUTE FOR ENERGY (PIE)

The Precourt Institute for Energy (PIE) engages in a broad-ranging, interdisciplinary program of research and education on energy – applying fundamental research to the problem of supplying energy in environmentally and economically acceptable ways, using it efficiently, and facing the behavioral, social, and policy challenges of creating new energy systems for the U.S. and the world.

PIE serves as the hub of a broad and deep network of experts from various science, technology, behavioral, and policy disciplines who are working independently and collaboratively to solve the world's most pressing energy problems.

PIE's mission is to advance the goal of major and rapid energy transformations. PIE provides funding and associated support for cutting-edge energy research, creates and maintains avenues for effective communication and intellectual exchange among scholars and others seeking energy solutions, and develops energy-literate leaders and communities through educational programs and the dissemination of research results.

For more information, please visit:

<http://pie.stanford.edu/>

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

<https://woods.stanford.edu/research/environmental-venture-projects>

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:

Stanford places a strong emphasis on multidisciplinary work by its faculty. Multidisciplinary research is one of the central themes of the Stanford Challenge, a university-wide program introduced in 2006 to tackle the most pressing global challenges of the next century. Through the Stanford Challenge, hundreds of millions of dollars have been raised to support multidisciplinary research, with funds going towards Professorships and Faculty Support, Programmatic and Research Support, and new multidisciplinary facilities. More than 100 new faculty positions and more than 300 new graduate fellowships were endowed.

For more information on multidisciplinary research and the success of the Stanford Challenge, please visit:

<http://news.stanford.edu/news/2012/february/stanford-challenge-concludes-020812.html>

Since 1990, Stanford has allowed selected Interdisciplinary Institutes on campus to make their own faculty appointments and promotions. The university states, “while reaffirming the value of coupling academic appointments in policy centers and institutes to faculty appointments in existing academic departments, it was recognized that interdisciplinary policy centers may have needs not met by regular professorial appointments in existing departments.” These Interdisciplinary Institutes include the Freeman Spogli Institute for International Studies, the Precourt Institute for Energy at Stanford, the Stanford Institute for Economic Policy Research, and the Woods Institute for the Environment. Each of these institutes can appoint Senior Fellows and Center Fellows, both of which are members of the Academic Council, regardless of any other appointments. These fellows can be faculty in their own department or can be completely appointed by that institute, giving institutes the freedom to promote anyone without university restrictions.

Relevant excerpts from the Faculty Handbook include:

<http://facultyhandbook.stanford.edu/ch2.html#joint>

<http://facultyhandbook.stanford.edu/ch2.html#senior>

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

<http://facultyhandbook.stanford.edu/ch2.html#senior>

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:

Stanford University Libraries maintains extensive collections to support sustainability research. Librarians regularly support classes and research in this area, including the following examples:

<http://library.stanford.edu/guides/planet-edge-rhetoric-sustainable-energy-0>

<http://library.stanford.edu/guides/sustaining-action-research-analysis-and-writing-public>

<http://library.stanford.edu/guides/writing-nature-discourses-ecology-culture-and-technology>

<http://library.stanford.edu/guides/staying-cool-hot-planet-environmental-rhetoric-changing-world>

d

Librarians develop research guides to assist researchers in sustainability fields:

<http://library.stanford.edu/guides/green-building-resources>

In addition, the libraries have occasionally hosted presentations with a sustainability theme, including this presentation by Martin McDonough:

<http://library.stanford.edu/blogs/special-collections-unbound/2013/05/upcycle-beyond-sustainability-designing-abundance>

lity-designing-abundance

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

Responsible Party

Moira Hafer

Sustainability Analyst
Office of Sustainability

Criteria

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

The open access repository may be managed by the institution or the institution may participate in a consortium with a consortial and/or outsourced open access repository.

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

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

7

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

7

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

For the full text of the university policy on openness in research, please visit the following website:

<http://doresearch.stanford.edu/policies/research-policy-handbook/conduct-research/openness-research>

arch

. An excerpt is included below for reference.

EXCERPT FROM STANFORD'S POLICY ON OPENNESS IN RESEARCH:

The rules adopted by the Academic Council on September 29, 1967, are hereby amended and, as amended, are reaffirmed:

(1) No research on a thesis or dissertation should be undertaken if, at the time the topic is set, there is any substantial possibility that it will lead to a secret thesis or dissertation.

(2) No secret thesis or dissertation should be accepted as the basis for a degree unless, in the judgment of the Committee on Graduate Studies, the imposition of secrecy could not reasonably have been foreseen until the work was so far advanced that modification of the thesis topic would have resulted in substantial inequity to the student.

(3) Scholarly activities not accessible for scrutiny by the entire Advisory Board should not be considered in connection with appointments, reappointments or promotions.

(4) The University should enter no contract and accept no grant to carry out research if the grant or contract restrains the freedom of the University to disclose the:

(4A) Existence of the contract or grant or,

(4B) General nature of the inquiry to be conducted or,

(4C) Identity of the outside contracting or granting entity or,

(4D) The research results;

provided that this clause shall not apply either (a) to anonymous gifts or grants that do not call for the performance of specified lines of inquiry, or (b) to research grants or contracts from individuals or non-governmental entities who request anonymity out of a justifiable motivation to protect individual privacy.

Research is available from a variety of sources, including publications, libraries, institutes, etc.

A copy of the open access policy:

The open access policy:

For the full text of the university policy on openness in research, please visit the following website:

<http://doresearch.stanford.edu/policies/research-policy-handbook/conduct-research/openness-research>

. An excerpt is included below for reference.

EXCERPT FROM STANFORD'S POLICY ON OPENNESS IN RESEARCH:

That the principle of openness in research - the principle of freedom of access by all interested persons to the underlying data, to the processes, and to the final results of research - is one of overriding importance. Accordingly, it is the decision of the Senate that that principle be implemented to the fullest extent practicable, and that no program of research that requires secrecy (as hereafter defined) be conducted at Stanford University, subject to the exceptions set forth in Paragraph 4 of this Resolution.

The website URL where the open access repository is available:

<http://doresearch.stanford.edu/policies/research-policy-handbook/conduct-research/openness-research>

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

Stanford University Libraries maintains extensive collections to support sustainability research. Librarians regularly support classes and research in this area, including the following examples:

<http://library.stanford.edu/guides/planet-edge-rhetoric-sustainable-energy-0>

<http://library.stanford.edu/guides/sustaining-action-research-analysis-and-writing-public>

<http://library.stanford.edu/guides/writing-nature-discourses-ecology-culture-and-technology>

<http://library.stanford.edu/guides/staying-cool-hot-planet-environmental-rhetoric-changing-world>

d

Librarians develop research guides to assist researchers in sustainability fields. For example:

<http://library.stanford.edu/guides/green-building-resources>

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

<http://doresearch.stanford.edu/policies/research-policy-handbook/conduct-research/openness-research>

Engagement

Campus Engagement

This subcategory seeks to recognize institutions that provide their students with sustainability learning experiences outside the formal curriculum. Engaging in sustainability issues through co-curricular activities allows students to deepen and apply their understandings of sustainability principles. Institution-sponsored co-curricular sustainability offerings, often coordinated by student affairs offices, help integrate sustainability into the campus culture and set a positive tone for the institution.

In addition, this subcategory recognizes institutions that support faculty and staff engagement, training, and development programs in sustainability. Faculty and staff members' daily decisions impact an institution's sustainability performance. Equipping faculty and staff with the tools, knowledge, and motivation to adopt behavior changes that promote sustainability is an essential activity of a sustainable campus.

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

Student Educators Program

Responsible Party

Moira Hafer
Sustainability Analyst
Office of Sustainability

Criteria

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

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

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

This credit recognizes ongoing student educator programs that engage students on a regular basis. For example, student educators may be responsible for serving (i.e. directly targeting) a particular subset of students, such as those living in residence halls or enrolled in certain academic subdivisions. Thus, a group of students may be served by a program even if not all of these students avail themselves of the outreach and education offerings.

Sustainability outreach campaigns, sustainability events, and student clubs or groups are not eligible for this credit unless the criteria outlined above are met. These programs are covered by *EN 5: Outreach Campaign* and *EN 3: Student Life*.

"---" 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:

15,957

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

Green Living Council

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

6,719

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

The Green Living Council is a group of trained students who act as “Green Living Coordinators” for individual dorms/residence halls and provide environmental education and outreach to dorm members. Examples of the peer-to-peer outreach include administration of the university's Green Living Pledge, kick-off presentations during New Student Orientation, and organization of the annual "Energy Wars / Water Wars" event. All undergraduate dorms are served by Green Living Coordinators, and 96% of undergraduates live in campus housing (undergraduate headcount = 6999 for academic year 2012 - 2013).

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

To become a Green Living Coordinator, students must submit a brief application. The organization receives both staff and financial support from Student Housing at Stanford, and the leaders of the Green Living Council work directly with sustainability staff within Student Housing.

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

Green Living Coordinators participate in a two-unit course entitled “Promoting Behavior Change at Stanford.”

<http://explorecourses.stanford.edu/search?view=catalog&filter-coursestatus-Active=on&page=0&catalog=&q=EARTHSYS18>

The course explores new research on different strategies that achieve maximum success and engagement with target audiences and provides strategies for effective program design.

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

The two-unit training course is taught by Stanford Professor Tom Robinson. GLC members are encouraged to apply for grant funding from the Stanford Green Fund to implement sustainability projects within their dorms. The GLC also receives institutional support from the Office of Sustainability, Student Housing, and Stanford Dining.

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

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

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

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

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

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

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

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

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

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

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

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

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

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

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

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

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

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

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

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

Responsible Party

Moira Hafer

Sustainability Analyst
Office of Sustainability

Criteria

Institution includes sustainability prominently in its student orientation activities and programming. Sustainability activities and programming are intended to educate about the principles and practices of sustainability. The topics covered include multiple dimensions of sustainability (i.e. social, environmental and economic).

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

As this credit is intended to recognize programming and student learning about sustainability, incorporating sustainability strategies into event planning (e.g. making recycling bins accessible or not serving bottled water) is not, in and of itself, sufficient for this credit. Such strategies may count if they are highlighted and are part of the educational offerings. For example, serving local food would not, in and of itself, be sufficient for this credit; however, serving local food and providing information about sustainable food systems during meals could contribute to earning this credit.

"---" 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:

Prior to arriving on campus, all incoming and transfer students are emailed a digital copy of the "Student Sustainable Living Guide," a helpful overview of Stanford's sustainability programs and practical advice on how to save energy & water and reduce waste on campus. The guide includes an opening letter co-signed by Office of Sustainability leadership that describes why Stanford considers sustainability to be a key component of the university's mission and the overall Stanford experience.

All freshmen participate in a zero waste lunch during New Student Orientation. Boxed lunches that include only compostable and recyclable materials are prepared for all students. At the zero waste lunch students learn details about waste reduction efforts at Stanford, including how to compost and recycle successfully on campus. Student volunteers station themselves at each compost and recycle bin to ensure waste is sorted and disposed of properly. In addition, informational booths run by sustainability staff members provide more information about sustainability on campus and are available for student questions throughout the event.

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

<http://www.stanford.edu/dept/rde/cgi-bin/drupal/housing/sites/default/files/SLG.pdf>

Responsible Party

Moira Hafer

Sustainability Analyst
Office of Sustainability

Criteria

Institution has co-curricular sustainability programs and initiatives. The programs and initiatives fall into one or more of the following categories:

- Active student groups focused on sustainability
- Gardens, farms, community supported agriculture (CSA) or fishery programs, and urban agriculture projects where students are able to gain experience in organic agriculture and sustainable food systems
- Sustainable enterprises that include sustainability as part of their mission statements or stated purposes (e.g. cafés through which students gain sustainable business skills)
- Sustainable investment funds, green revolving funds or sustainable microfinance initiatives through which students can develop socially, environmentally and fiscally responsible investment and financial skills
- Conferences, speaker series, symposia or similar events related to sustainability that have students as the intended audience
- Cultural arts events, installations or performances related to sustainability that have students as the intended audience
- Wilderness or outdoors programs (e.g. that organize hiking, backpacking, kayaking, or other outings for students and follow Leave No Trace principles)
- Sustainability-related themes chosen for themed semesters, years, or first-year experiences (e.g. choosing a sustainability-related book for common reading)
- Programs through which students can learn sustainable life skills (e.g. a series of sustainable living workshops, a model room in a residence hall that is open to students during regular visitation hours and demonstrates sustainable living principles, or sustainability-themed housing where residents and visitors learn about sustainability together)
- Sustainability-focused student employment opportunities offered by the institution
- Graduation pledges through which students pledge to consider social and environmental responsibility in future job and other decisions
- Other co-curricular sustainability programs and initiatives

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

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

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

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

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

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

Stanford has 20 sustainability-focused student groups that address a wide range of sustainability topics across campus. The most established sustainability organization, Students for a Sustainable Stanford, has been working on campus for more than a decade and contains multiple sub-groups focused on water, environmental justice, climate change, and other sustainability topics.

Additional sustainability-focused student groups include the Green Living Council, which promotes sustainability in dorms; Engineers for a Sustainable World, which just completed a hydropower project in Peru; Stanford Solar and Wind Energy Project (SWEP); and many others. Please see the website for a full list of sustainability-related student groups on campus.

More information, and a brief description of each group, can be found online:

http://sustainable.stanford.edu/student_groups

The website URL where information about student groups is available:

http://sustainable.stanford.edu/student_groups

A brief description of gardens, farms, community supported agriculture (CSA) or fishery programs, and urban agriculture projects where students are able to gain experience in organic agriculture and sustainable food systems:

Stanford Dining operates a network of organic gardens at dining halls and student houses across campus to enable students to experience growing and consuming fresh organic produce. Stanford Dining also works in collaboration with Stanford's BeWell program to operate the Stanford Community Gardens, which are strategically placed in open areas around Stanford's campus and tended by community members.

Stanford's School of Earth Sciences also runs an educational farm, which was renovated in 2014-15. This farm is used for classes and student activities, such as a hands-on organic farming class that is offered each quarter. The produce grown at the educational farm is sold on a weekly basis at the student-run Stanford Produce Stand.

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

<http://www.stanford.edu/dept/rde/cgi-bin/drupal/dining/node/215>

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

Stanford has multiple sustainability-oriented student enterprises. The Stanford Farm Stand is a weekly student-run produce stand that sells locally-grown, seasonal, organic produce from Stanford's community organic farm and from a nearby organic farm that is a campus partner. The campus Green Store is a student-run store that sells sustainable items to students, including smart power strips, compostable serviceware, recyclable party cups, and eco-friendly detergent. The Green Store is run by the Associated Students of Stanford University (ASSU).

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

<http://greenstore.stanford.edu/>

A brief description of the sustainable investment or finance initiatives:

The Stanford Student Green Fund provides grants for innovative student-driven projects designed to create a more sustainable campus. A total of \$30,000 per academic year is available to fund projects. Projects must aim to reduce Stanford's ecological footprint, have a clearly defined, measurable outcome, incorporate publicity, education or outreach, and include direct student involvement. Projects funded in the 2013-2014 academic year include Graduate School of Business Students designing a "Climate Act @ GSB" initiative, a Students for a Sustainable Stanford program piloting environmentally friendly cleaning practices in student residences, the purchase and installation of a water bottle filling station on campus, and several projects run by R&DE Student Housing interns.

http://sustainable.stanford.edu/green_fund

Also, in May 2014, acting on a recommendation of Stanford's Advisory Panel on Investor Responsibility and Licensing, the Board of Trustees announced that Stanford will not make direct investments in coal mining companies. The Board of Trustees concurred with the advisory panel that divesting from coal is consistent with the university's Statement on Investment Responsibility given the current availability of alternatives to coal that have less harmful environmental impacts. The resolution means that Stanford will not directly invest in approximately 100 publicly traded companies for which coal extraction is the primary business, and will divest of any current direct holdings in such companies. Stanford also will recommend to its external investment managers, who invest in wide ranges of securities on behalf of the university, that they avoid investments in these public companies as well. A student-led organization known as Fossil Free Stanford petitioned the university last year to divest from 200 fossil-fuel extraction companies as part of a national divestment campaign. The request by Fossil Free Stanford was reviewed over the last several months by APIRL's Environmental Sustainability Subcommittee, which met with the group, conducted its own extensive research and took input from other constituencies. The subcommittee's recommendation was subsequently approved by the full APIRL, the Trustees' Special Committee on Investment Responsibility and the Board of Trustees.

In the investment context, in addition to the action on coal, Stanford's existing proxy voting guidelines adopted earlier by the Board of Trustees mandate that the university vote "yes" on proxy resolutions asking companies to adopt sustainability principles, reduce greenhouse gas emissions and increase the energy efficiency of their operations.

<http://apir.stanford.edu>

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

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

Stanford hosts a vast array of conferences and events targeted at engaging students in Sustainability. The Office of Sustainability organizes an annual "Celebrating Sustainability" event around Earth Day. The "Celebrating Sustainability" event was hosted in 2014 for

the third year in a row as an interactive festival designed to educate members of the campus community about Stanford's sustainability achievements and opportunities for individual action through engaging activities and displays. Another example is the student-governed Berkeley-Stanford Cleantech Conference, which is an annual conference co-hosted by Stanford and Berkeley that addresses renewable energy advancements. Additionally, Stanford hosts an annual conference at SLAC called Energy@Stanford. This conference is open to all interested incoming graduate students to find out more about energy initiatives at Stanford.

Stanford also hosts many lecture series each quarter dealing with the environment, including topics such as energy, climate change, conservation biology, and a wide variety of other subjects. The student-governed Stanford Energy Club maintains a comprehensive calendar of such events, both on- and off-campus and distributes this information to students, faculty, and staff (

<http://energy.stanford.edu/>

).

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

<http://sustainable.stanford.edu/events>

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

eARTHbeat was the fourth annual installment of the spring arts and sustainability festival organized by the Student Organizing Committee for the Arts and Students for a Sustainable Stanford. In 2013, the groups also partnered with the Institute for Diversity in the Arts, the Green Alliance for Innovative Action (GAIA), Green Grid Radio, and the Green Living Council. The event took place on May 24, 2013 from 12 to 8 p.m. on the Columbae lawn. It featured interactive art and sustainability workshops, sustainable food trucks, live music and other activities. Shalini Kantayya, an award-winning filmmaker, hosted a screening of and Q&A on her latest film, A Drop of Life, and Michael Christian, an artist who has presented works at Burning Man and Coachella, organized an exhibit of his latest interactive sculptures. The evening ended with the always-popular Stanford Soundtrack Release Party featuring student bands and performers.

Approximately 300

students attended the event.

The inaugural event in this series, Vision eARTH, was held in 2011. Planning for the 2014 event is currently underway. For more details, please visit:

<http://events.stanford.edu/events/275/27597/>

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

<https://www.facebook.com/events/536000973117975/>

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

Stanford is home to a number of different outing societies. Most relevant is the Outdoor Education Program, which teaches a one-unit class each quarter on outdoor leadership skills including Leave No Trace and basic backwoods safety and responsibility. Stanford Outdoor Gear is a student-run group which rents outing supplies to students for weekend trips. Stanford also organizes an annual

student-led pre-orientation backpacking trip (SPOT) for any interested incoming freshmen.

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

<http://outdoors.stanford.edu/>

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

n/a

The website URL where information about the theme is available:

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

(1) The student-run organization Green Living Council runs a training course, EARTHSYS 18: Promoting Sustainability Behavior Change at Stanford. This class covers effective strategies for enacting sustainable behavior change on campus, including community-based social marketing, psychology, behavioral economics, education, sociology, and design. Students design a behavior change intervention project targeting a specific sustainable behavior. The course consists of online lectures and weekly sections/workshops.

(2) The student-run organization Students for a Sustainable Stanford runs a series of open workshops called SustainaSkills that focus on life skills like bike repair, gardening, energy audits, etc.

(3) R&DE's Stanford Dining runs a number of workshops for students focused on sustainable food, including organic gardening, vegetarian cooking, etc. These workshops are led by the Sustainable Food Program Manager in partnership with internal and external experts.

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

<http://explorecourses.stanford.edu/CourseSearch/search?view=catalog&filter-coursestatus-Active=on&page=0&catalog=&academicYear=&q=EARTHSYS18&collapse=>

A brief description of sustainability-focused student employment opportunities:

The Sustainable Stanford Internship Program (managed by the Office of Sustainability in partnership with sustainability staff and organizations across campus) provides a paid opportunity for students to gain hands-on experience implementing programs that influence on-campus sustainability. Sustainable Stanford Interns work on projects covering various campus sustainability topics (waste, water, housing, food), under supervision and direction from campus sustainability staff. Each intern commits to an academic year-long program working to manage a campus sustainability project and bring about tangible results. In addition to gaining experience in sustainability project design and implementation, interns learn about the variety of careers in sustainability across campus as well as develop a network of cohorts through group lunches and presentations.

Additionally, Stanford's Haas Center for Public Service offered the Community Work-Study Program, which provides an opportunity for students to develop and participate in a significant service experience while earning a portion of their financial aid award. This program is available during the academic year and the summer. It provides the freedom for eligible students to design a service experience in collaboration with a partnering organization. Placements during the academic year are typically on campus and in the local community

while summer placements can be at qualified organizations anywhere in the United States.

The Haas Center also runs the Undergraduate Fellowship Program, which offers resources for Stanford undergraduates who wish to make contributions to public service organizations and communities. Depending on the fellowship, fellows can participate in either prearranged placements or self-designed fellowship opportunities in both domestic and international settings. The Haas Center offers grants to undergraduate students interested in this type of service experience, in addition to operating several other grant programs to help cultivate students' passion for service.

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

<http://sustainable.stanford.edu/internships>

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

Students for a Sustainable Stanford administers a graduation pledge each year. The pledge reads as follows:

I pledge to explore and take into account the social and environmental consequences of any job I consider, and I will try to improve these aspects of any organizations for which I work.

Graduating students may take the pledge online and those who pledge wear a green ribbon on their graduation robes.

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

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

n/a

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

Outreach Materials and Publications

Responsible Party

Moira Hafer

Sustainability Analyst
Office of Sustainability

Criteria

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

- A central sustainability website that consolidates information about the institution's sustainability efforts
- A sustainability newsletter
- Social media platforms (e.g. Facebook, Twitter, interactive blogs) that focus specifically on campus sustainability
- A vehicle to publish and disseminate student research on sustainability
- Building signage that highlights green building features
- Food service area signage and/or brochures that include information about sustainable food systems
- Signage on the grounds about sustainable groundskeeping and/or landscaping strategies employed
- A sustainability walking map or tour
- A guide for commuters about how to use alternative methods of transportation
- Navigation and educational tools for bicyclists and pedestrians (e.g. covering routes, inter-modal connections, policies, services, and safety)
- A guide for green living and incorporating sustainability into the residential experience
- Regular coverage of sustainability in the main student newspaper, either through a regular column or a reporter assigned to the sustainability beat
- Other

A single outreach material or publication that serves multiple purposes may be counted more than once. For example, a sustainability website that includes tools for bicyclists and pedestrians may be counted in both categories.

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

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

	Yes or No
A central sustainability website that consolidates information about the institution's sustainability efforts	Yes

A sustainability newsletter	Yes
Social media platforms that focus specifically on campus sustainability	Yes
A vehicle to publish and disseminate student research on sustainability	Yes
Building signage that highlights green building features	Yes
Food service area signage and/or brochures that include information about sustainable food systems	Yes
Signage on the grounds about sustainable groundskeeping and/or landscaping strategies employed	Yes
A sustainability walking map or tour	Yes
A guide for commuters about how to use alternative methods of transportation	Yes
Navigation and educational tools for bicyclists and pedestrians	Yes
A guide for green living and incorporating sustainability into the residential experience	Yes
Regular coverage of sustainability in the main student newspaper, either through a regular column or a reporter assigned to the sustainability beat	Yes
Other sustainability publications or outreach materials not covered above	Yes

A brief description of the central sustainability website:

The Sustainable Stanford website provides information about Stanford’s sustainability efforts across all campus realms, including academics, research, campus operations, and student engagement. The website discusses specifically the campus plans for energy, transportation, food, waste, landscaping, Sustainable IT, and other sustainability topic areas. It also provides suggestions for what staff, students, and faculty can do to promote sustainability within their own lives, including comprehensive campus-wide sustainability campaigns (

). The website is also an information hub for Sustainable Stanford publications, including the newsletter, fact sheets, how to guides, and the annual year in review (

http://sustainable.stanford.edu/news_and_resources

).

The website URL for the central sustainability website:

<http://sustainable.stanford.edu/>

A brief description of the sustainability newsletter:

Sustainable Stanford's monthly newsletter, Cardinal Green, describes the latest campus sustainability news and success stories. It covers sustainability awards and recognition, new programs, campus sustainability improvements, upcoming events, and engagement opportunities.

The website URL for the sustainability newsletter:

<http://sustainable.stanford.edu/newsletter>

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

Sustainable Stanford maintains an active Facebook page and Twitter account (@SustainStanford). Both platforms are maintained by Office of Sustainability staff and promote current events, campaigns, tips, and general sustainability information to the community at large. In addition, both platforms frequently link and share other sustainability campus news coming from research institutes, university communications, etc.

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

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

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

Stanford has a number of journals dedicated to publishing student research. These include the Stanford Undergraduate Research Journal, Stanford Service in Global Health Journal, and Stanford Environmental Law Journal. Student sustainability research projects can be submitted to any one of these publications.

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

<http://www.stanford.edu/group/journal/cgi-bin/wordpress/>

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

The Yang and Yamazaki Environment and Energy (Y2E2) building is a flagship high performance building on the Stanford campus and is LEED-EBOM Platinum certified. The building features computer kiosks that highlight specific sustainability features, an online

dashboard, and stairwell signage which describes sustainability themes incorporated into the building design and construction. Each restroom includes signage describing the use of recycled water to flush toilets and urinals.

Similar signage has been included in numerous other high performance buildings on campus, including the Knight Management Center (the Graduate School of Business), the Huang Engineering Center, and the Center for Nanoscale Science and Engineering, among others.

<http://sustainable.stanford.edu/green-buildings>

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

http://sustainable.stanford.edu/sites/sem.stanford.edu/files/documents/Stanford_sustainable_guidelines.pdf

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

All Stanford dining halls and Stanford-operated cafes practice composting and utilize compostable serviceware. As a result, all include signage describing the differences between recyclable, compostable, and waste material. Stanford Dining also promotes a “Love Food Hate Waste” campaign which includes signage describing the environmental impacts of food waste. Additional dining hall signage promotes the "performance dining program" and directs students to healthy food choices tailored for their next activity (

https://www.stanford.edu/dept/rde/cgi-bin/drupal/dining/sites/default/files/pdfs/PD_IntroHOREvised.pdf

). Vegan and vegetarian options are highlighted with signage, and sustainable fish is also highlighted. The Stanford Dining publication “Sustainability: A Way of Life” describes how Stanford incorporates sustainability into its food system.

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

<http://www.stanford.edu/dept/rde/dining/sustainablefood.htm>

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

Stanford's "Waterwise Demonstration Garden" serves as an educational model for the entire campus community regarding native and drought-tolerant plants.

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

<http://bgm.stanford.edu/groups/grounds/special/waterwise>

A brief description of the sustainability walking map or tour:

In 2013 the Office of Sustainability launched a self-guided sustainability walking tour that highlights the university's major sustainability achievements (

<http://lbre-apps.stanford.edu/sustours/>

). Since 2009, the Office of Sustainability has also offered a campus sustainability tour at major university events and a short tour upon request. Aboard one of the new fully electric Marguerite shuttles, participants travel to venues where campus operations feature sustainable practices in action. Staff members provide presentations both on the bus and on-site at select stops. Topics include water, waste and recycling, transportation demand management, energy, sustainable landscaping, and a version of some high performance building tour. Upon request, Office of Sustainability staff offer walking tours of several high performance buildings, including Y2E2 and the Knight Management center.

The website URL of the sustainability walking map or tour:

<http://sustainable.stanford.edu/tours>

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

Stanford's Parking and Transportation Services provides extensive information online and through one-on-one consultations regarding alternative transportation. The commute planning assistance program provides personalized recommendations (

<http://transportation.stanford.edu/commuteplanning/>

). The guide "Thriving at Stanford Without a Car" provides an overview of public transit options on and around campus. Stanford's "Commute Club" incentivizes the use of public transit and carpooling.

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

<http://transportation.stanford.edu/pdf/thriving-at-stanford.pdf>

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

Stanford employs a full-time Bicycle Coordinator to support bicyclists on campus. A sample of the services provided to bicyclists include: bike registration, a brochure titled "biking around Stanford," a mid-peninsula bicycle map, city and county bike maps, brochures to make rides easier and safer, discounts on bike helmets, and clothes lockers and bike storage rentals, as well as information on the location of accessible shower facilities.

In addition, commute planning assistance is available to any member of the Stanford community, including all pedestrian travelers (

<http://transportation.stanford.edu/commuteplanning/>

).

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

http://transportation.stanford.edu/alt_transportation/BikingAtStanford.shtml

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

STARS Reporting Tool | AASHE

Sustainability is a core value on campus and within Residential & Dining (R&DE) Enterprises Student Housing. The R&DE Student Housing Sustainability and Conservation Programs Office collaborates with students and staff to foster behavior change, reduce energy and water consumption and waste production in our residences, and to integrate long-term sustainable thinking into everyday operations. Building upon past publications of student living guides, R&DE student housing partnered with the Office of Sustainability to produce "How To Be Cardinal Green: Student Sustainable Living Guide," an annual electronic publication sent to each incoming student and available to all students online.

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

<http://www.stanford.edu/dept/rde/cgi-bin/drupal/housing/sites/default/files/SLG.pdf>

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

The Stanford Daily reports on sustainability on campus on a regular basis. Several Stanford Daily reporters work with representatives from Land, Buildings, and Real Estate, the Office of Sustainability, and other entities to collect and promote information on Stanford's sustainability initiatives. For example, the Stanford Daily has written numerous articles on the Stanford Energy System Innovations (SESI) project (

<http://www.stanforddaily.com/tag/sesi>

) and the LEED-EBOM Platinum certification for the Yang and Yamazaki Energy and Environment Building (Y2E2) (

<http://www.stanforddaily.com/tag/y2e2/>

). The Stanford Daily also covers most of the sustainability-focused events that occur on campus, such as the annual Keys to Sustainability fair meant to help students learn about ways to get involved in sustainability activities on campus (

<http://www.stanforddaily.com/2014/02/10/keys-to-sustainability-makes-the-environment-the-focus>

).

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.stanforddaily.com/>

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

The Office of Sustainability publishes an annual report titled "Sustainability at Stanford – A Year In Review." This publication provides campus sustainability metrics and trends as well as highlights campus sustainability stories from the past year. The publication highlights the actions taken across campus to improve sustainability and provides valuable year-to-year tracking on consumption metrics.

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

<http://sustainable.stanford.edu/sites/sustainable.stanford.edu/files/documents/Sustainability-at-Stanford-2012-13.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):

The Stanford University Energy and Climate Plan, first developed in 2009 and revised in 2013, outlines an in-depth framework for Stanford's plans to advance the sustainability of Stanford's energy system. This document was created through strategic partnerships between Stanford's Department of Sustainability and Energy Management and Stanford faculty experts. Stanford's Energy and Climate Plan, when fully implemented, will immediately reduce campus GHG emissions by 50% and potable water use by 15%, while also opening a path to full energy sustainability over time through greening the campus electricity supply.

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

http://sustainable.stanford.edu/sites/sustainable.stanford.edu/files/documents/Stanford_Energy_&_Climate_Plan_2nd_Edition.pdf

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 Project Delivery Process (PDP), originally developed in 2001, serves the Stanford University community as an invaluable resource for assisting staff, clients and contractors who are embarking on a new building or renovation project for Stanford.

The PDP manual is designed to facilitate communication with internal and external stakeholders interested in understanding both general and specific purposes. The PDP Manual can assist in educating new staff, clients and contractors as well as serve as an invaluable day-to-day reference manual for seasoned personnel. The goal is to improve understanding and communication between all stakeholders by clearly identifying the roles and responsibilities of the numerous team members and the Process and Controls that are expected at each phase of the project. With clear expectations and communications, overall project quality and satisfaction will be improved.

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

http://lbre.stanford.edu/dpm/sites/all/lbre-shared/files/docs_public/PDP_BrochureAugust2010_f.pdf

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

Yes

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

The Woods Institute for the Environment produces numerous publications related to sustainability, including policy briefs, research plans, and general reports on the following topic areas: climate, freshwater, land use & conservation, and oceans & estuaries.

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

<https://woods.stanford.edu/publications>

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

Yes

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

Sustainable Stanford publishes a large number of Fact Sheets that explain various aspects of campus sustainability. These publications are designed to provide a concise overview of a particular environmental topic and how it is being addressed on campus. Fact sheet topics include “Food & Dining,” “Transportation,” “Water Conservation,” “Energy and Climate Action,” and fourteen others.

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

<http://sustainable.stanford.edu/resources>

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

Yes

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

Sustainable Stanford published Green Event Guidelines designed to inform faculty, staff, and students putting on events about Stanford’s sustainability goals and how to incorporate these into event planning. The guideline discusses utilizing reusable signage, proper event composting and recycling, and additional tactics.

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

http://sustainable.stanford.edu/sites/default/files/documents/Final_Greening_Events_Checklist-Comprehensive.pdf

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

Yes

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

Sustainable Stanford publishes step-by-step “How To Guides” on various campus sustainability topics. These guides are intended to help individuals on campus take specific actions to contribute to campus sustainability. The guides directly support the Cardinal Green Office Program (

<http://sustainable.stanford.edu/cardinal-green/campaign/cardinal-green-office-program>

). Topics include “How to Eat More Sustainably,” “How to Start an Office Composting Program,” “How to Reduce Computing Energy
[STARS Reporting Tool](#) | [AASHE](#)

Use,” and many other campus-specific topics.

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

http://sustainable.stanford.edu/publications_and_reports

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

Yes

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

Stanford University Sustainability Scholars is a student groups that works to develop creative methods of sustainability outreach. The group regularly updates a sustainability blog which profiles students and faculty working on sustainability issues, mentions upcoming sustainability events on campus, and discusses campus sustainability concerns. Any and all students are welcome to contribute to the blog. In addition, the Office of Sustainability funds one student writer for the blog each year.

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

<http://suss.stanford.edu/blog/>

Outreach Campaign

Responsible Party

Moira Hafer

Sustainability Analyst
Office of Sustainability

Criteria

Part 1

Institution holds at least one sustainability-related outreach campaign directed at students that yields measurable, positive results in advancing sustainability. The sustainability-related outreach campaign may be conducted by the institution, a student organization, or students in a course.

Part 2

Institution holds at least one sustainability-related outreach campaign directed at employees that yields measurable, positive results in advancing sustainability. The sustainability-related outreach campaign may be conducted by the institution or an employee organization.

The campaign(s) reported for this credit could take the form of a competition (e.g. a residence hall conservation competition), a rating or certification program (e.g. a green labs or green office program), and/or a collective challenge (e.g. a campus-wide drive to achieve a specific sustainability target). A single campus-wide campaign may meet the criteria for both parts of this credit if educating students is a prime feature of the campaign and it is directed at both students and employees.

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

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

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

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

Yes

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

Yes

The name of the campaign (1st campaign):

(1) RecycleMania & (2) Water Wars & Energy Wars (3) Give & Go

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

(1) RECYCLEMANIA

<http://sustainable.stanford.edu/recyclemania>

Recyclemania is a national 8-week intercollegiate competition and benchmarking tool for higher education recycling programs. Each year during RecycleMania, Stanford reports recycling and trash tonnage and attempts to surpass other schools in categories such as total tons recycled, waste diversion rate, waste minimization, and per capita recycling. All members of the campus community are encouraged to participate and evaluate their own waste and recycling habits during this annual competition through activities and trainings offered by Stanford's Office of Sustainability and Peninsula Sanitary Services, Inc./ Stanford Recycling Center (PSSI). For instance, Stanford offers trainings in conjunction with this campaign entitled "Best Practices in Waste Reduction." These trainings are eligible for incentives through Stanford's BeWell program. Stanford also offers free tours of its on-site recycling center and off-site composting facility to the campus community. Finally, in 2015, Stanford released a promotional music video in conjunction with the Recyclemania campaign entitled "We're All About No Waste at Stanford." The video was produced by Stanford's Office of Sustainability and features Stanford students, faculty, and staff performing an adapted version of a popular song.

(2) WATER WARS & ENERGY WARS

<http://sustainable.stanford.edu/energy-wars-and-water-wars>

For three weeks during winter quarter, residents in Florence Moore, Stern, and Roble Halls will compete to reduce Stanford's collective water and energy footprint and beat out the competition as part of Campus Conservation Nationals. Since 2004, Stanford students have organized annual competitions to encourage energy and water conservation in their residence halls. The competitions' names have gone through multiple changes, but their conservation data has always been used to compare Stanford against more than 100 other colleges and universities participating in a national competition called Campus Conservation Nationals. In 2013, Stanford saved over 10,000 kWh and 12,000 gallons of water during the competition.

(3) GIVE & GO

<http://www.stanford.edu/dept/rde/cgi-bin/drupal/housing/give-go>

In June 2013, over 2,000 Stanford students took a simple step toward helping the local community and the environment by donating useable, unwanted items to charity during the "Give and Go" move-out. The items were donated to local charities to benefit families in need. With more than 200 convenient donation sites made available across undergraduate and graduate housing, it was easy for students to take part in the campaign, ultimately diverting over 97,500 lbs (nearly 50 tons!) of materials that were collected by the Ecumenical Hunger Program, Goodwill, and InnVision Shelter Network. The cumulative donations accounted for at least 15% of the total waste generated during move out being diverted from the landfill, saving R&DE between \$2,900-5,000 in landfill and hauling costs and over \$10,000 estimated in extra labor, not to mention the benefits of not sending those materials to landfill. This will now be an annual student campaign.

(4) OTHER CARDINAL GREEN CAMPAIGNS

http://sustainable.stanford.edu/be_cardinal_green

In addition to those listed above, there are other campus-wide Cardinal Green campaigns in which students are encouraged to participate, including a water conservation campaign launched in May 2014 to help the campus respond to California's drought.

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

(1) RECYCLEMANIA

During Recyclemania, Stanford earns a competition ranking relative to both all competitors and peer institutions. In 2014, Stanford scored 6th out of 365 schools in the Gorilla category (total pounds recycled), and 20th out of 362 schools in the Per Capita category (pounds per person). Stanford was also ranked 1st among its peer institutions in the Per Capita category. Lastly, Stanford scored particularly well in the paper, cardboard, bottles & cans, and food waste categories, ranking 13th, 9th, 11th, and 16th respectively among all competing schools and ranking 1st among its peer institutions in each category.

The results for Recyclemania in 2015 will be released in April. Throughout the campaign, Stanford has measured its impact on the campus community by asking people to pledge to reduce waste via our Sustainable Stanford website. The number of pledges received in 2015 has more than doubled the number of pledges received in past years, showing that the visibility of the campaign is continually increasing.

(2) WATER WARS / ENERGY WARS

Since 2004, Stanford students have organized annual competitions to encourage energy and water conservation in their residence halls. The competitions' names have gone through multiple changes, but their conservation data has always been used to compare Stanford against more than 100 other colleges and universities participating in a national competition called Campus Conservation Nationals. In 2013, Stanford saved over 10,000 kWh and 12,000 gallons of water during the competition.

(3) GIVE & GO

In 2013, students ultimately diverted over 97,500 lbs (nearly 50 tons!) of materials that were collected by the Ecumenical Hunger Program, Goodwill, and InnVision Shelter Network. The cumulative donations accounted for at least 15% of the total waste generated during move out being diverted from the landfill, saving R&DE between \$2,900-5,000 in landfill and hauling costs and over \$10,000 estimated in extra labor, not to mention the environmental benefits of not sending those materials to landfill.

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

http://sustainable.stanford.edu/be_cardinal_green

The name of the campaign (2nd campaign):

Cardinal Green Buildings

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

The annual Cardinal Green Buildings campaign is one excellent example of the many campus-wide Cardinal Green campaigns (

http://sustainable.stanford.edu/be_cardinal_green

) in which employees are encouraged to participate. Stanford operates and maintains hundreds of campus buildings. While advanced systems ensure these buildings operate efficiently, a critical tool in helping further reduce Stanford's energy use is the collective action of campus building occupants. For years, Stanford's building managers have helped the university realize significant energy savings through the success of programs like the annual Winter Closure and the Cardinal Green Office Program. In partnership with Zone Management and Facilities & Energy Management, these efforts were joined under the Cardinal Green Buildings campaign in order to call attention to the great work building leads are doing and to further engage the campus community in sustainability.

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

The 2014 Cardinal Green Buildings campaign proved to be a success, with 31 buildings volunteering to participate in the Cardinal Green Office Program and a total of 181 buildings participating in Winter Closure energy curtailment. The resulting savings totaled \$357,000 in avoided energy costs - which represents 1.5 million kilowatt-hours of electricity or 840 million metric tons of CO2 emissions avoided.

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

<http://sustainable.stanford.edu/CardinalGreenBuildings>

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

Please see the following website for more details on all engagement campaigns:

http://sustainable.stanford.edu/be_cardinal_green

Employee Educators Program

Responsible Party

Moira Hafer

Sustainability Analyst
Office of Sustainability

Criteria

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

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

This credit recognizes ongoing programs that engage employees on a regular basis. For example, employee educators may represent or be responsible for engaging workers in certain departments or buildings. Thus, a group of employees may be served (i.e. directly targeted) by a program even if not all of these employees avail themselves of the outreach and education offerings.

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

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

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

Yes

Total number of employees:

14,481

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

Building Level Sustainability Program (Building Champions / Building Heroes / Green Teams)

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

14,481

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

Stanford's "Green Teams" are self-selected groups of employees (faculty and staff) who are a resource to their department and/or school and help implement Stanford's Building Level Sustainability Program (

<http://ssu.stanford.edu/BuildingLevelSustainability>

). Recruitment of Green Team members, sometimes called "Building Champions" or "Building Heroes" on campus, has occurred through a variety of formats. In the School of Medicine, there was an open call to join the initial training program (

<http://med.stanford.edu/sustainability/>

). In the case of early program adopters like the Office of the Vice Provost on Undergraduate Education (VPUE), Building 170 (General Counsel, Public Affairs), IT Services, and the Alumni Association, existing Green Teams approached the Office of Sustainability for program participation and support. The School of Earth Sciences was a case-study for the CEE/ES 109 "Green Buildings and Behavior" course, and the Green Team formed through that process. In recent years, an annual campus-wide outreach campaign called "Cardinal Green Buildings" recruited other interested parties during the fall quarter (

<http://sustainable.stanford.edu/CardinalGreenBuildings>

). At this time there are program participants and trained educators within each of Stanford's seven schools and all administrative organizations. The entire faculty/staff community is therefore served by these peer educators.

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

Office of Sustainability staff work closely with each volunteer Cardinal Green Building participant, especially at the start of program implementation, to ensure the group is aware of Stanford's core practices related to sustainability, as well as the specific opportunities within the program. The School of Medicine has also implemented its own training for Green Teams.

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

Office of Sustainability staff and the Sustainable Stanford program support Stanford's Cardinal Green Building participants. Examples of support include but are not limited to the following:

- Specific training upon request (from the Office of Sustainability)
- Open enrollment training each fall (from the Office of Sustainability)
- Staff support through the building audit process (from the Office of Sustainability and its student interns)
- The ERP Express rebate program to incentivize Smart Strip and appliance timer purchases (administered by the Office of Sustainability)
- Templates, surveys, audit forms, and standard email language (developed by the Office of Sustainability)
- A professional network of other interested Building Champions (supported by the Sustainability Working Group and Sustainable Stanford)

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

<http://sustainable.stanford.edu/CardinalGreenBuildings>

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

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

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

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

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

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

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

Number of employees served by all other programs:

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

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

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

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

Employee Orientation

Responsible Party

Moira Hafer

Sustainability Analyst
Office of Sustainability

Criteria

Institution covers sustainability topics in new employee orientation and/or in outreach and guidance materials distributed to new employees, including faculty and staff. The topics covered include multiple dimensions of sustainability (i.e. social, environmental and economic).

"---" 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:

Stanford's new employee orientation process (Onboarding@Stanford) consists of a half-day training program and a plethora of web resources and support organizations, including a monthly electronic newsletter specifically targeted to new hires. Sustainability is a component of the new hire experience through the following:

- explicit slides dedicated to Stanford's recycling programs during the training presentation
- a handout for all new employees during training that highlights Stanford's sustainability programs and accomplishments
- inclusion on the new hire website in the discussion of community values
- advertisement of Cardinal Green sustainability campaigns through the new hire electronic newsletter

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

<http://newhire.stanford.edu/organization/index.html#values>

Staff Professional Development

Responsible Party

Moira Hafer
Sustainability Analyst
Office of Sustainability

Criteria

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

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

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

The following training opportunities are not sufficient for this credit:

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

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

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

Yes

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

The Cardinal Green Training Series was launched in 2012 through the university's AXESS/STARS system. Available to all Stanford staff and faculty, the training courses provide a hands-on exploration of conservation measures and best practices at Stanford. Delivering formal training to the Stanford community was one of the key actions identified through the Sustainability 3.0 strategic planning process completed in 2012.

The Cardinal Green training courses are offered seasonally, in partnership with related Cardinal Green campaigns. Currently available Cardinal Green training modules include:

(1) SST 1000: Sustainable Office Spaces - Offered in Fall Quarter

This session provides a hands-on demonstration of how Stanford's Building Level Sustainability Program can help lead workplaces to greater resource conservation. Employees will learn how to "green" their individual workspace and gain strategies to create a sustainable office environment for their group or building.

(2) SST 2000: Best Practices in Waste Reduction - Offered in Winter Quarter

Employees will learn about reducing their waste impact and becoming leaders in their workplaces. This course demonstrates best practices in waste reduction through the 5R's (reduce, reuse, recycle, rot, rebuy) in order to help jumpstart improvements in employee workplaces.

Training courses that will be implemented in Summer 2014 include:

- (1) Water Wise Gardening
- (2) Green Events at Stanford
- (3) Alternative Commute Planning

The Office of Sustainability has also partnered with BeWell to offer the Sustainable Stanford Training Series as BeWell berry-eligible courses under the "Environmental Health" berry category.

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

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

<http://sustainable.stanford.edu/trainings>

Public Engagement

This subcategory seeks to recognize institutions that help catalyze sustainable communities through public engagement, community partnerships and service. Engagement in community problem-solving is fundamental to sustainability. By engaging with community members and organizations in the governmental, non-profit and for-profit sectors, institutions can help solve sustainability challenges. Community engagement can help students develop leadership skills while deepening their understandings of practical, real-world problems and the process of creating solutions. Institutions can contribute to their communities by harnessing their financial and academic resources to address community needs and by engaging community members in institutional decisions that affect them. In addition, institutions can contribute toward sustainability broadly through inter-campus collaboration, engagement with external networks and organizations, and public policy advocacy.

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

Community Partnerships

Responsible Party

Moira Hafer
 Sustainability Analyst
 Office of Sustainability

Criteria

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

Each partnership conforms to one of the following types:

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

C.Transformative

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

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

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

This credit recognizes campus-community partnerships that advance sustainability in an explicit and participatory way. Participatory, community-based research and engaged scholarship around issues of sustainability may be included if it involves formal partnership(s). Although community service activities (e.g. academic service learning, co-curricular service learning and volunteer activities, Work-Study community service and paid community service internships) may involve local partnerships and contribute toward sustainability, they are not included in this credit. Community service is covered by *EN 12: Community Service*.

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

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

Yes

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

Canopy:

Stanford partners with Canopy, a non-profit organization based in Palo Alto that is dedicated to protecting and growing the urban forest in Palo Alto, East Palo Alto, and neighboring communities. With a shared goal to expand the urban forest, Canopy has provided countless Stanford students, staff, and alumni with the volunteering opportunity to plant trees and improve our local environment through its Healthy Trees, Healthy Kids! Program, among many others.

Community Environmental Action Partnership:

The City of Palo Alto and community groups created the Community Environmental Action Partnership (CEAP) in 2008 in accordance with the recommendations made by the City’s Green Ribbon Task Force and the Climate Protection Plan. CEAP's mission is to bring the various segments of the community together to share knowledge, build mutual understanding, leverage resources, and both create and implement innovative environmental solutions. CEAP goals include: identify and implement top-priority environmental initiatives with measurable objectives; educate and engage each segment of the community in environmental initiatives that fit their needs; create a vehicle for communication, education and awareness among the City and all segments of the community; leverage resources and actions among segments by aligning and coordinating efforts; connect with expertise, input and initiatives from the community and beyond to inform, improve and inspire innovative ideas and programs; and track and report progress toward objectives to the community.

The community is divided into eight segments and a “liaison” is appointed to each segment. The liaisons, which serve as an Executive Committee, meet monthly to share the accomplishments of the work done by the segments. Stanford is one of the segments and a liaison provides a conduit between the environmental and sustainability efforts of the university and the other CEAP segments.

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):

Sustainable Cities:

Sustainable Cities is a service-learning course offered through Stanford University’s Program on Urban Studies. Students learn and work collaboratively with Bay Area government agencies and community organizations to support their sustainability goals. Experiential learning outside the classroom allows students to serve the local community in achieving a more sustainable future. Sustainable Cities presents students with the opportunity to work hands-on in a professional environment with the close guidance of professional staff and Stanford faculty. Students select projects that fit their personal interests and skill-sets and are matched with other students into project teams. The teams work diligently on the projects over ten weeks, and present their final products to key stakeholders and community members at the conclusion of the class. Some of these projects, such as the Downtown Redwood City Bike Parking Inventory 2010 and the Redwood City Bike Share Assessment have been, or are in the process of being implemented. Past partners include Redwood City 2020, Joint Venture Silicon Valley, How Youth Perceive the Environment (HOPE), and more.

Stanford GOALS Partnership:

Stanford GOALS is a multi-year Stanford Prevention Research Center program to evaluate an innovative, community-based approach to addressing childhood obesity. Stanford’s partners, the Boys and Girls clubs of the Peninsula, Redwood City Police Activities League and Redwood City Parks, Recreation and Community Services Department, identify youth at risk for obesity and engage them in developing healthy lifestyles. Children enrolled in GOALS participate in a health education program or an active intervention, which includes a team sports program, home visits to reduce screen time and improve the home food environment, and primary care provider follow-up. The partnership builds upon existing after school programming and also partners with Stanford Athletics to provide site visits from the Stanford student-athletes, visits to campus for mentoring programs, and on-campus field days. The GOALS partnership seeks to develop best practices to serve community youth and exemplifies the positive, communal nature of a partnership based on social change.

Redwood Environmental Academy of Leadership (REAL)

REAL grew out of a Stanford K-12 Initiative grant called "Ecology: Learning by Doing and Making a Difference." It has grown into a Sequoia Union High School District academy program for environmental science education and stewardship. REAL uses Cordilleras Creek, which runs through the campus of Redwood High School, to engage students in hands-on ecology-based learning, creek restoration and research.

Science in Service:

Science in Service (SIS) is a unique collaboration of Stanford students, science and engineering faculty, service-learning educators, and Peninsula community organizations. The program connects Stanford students to youth in neighboring communities through science mentorship and after-school science programs, providing Stanford students a unique opportunity to learn about and participate in science outreach. SIS brings science content enrichment to children who may not have access to positive and fun science experiences. Participating children benefit both from this academic enrichment and from the mentorship of a college student role model. Stanford participants receive training in key techniques for teaching science through mentorship. Trained students then serve as science mentors to children in after-school programs at the Boys & Girls Clubs of the Peninsula (BGCP) and Citizen Schools in East Palo Alto, Menlo Park, and Redwood City, with ongoing support from SIS staff. There are opportunities for Stanford students who are new to science outreach as well as students who have previous teaching experience.

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:

Searsville Dam and Reservoir Study:

Searsville Dam and Reservoir was built in 1892 by the for-profit Spring Valley Water Company and acquired by Stanford in 1919. The dam, which is structurally sound, provides a source of non-potable water used on campus for landscape irrigation. A faculty and staff committee that includes Stanford scholars who specialize in engineering, environmental science, history and law is studying alternatives for the future of Searsville Dam.

Because of the extent and rate of sedimentation that will lead to the eventual loss of the reservoir and the importance of all of the various hydrologic and natural habitat issues involved, Stanford is conducting an in-depth, expert comprehensive review of all issues and all possible actions related to the dam's future. Stanford believes that only a careful, thoughtful analysis of the complex, intersecting issues will provide a proper road map for the future of this important biological preserve and the species that thrive there.

Steering Committee:

The committee is co-chaired by Jean McCown, Stanford director of community relations, and Chris Field, faculty director of Jasper Ridge and professor of biology and of Environmental Earth system science. The Committee includes prominent faculty: Jeffrey Koseff, co-director of the Woods Institute for the Environment; Pamela Matson, dean of the School of Earth Sciences; Buzz Thompson Jr., professor of natural resources law and co-director of the Woods Institute for the Environment; David Freyberg, professor of civil engineering and hydrology; and Richard White, professor of history. Staff members include senior leadership and specialists in conservation, land use, environmental sustainability and water conservation.

Advisory Group

In 2013 Stanford established an advisory committee of external representatives to provide input to the steering committee's evaluation process. Examples of members of this group include representatives from the U.S. Army Corps of Engineers, California Department of Fish and Wildlife, California State Water Resources Control Board and the San Francisquito Creek Joint Powers Authority along with more local representation from local governments and non-profits such as Acterra, the Committee for Green Foothills, CalTrout, Santa Clara Audubon, American Rivers and Beyond Searsville Dam, as well as individual community members and neighbors.

The Advisory Group provides input and feedback to the Steering Committee on each phase of the process, including considerations of alternatives.

In relation to broader water conservation and flooding control efforts within the local communities surrounding Stanford, the university works closely with the San Francisquito Creek Joint Powers Authority (JPA). The JPA is developing a regional comprehensive plan for both the waters that flow into San Francisquito Creek and onto San Francisco Bay (its watershed) and the waters that threaten our communities from the Creek and from Bay tides (our floodplains). Within the context of this plan, the JPA is leading the local effort on four major projects. Working their way upstream from the Bay, they are planning, designing, and soon constructing capital projects to eliminate risk to over 8,400 properties and the need for many of them to pay premiums to the National Flood Insurance Program. Integral to this effort is our work with Caltrans on their project to replace the Highway 101 crossing over the Creek. And while we are designing and implementing local projects without waiting for a federal government solution, we continue to keep open the possibility of federal support through the U.S. Army Corps of Engineers.

Another major project includes working with the one of the JPA's member agencies, the Santa Clara Valley Water District, to analyze what capital improvements are necessary to provide 100-year flood protection for the flood prone reach of San Francisquito Creek upstream of U.S. Highway 101. Creek capacity improvements being analyzed include bridge replacement, channel widening and

naturalization, floodwall construction or enhancement, a bypass culvert, and upstream detention facility. It is likely that a suite of these alternatives will be required to address the flooding problem.

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

Many Stanford researchers work collaboratively with international communities to bring cutting edge research to those who need it most. Below please find four sample partnerships:

SOLAR MARKET GARDEN PROJECT

The Solar Market Garden Project aims to bring solar-powered drip-irrigation systems to arid regions with endemic food shortages. In partnership with the Solar Electric Light Fund (SELF), which uses solar power to pump irrigation and drinking water in a set of rural villages in northern Benin, West Africa, this Center on Food Security and the Environment-sponsored project is spreading its technology into an increasing number of arid West African villages.

http://fsi.stanford.edu/research/solar_market_gardens_as_a_tool_for_rural_development/

DHAKA WATER PROJECT

Stanford's Dhaka Water Project developed a device to disinfect drinking water without relying on electricity or moving parts. The in-line chlorinator is designed for low-income urban areas that rely on shared drinking water points and is currently being distributed in Dhaka, Bangladesh.

<http://stanforddhakawater.wordpress.com/about/>

RE.SOURCE

The re.source project, led by two Civil and Environmental Engineering doctoral students and developed under the guidance of Jenna Davis, associate professor and fellow at the Woods Institute for the Environment, completed a pilot phase in 2013 in which it tested innovative toilet models and deployed them to 130 households in Haiti. The project started through seed funding through the Woods Institute's Mel Lane Grant Program and was awarded the highest recognition at Sustainable Silicon Valley's Water, Energy, and Smart Technology (WEST) Summit in May 2013.

<http://resourcesanitation.com/about/>

THE OSA AND GOLFITO INITIATIVE

The Osa and Golfito Initiative through the Woods Institute for the Environment is helping to facilitate the development of a strategy for sustainable human development and environmental stewardship in Costa Rica's ecologically sensitive Osa and Golfito region. Over the past year, INOGO (the program's acronym for its Spanish title) has produced five case studies on key issues in the Osa and Golfito region, including the potential impacts of a proposed hydroelectric dam and a proposed international airport, and the socioeconomic and biological impacts of expanding oil palm plantations.

<http://inogo.stanford.edu/?language=en>

The website URL where information about sustainability partnerships is available:

<http://stanford.edu/dept/gover/community-partnership-awards/>

Inter-Campus Collaboration

Responsible Party

Moira Hafer
Sustainability Analyst
Office of Sustainability

Criteria

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

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

"---" 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:

Each year Stanford takes an active role in regional and national sustainability conferences related to higher education. The Association for the Advancement of Sustainability in Higher Education (AASHE) and California Higher Education Sustainability Conference (CHESC) annual events provide opportunities for Stanford to interact with other institutions, share best practices, and further develop sustainability in the context of higher education. Specific Stanford presentations from recent AASHE and CHESC events are listed below with a link where the abstract and presentation material can be found:

AASHE 2014 CONFERENCE

<http://conference.aashe.org/2014/>

- Increasing Momentum for Occupant Engagement through the Cardinal Green Office Program
- Utilizing Campus Partnerships to Enhance Campaigns
- Stanford Plug Load Equipment Inventory (poster)
- Tracking Stanford's Transportation Program Metrics
- Electrification of Stanford's Bus Fleet (poster)

AASHE 2013 CONFERENCE

<http://www.aashe.org/events/conference/2013-presentation-index>

- Planning for the Future: Climate and Energy Action at Stanford
- Sustainability Portal (poster)

AASHE 2012 CONFERENCE

- STARS Introductory Workshop (panelist & presenter)

AASHE 2011 CONFERENCE

<http://www.aashe.org/resources/conference/search>

- Cardinal Green Campaigns: Tackling Environment, Economy, and Social Engagement at Stanford
- Building a Business Case for Behavior-Based Conservation Programs
- A Service Learning Course that Engages a Student Workforce to Help Implement Stanford's Sustainability Programs

AASHE 2010 CONFERENCE

<http://www.aashe.org/resources/conference/search>

- Behavior Matters: Program Results from Stanford, MIT, and Cornell
- Climate Action Implementation on Research Campuses: Lessons from Large-Scale Energy Projects
- Sustainable Transportation at Stanford University: The Role of Transportation Demand Management
- Driving Down Energy Use While IT Load Increases
- Room Temperature Biological Sample Storage
- Y2E2: Built to Conserve, Inspire, and Teach

CHESC 2014 CONFERENCE:

http://cahigheredusustainability.org/program/presentations2014.php#.VN5bq_nF-3I

- Increasing Momentum for Occupant Engagement through the Cardinal Green Office Program
- Utilizing Campus Partnerships to Enhance Campaigns
- New Building Post Occupancy Energy Efficiency Modeling
- Stanford Bus Electrification
- Tracking Stanford's Transportation Program Metrics
- Stanford's Whole Building Retrofits Program

CHESC 2013 CONFERENCE

<http://cahigheredusustainability.org/program/presentationsandhandouts.php#.U9kx-PldVNQ>

- Art and Science of Policy and Planning
- Best Practices in Overall Sustainable Design
- Sustainable Transportation on Campus: Translating Research into Action
- Changing Occupant Behavior
- Advancing Healthy Eating & Living: Engaging Employees & Students in Health, Wellness, and Sustainable Food Efforts
- Strategic Energy Efficiency Initiatives - Think Big!
- Integrated Design

CHESC 2012 CONFERENCE

University staff gave presentations at 10 separate sessions on topics such as climate action, sustainability governance, transportation, energy efficiency, food systems, and creating a culture of sustainability.

CHESC 2011 CONFERENCE

(Presentations by both Sustainable Stanford and Stanford Hospital & Clinics)

- Healthy and Sustainable Foods (SH&C)
- Making a Business Case for Behavior-Based Programs and Engaging Stakeholders (SU)
- Teaching Students to Address Sustainability Challenges through Market-Based Solutions (SU)
- Waste Reduction Efforts in a Healthcare Setting (SH&C)
- A Comprehensive Campus-Wide Approach to Water Resources Management (SU)
- Utilizing Service Learning to Enhance the Curriculum (SU)
- Greening the Operating Room (SH&C)
- Surpassing Green Standards in Science Buildings (SU)

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:

- Association for the Advancement of Sustainability in Higher Education (

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

)

- California Higher Education Sustainability Conference (

<http://cahigheredusustainability.org/>

)

- Ivy Plus Sustainability Working Group

(

<http://sustainability.yale.edu/people-partners/strategic-external-partnerships/ivy-plus>

)

- U.S. Green Building Council (

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

)

--International Sustainable Campus Network (

<http://www.international-sustainable-campus-network.org>

)

-- Silicon Valley Leadership Group (

<http://svlg.org/>

)

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

Stanford participates in conferences and belongs to consortia and other organizations to share best practices and advance sustainability in higher education.

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

Continuing Education

Responsible Party

Moira Hafer

Sustainability Analyst
Office of Sustainability

Criteria

Part 1

Institution offers continuing education courses that address sustainability.

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

Part 2

Institution has at least one sustainability-themed certificate program through its continuing education or extension department.

Degree-granting programs (e.g. programs that confer Baccalaureate, Masters, and Associates degrees) and certificates that are part of academic degree programs are not included in this credit. They are covered in the Curriculum subcategory.

Submission Note:

Additional information about sustainability in continuing education courses at Stanford can also be found on the Center for Professional Development website at scpd.stanford.edu.

"---" 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:

22

Total number of continuing education courses offered:

533

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

[EN 11, Stanford Continuing Education Sustainability Courses.pdf](#)

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

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

Yes

A brief description of the certificate program:

The Stanford Center for Professional Development connects professionals worldwide to the research and teaching of Stanford University faculty in the School of Engineering and related academic departments. The Energy Innovations and Emerging Technologies certificate program offered through Stanford's Center for Professional Development examines emerging technologies that will transform how we obtain, distribute and store energy. Students will learn from some of the best, determine how they can contribute to this dynamic field, and gain a greater understanding of the entire energy landscape. For more information, please visit

<http://energyinnovation.stanford.edu/>

Year the certificate program was created:

2,012

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

<https://continuingstudies.stanford.edu/>

Community Service

Responsible Party

Moira Hafer

Sustainability Analyst
Office of Sustainability

Criteria

Part 1

Institution engages its student body in community service, as measured by the percentage of students who participate in community service.

Part 2

Institution engages students in community service, as measured by the average hours contributed per full-time student per year.

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

Submission Note:

The total number of students includes both graduate and undergraduate students. The total number of students involved in community service and corresponding hours during a one-year period is an estimate, which is drawn from Stanford's submission for the President's Higher Education Community Service Honor Roll. The survey does not provide detailed guidance or a definition for what constitutes "community service", and Stanford University does not track this data centrally. The definition provided, (i.e., "activities designed to improve the quality of life of off-campus community residents, particularly low-income individuals") is extremely broad.

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

Number of students engaged in community service:

7,500

Total number of students :

16,491

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:

301,450

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:

n/a

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:

As described on the "community service programs" website:

At Stanford we understand the value of connecting our academic mission with public service. Students, faculty and staff are actively involved in a variety of public and community service initiatives. Their involvement is through established programs in academic departments as well as the ethnic/cultural centers on campus. Such activities range from raising donations for hurricane victims to tutoring young elementary school children to creating a high school in a local community. Links to the many and varied community services activities and programs at Stanford are provided below.

Please visit the following website for further details:

<https://studentaffairs.stanford.edu/diversityworks/resources>

In addition, Stanford's Land, Buildings, and Real Estate (LBRE) organization participates annually in National Rebuilding Day with Rebuilding Together Peninsula (the organization also serves as a "city builder" partner). Individual participation in this annual effort is strongly encouraged for both professional and bargaining-unit staff. All participating staff members are recognized and celebrated at an annual LBRE all-hands meeting.

For more details, please visit the following website:

<http://rebuildingtogetherpeninsula.org/support/sponsorship/rtp-sponsors>

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

<http://haas.stanford.edu/>

Community Stakeholder Engagement

Responsible Party

Moira Hafer

Sustainability Analyst
Office of Sustainability

Criteria

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

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

And

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

Frameworks adopted by entities of which the institution is part (e.g. government or university system) may count for this credit as long as the policies apply to and are followed by the institution.

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

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

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

Yes

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

The University is committed to working with our local community members and neighbors to ensure that our campus is planned, built and operated in harmony with community interests. Successful community engagement is not an accident. It requires careful planning, consultation and collaboration with the community and local jurisdictions along with effective execution and financial resources. Being a good neighbor enhances both the community and the university.

Stanford University's Office of Public Affairs and more specifically the Office of Government and Community Relations (GCR) coordinates and facilitates Stanford's interactions with local, state and federal governments, as well as its relationship with neighboring communities.

GCR promotes the interests of the University's faculty, students and staff through contact with public officials, involvement with educational organizations, tracking of pertinent legislation and lobbying on behalf of the University on a wide variety of issues from land use policies to funding for the basic sciences.

The GCR also serves as a liaison between Stanford and its neighboring communities by maintaining relations with numerous community-based organizations and individuals while also supporting the campus-community that contributes to the vitality of the greater community. Annual Community Partnership Awards (

<http://www.stanford.edu/dept/govcr/community-partnership-awards>

) are awarded each year to honor the valuable partnerships that exist between Stanford and its neighbors, and to celebrate community efforts that successfully tackle real world problems and advance the public good.

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

Academic Focused Community Engagement

Stanford's founding grant states the university's "object" succinctly: "to qualify its students for personal success, and direct usefulness in life." Today, more than a century later, we still subscribe to that goal. But we also hope for more. We want our students not simply to succeed but to flourish; we want them to live not only usefully but also creatively, responsibly, and reflectively.

In January 2010, Provost John Etchemendy and then Vice Provost for Undergraduate Education John Bravman launched "The Study of Undergraduate Education at Stanford University" (SUES). SUES was asked to examine the undergraduate experience at Stanford and make "recommendations for affirming or modifying our current undergraduate academic requirements." In particular, it was asked "What do we want our students to gain from their time on the Farm?" and "How do we best prepare them for local, national, and global citizenship?"

An essential aim of a Stanford education is if our graduates are to assume the responsibilities of local, national, and global citizenship, they need not only deep knowledge and well-honed skills but also a wider set of characteristics and competencies: a sense of personal and social responsibility; ethical and moral reasoning skills; an appreciation of cultural difference, as well as of human commonality; the ability to work collaboratively in diverse teams; tolerance, generosity, and a broad capacity for empathy.

With this in mind, many departments and programs have devised innovative courses and assignments that powerfully engage students without their having to venture far from the Farm. Students studying music, drama, and the studio arts routinely stage performances and exhibitions. Engineers work in teams to design, fabricate, and test products, working with actual clients. Students studying child development observe children at the Bing Nursery School, while students studying biology take courses at Jasper Ridge Biological Preserve, where many become docents. While relatively simple and inexpensive to administer, such exercises pay large educational dividends. They offer students a literal and figurative change of scenery, an opportunity to relate what they are learning in the classroom to the wider world.

Over the last generation, community-based learning has emerged as one of the most exciting fields in American higher education, a field that promises not only to deepen students' education but also to reshape universities' relationship to the wider world. Few if any enterprises hold more promise for building the essential capacities that our students need to function as responsible, reflective citizens at the local, national, and global levels. And few if any universities in the world have a greater opportunity to promote ethical, effective community-based learning than Stanford.

The SUES committee distinguishes “community-based learning” from what is commonly called “community service.” At Stanford, as at many other highly selective universities, community service is now a virtual requirement for admission, and most of our students have done a considerable amount of it before they arrive on campus. Many continue to engage in service at Stanford, some- times under university auspices, sometimes in independent organizations (some founded by students themselves). For a few, community service is the defining feature of their undergraduate educations.

Here, however, we wish to highlight something different—not service per se, but rather a specific kind of university-based learning. We are interested in particular in educational experiences that thoughtfully and purposefully connect students’ service in the community with their academic work. Like other forms of educational engagement, community-based learning provides opportunities for students to apply the knowledge and skills they are developing to the wider world, but it does so in a very particular context, with significant ethical and political implications. We believe that teaching students to think reflectively about the nature of their service work, to approach communities not just as beneficiaries of their aid but as partners in a common enterprise, will make the work more effective, ethical, enduring, and educational.

List of identified community stakeholders:

Below is a list of community stakeholders that Stanford University identified as part of its Searsville Dam and Reservoir Study:

Local governments

Local residents & community members

Local community groups (ex. Acterra, the Committee for Green Foothills, CalTrout, Santa Clara Audobon, American Rivers, Beyond Searsville Dam)

San Francisquito Creek Joint Powers Authority

Caltrans

U.S. Army Corps of Engineers

California Department of Fish and Wildlife

California State Water Resources Control Board

Santa Clara Valley Water District

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

Searsville Dam and Reservoir Study:

The Searsville Dam and Reservoir Study and the establishment of the Searsville Steering Committee and Working Group was implemented to assess what should be done with the 120-year-old dam, located in the university's Jasper Ridge Biological Preserve. This effort touches on many topics including land use, water systems, and sustainability.

The dam was built in 1892 by the for-profit Spring Valley Water Co. and acquired by the university in 1919. Today, sedimentation has reduced the reservoir to less than 10 percent of its original water capacity. The reservoir is one of several sources of non-potable water used at Stanford for landscape irrigation, agriculture and fire protection. The ecosystem created by the dam also is a key aspect of environmental research conducted at Jasper Ridge.

The steering committee is considering many possible options for Searsville Dam and the studies will cover some 20 subtopics, including, for example, dam structure and long-term integrity, downstream impacts from changes in sediment, fish passage and archaeological resources. Possible changes to be considered as part of the studies range from dredging the reservoir to bypassing the dam to altering or removing it. Also factored into the studies will be the possible effect of such occurrences as droughts, catastrophic storms and earthquakes.

The studies are also considering other issues related to Searsville, including alternatives to the current water supply and storage facilities, provision of fish passage, the change in the amount of sediment going downstream and options for removing accumulated sediment from 12 decades of deposition. Stanford is equally concerned about the steelhead population and has been working for more than a decade to improve the habitat for it and other protected species in the San Francisquito Creek watershed and on Stanford lands in general.

The effort has included the creation of an external advisory committee to help the university understand the community's perspective on the numerous options possible at Searsville Dam and Reservoir. Community representatives include residents from both upstream and downstream of the dam and reservoir, community based advocacy and environmental groups, local jurisdictional representatives and other stakeholders (see description in response to EN Credit 9: Community Partnerships).

Other community engagement activities are often conducted by community engagement oriented offices at Stanford. These include:

Office of Government & Community Relations

o

<http://www.stanford.edu/dept/govcr/>

Community Partnership Awards

o

<http://www.stanford.edu/dept/govcr/community-partnership-awards/>

Haas Center for Public Service

o

<http://studentaffairs.stanford.edu/haas>

John W. Gardner Center for Youth and Their Communities

o

<http://gardnercenter.stanford.edu>

The Study of Undergraduate Education at Stanford University

o

http://www.stanford.edu/dept/undergrad/sues/SUES_Report.pdf

Searsville Dam & Reservoir Study

o

<http://news.stanford.edu/searsville/>

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

Participation in Public Policy

Responsible Party

Moira Hafer

Sustainability Analyst
Office of Sustainability

Criteria

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

The policy advocacy must be done by the institution, not by students or a student group. This credit acknowledges institutions that advocate for policy changes and legislation to advance sustainability broadly. Advocacy efforts that are made exclusively to advance the institution's interests or projects may not be counted. For example, advocating for government funding for campus sustainability may be counted, whereas lobbying for the institution to receive funds that have already been appropriated may not.

Submission Note:

"---" 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:

Stanford University participates in public policy through its institutes, faculty and graduate student researchers, and general planning. Some of the best examples include:

(1) In May 2013, 48 Stanford scientists joined in presenting California Governor Jerry Brown with a consensus statement urging immediate and drastic action to address climate change. The document was signed by 520 scientists from 44 countries. The statement was delivered at Sustainable Silicon Valley's Water, Energy, and Smart Technology Summit at the NASA Ames Research Center.

(2) During the Stanford-MIT Game-Changers Workshop on March 7, 2013, energy researchers from Stanford and MIT met with members of Congress and the Obama administration to discuss game-changing energy technologies that will boost America's long term economic growth and address serious energy challenges, including climate change and reliability of supplies. Former U.S. Secretary of State George Shultz, chair of the Shultz-Stephenson Task Force on Energy Policy at Stanford's Hoover Institution, also advocated for implementation of a revenue-neutral carbon tax in the U.S. to help reduce greenhouse gas emissions.

(3) In the 2012-2013 academic year, former U.S. senator and Stanford Law School alumnus Jeff Bingaman joined the Steyer-Taylor Center at Stanford (jointly run by the Law School and Graduate School of Business) as a distinguished fellow to develop policies to assist states and local communities in promoting increased use of clean energy.

(4) In the 2012-2013 academic year, students in the Emmett Interdisciplinary Program in Environment and Resources joint master's program presented final capstone projects, including presenting an amicus brief to the Ninth Circuit Court of Appeals to argue that California's AB 32 should include life cycle analysis for ethanol.

(5) The Precourt Institute for Energy (PIE) runs several centers and programs based around policy advocacy, such as the Bay Area Photovoltaic Consortium, the Shultz-Stephenson Task Force on Energy Policy, and the Stanford Environmental and Energy Policy Analysis Center. These entities participate in ongoing work in sustainability policy advocacy.

(6) Stanford's Woods Institute for the Environment is helping leaders from the public and private sectors address sustainability challenges through a series of dialogues and workshops focused on key public policy issues. As a trusted and neutral source of research and information, Woods brings business, government and NGO leaders together with experts from Stanford and other academic institutions to create practical solutions to the world's most pressing environmental challenges. Through these "uncommon dialogues", the Woods Institute creates a two-way flow of information to help inform Stanford's environmental research. For more information, visit:

<https://woods.stanford.edu/news-events/dialogues-workshops>

(7) The Woods Institute's Water in the West Program is assisting the National Fish and Wildlife Foundation in the development of its western water conservation strategy, which will help determine the foundation's investment priorities in seven critical ecoregions.

(8) Stanford Law School's Environmental and Natural Resources Law and Policy Program along with the Woods Institute's Center for Ocean Solutions, organized an international symposium on adaptive marine reserves in the 2012-2013 academic year.

(9) In 2010, the Santa Clara County Board of Supervisors approved a "Green Building Ordinance" for unincorporated Santa Clara County (a second phase of the 2008 ordinance of the same name, which only addressed single-family homes). Stanford lies in unincorporated Santa Clara county and is the source of most non-residential and multi-family new construction in this area. Building on its track record of environmental stewardship with respect to water use and sustainable design and construction, Stanford has worked actively with the county since the approval of the Green Building Ordinance to develop alternate means compliance paths for the ordinance. Alternate means allow inclusion of innovative practices and methods that go beyond either CAL Green or LEED to be included in demonstration of building performance equivalent with the county ordinance.

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

N/A

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

Stanford does not make political donations.

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

<http://sustainable.stanford.edu/sites/sustainable.stanford.edu/files/documents/Sustainability-at-Stanford-2012-13.pdf>

Trademark Licensing

Responsible Party

Moira Hafer

Sustainability Analyst
Office of Sustainability

Criteria

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

"---" 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? :

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

Responsible Party

Moira Hafer

Sustainability Analyst
Office of Sustainability

Criteria

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

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

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

Is the institution a member of the Global Green and Healthy Hospitals Network?:

No

Is the institution a member of the Healthier Hospitals Initiative?:

Yes

Is the institution a member of Practice Greenhealth?:

Yes

A brief description of the hospital's sustainability initiatives:

For an overview of various initiatives and awards, please visit:

<http://stanfordhospital.org/newsEvents/newsReleases/2012/greening-the-or.html>

The website URL where information about the hospital's sustainability initiatives is available:

Operations

Air & Climate

This subcategory seeks to recognize institutions that are measuring and reducing their greenhouse gas and air pollutant emissions. Global climate change is having myriad negative impacts throughout the world, including increased frequency and potency of extreme weather events, sea level rise, species extinction, water shortages, declining agricultural production, and spread of diseases. The impacts are particularly pronounced for low-income communities and countries. In addition, institutions that inventory and take steps to reduce their air pollutant emissions can positively impact the health of the campus community, as well as the health of their local communities and regions.

Credit
Greenhouse Gas Emissions
Outdoor Air Quality

Greenhouse Gas Emissions

Responsible Party

Moira Hafer

Sustainability Analyst
Office of Sustainability

Criteria

Part 1

Institution has conducted a publicly available greenhouse gas (GHG) emissions inventory that includes, at minimum, Scope 1 and Scope 2 GHG emissions and may also include Scope 3 GHG emissions. The inventory may be validated internally by campus personnel who are independent of the GHG accounting and reporting process and/or verified by an independent, external third party.

Part 2

Institution reduced its adjusted net Scope 1 and Scope 2 GHG emissions per weighted campus user compared to a baseline.

Part 3

Institution's annual adjusted net Scope 1 and Scope 2 GHG emissions are less than the minimum performance threshold of 0.02 metric tons of carbon dioxide equivalent (MtCO₂e) per gross square foot (0.002 MtCO₂e per gross square metre) of floor area.

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

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

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

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

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

Institutions that have sold or transferred emissions reductions, e.g. in the form of verified emissions reductions (VERs), may not count those reductions toward this credit.

Submission Note:

Please note that the GSF reported for the GHG inventory varies from the campus GSF reported for all other credits. The boundary of the GHG inventory is slightly different from the overall STARS boundary, and the GSF for the GHG inventory boundary is used for this

credit. The difference primarily derives from the inclusion of off-campus leased spaces in the GHG inventory boundary.

Additionally, Stanford has conducted an inventory of the GHG emissions associated with Purchasing, but the results were not included in Stanford's official GHG Inventory submitted through the Climate Registry.

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

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

Yes

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

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

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

No

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

In 2001, the State of California created the nonprofit California Climate Action Registry (CCAR) to facilitate the voluntary accounting and reporting of greenhouse gas emissions within the state. CCAR stopped collecting emissions inventories in 2010 and transitioned its membership to the Climate Registry (TCR), a nonprofit emissions registry for North America.

The CCAR General Reporting Protocol required filing of Scope I & II emissions with independent third party verification, and encouraged participants to file inventories of Scope III emissions as well. Stanford joined the CCAR in 2006 and used this protocol to prepare and file its GHG emission inventories through 2009. In 2010, Stanford transitioned to TCR protocol for its third-party verified emissions inventory, and it has used the TCR in each subsequent year to date.

Scope III emissions at this time (business air travel and driving commuters) are compiled internally by Stanford's Parking & Transportation Services and are not formally verified.

Has the GHG emissions inventory been validated internally by personnel who are independent of the GHG accounting and reporting process and/or verified by an independent, external third party?:

Yes

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

Stanford verifies its emissions inventory every year through an independent third party, as required by TCR's protocol.

Please see the following website for more details on the required verification protocol:

<http://www.theclimateregistry.org/resources/verification/general-verification-protocol/>

Scope 1 and Scope 2 GHG emissions::

	Performance Year	Baseline Year
Scope 1 GHG emissions from stationary combustion	15,224.74 <i>Metric Tons of CO2 Equivalent</i>	10,713 <i>Metric Tons of CO2 Equivalent</i>
Scope 1 GHG emissions from other sources	5,739.91 <i>Metric Tons of CO2 Equivalent</i>	5,231 <i>Metric Tons of CO2 Equivalent</i>
Scope 2 GHG emissions from purchased electricity	81,702.44 <i>Metric Tons of CO2 Equivalent</i>	74,394 <i>Metric Tons of CO2 Equivalent</i>
Scope 2 GHG emissions from other sources	79,047.97 <i>Metric Tons of CO2 Equivalent</i>	92,554 <i>Metric Tons of CO2 Equivalent</i>

Figures needed to determine total carbon offsets::

	Performance Year	Baseline Year
Institution-catalyzed carbon offsets generated	0 <i>Metric Tons of CO2 Equivalent</i>	0 <i>Metric Tons of CO2 Equivalent</i>
Carbon sequestration due to land that the institution manages specifically for sequestration	0 <i>Metric Tons of CO2 Equivalent</i>	0 <i>Metric Tons of CO2 Equivalent</i>

Carbon storage from on-site composting	<i>0 Metric Tons of CO2 Equivalent</i>	<i>0 Metric Tons of CO2 Equivalent</i>
Third-party verified carbon offsets purchased	<i>0 Metric Tons of CO2 Equivalent</i>	<i>0 Metric Tons of CO2 Equivalent</i>

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

N/A

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

N/A

A brief description of the composting and carbon storage program:

N/A

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

N/A

Figures needed to determine “Weighted Campus Users”::

	Performance Year	Baseline Year
Number of residential students	11,147	10,305
Number of residential employees	0	0
Number of in-patient hospital beds	0	0
Full-time equivalent enrollment	15,606	13,282
Full-time equivalent of employees	12,297	11,027
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	Jan. 1, 2013	Dec. 31, 2013
Baseline Year	Jan. 1, 2007	Dec. 31, 2007

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

Although Stanford University first reported its GHG emissions in 2006, the 2007 results provide a more accurate baseline for the university. Reporting in 2006 included a number of non-typical operations, including major maintenance operations at the Central Energy Facility. Therefore, 2006 results are not considered representative of the campus emissions.

Gross floor area of building space, performance year:

15,611,389 *Square Feet*

Floor area of energy intensive building space, performance year:

	Floor Area
Laboratory space	3,953,410 <i>Square Feet</i>
Healthcare space	0 <i>Square Feet</i>
Other energy intensive space	74,705 <i>Square Feet</i>

Scope 3 GHG emissions, performance year::

	Emissions
Business travel	26,541 <i>Metric Tons of CO2 Equivalent</i>
Commuting	28,281 <i>Metric Tons of CO2 Equivalent</i>
Purchased goods and services	0 <i>Metric Tons of CO2 Equivalent</i>
Capital goods	0 <i>Metric Tons of CO2 Equivalent</i>
Fuel- and energy-related activities not included in Scope 1 or Scope 2	0 <i>Metric Tons of CO2 Equivalent</i>

Waste generated in operations	<i>0 Metric Tons of CO2 Equivalent</i>
Other categories (please specify below)	<i>0 Metric Tons of CO2 Equivalent</i>

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

N/A

A copy of the most recent GHG emissions inventory:

[Stanford University FINAL Entity Emissions Detailed Report.pdf](#)

The website URL where the GHG emissions inventory is posted:

http://sustainable.stanford.edu/emissions_inventory

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

Since 1987, Stanford relied on a natural gas-fired combined heat and power (CHP) plant for virtually all its energy demand. Although efficient, its fossil-fuel based source caused the CHP to produce 90% of Stanford's GHG emissions and consume 25% of the campus' potable water supply. As a result, Stanford's GHG reduction strategy focuses primarily on changing the university's energy supply through a new Central Energy Facility (CEF).

The new CEF houses three large water tanks for thermal energy storage and a high voltage substation that receives electricity from the grid. It features an innovative heat recovery system that is 52% more efficient than the CHP plant. The new CEF will come online in April 2015. In addition to a new CEF, Stanford is converting the heat supply of all buildings from steam to hot water. The campus-wide conversion was completed in March 2015.

The efficiencies gained from the new CEF and hot water conversion, along with Stanford's commitment to procure much of its electricity from solar and geothermal sources, will reduce the university's overall GHG emissions by 80% compared to current emissions. Further details on these GHG reduction measures are outlined in Stanford's Energy and Climate Plan, available at:

http://sustainable.stanford.edu/sites/default/files/Stanford_Energy_%26_Climate_Plan_2nd_Edition.pdf

Stanford also reduces its GHG emissions on an ongoing basis through the following building energy efficiency and conservation programs.

- Stanford's new buildings are designed to meet a whole-building, energy performance target. The target is unique to each new building, but based on performance of existing campus buildings of the same space type. Each new building is targeted to perform better than the peer buildings that were built before it.
- Stanford runs several energy retrofit programs for existing buildings: the Whole Building Energy Retrofit Program, the Energy Retrofit Program for Labs, and the Energy Retrofit Program for Offices. These programs provide rebates for projects that demonstrate energy savings.

- Stanford's Cardinal Green Office Program realizes energy conservation through individual building occupant actions.

Please see the following websites for complete details:

<http://sustainable.stanford.edu/sesi>

<http://sustainable.stanford.edu/energy-initiatives>

<http://sustainable.stanford.edu/cardinal-green/campaign/cardinal-green-office-program>

Outdoor Air Quality

Responsible Party

Moira Hafer

Sustainability Analyst
Office of Sustainability

Criteria

Part 1

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

Policies adopted by entities of which the institution is part (e.g. government or university system) may count for Part 1 of this credit as long as the policies apply to and are followed by the institution.

Part 2

Institution has completed an inventory of significant air emissions from stationary sources on campus. Significant emissions include nitrogen oxides (NO_x), sulfur oxides (SO_x), and other standard categories of air emissions identified in environmental permits held by the institution, international conventions, and/or national laws or regulations.

"---" 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:

There are various guidelines and programs in place to reduce air pollutant emissions from mobile sources on the Stanford campus. There is a no idling policy for the Marguerite shuttle system. All bus/shuttle drivers are instructed to turn off their engines if they are at a stop for longer than three minutes. Land, Buildings, and Real Estate (LBRE), the owner/operator of the largest portion of university fleet vehicles also has a no idling policy with signage posted throughout the facilities yard. LBRE also includes a no idling policy in its contracts with external entities. The grounds crews have been moving away from gas/diesel-powered engines for their equipment in an effort to limit air pollutant emissions for the workers and the campus community.

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

Yes

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

The Bay Area Air Quality Management District (BAAQMD) has an inventory of emissions from all permitted sources. In addition, Stanford has completed engineering estimates for each of 85 toxic air contaminants from 3 new large lab buildings as part of the construction planning process. These estimates are evaluated in comparison to BAAQMD trigger levels for each compound.

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

	Weight of Emissions
Nitrogen oxides (NOx)	0.00 <i>Tons</i>
Sulfur oxides (SOx)	---
Carbon monoxide (CO)	---
Particulate matter (PM)	---
Ozone (O3)	---
Lead (Pb)	---
Hazardous air pollutants (HAPs)	---
Ozone-depleting compounds (ODCs)	---
Other standard categories of air emissions identified in permits and/or regulations	0.00 <i>Tons</i>

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

New emergency generators are equipped with active diesel particulate (DP) filters as appropriate to reduce overall risk associated with DP emissions on and off campus. In the Chemistry Department, researchers are instructed to use cold traps on their reflux and other equipment upstream of the vacuum pump to reduce emissions. Campus-wide, EH&S discourages intentional evaporation in fume hoods. This is part of the “Responsible Laboratory Management Practices” (BAAQMD; 2-1-224), which also include:

- i. Open container procedures involving volatile toxics (from BAAQMD list) are avoided where feasible.
- ii. Avoid storage of open containers of volatile hazardous wastes.
- iii. Employee training includes the above
- iv. Fume hoods posted, and inspected annually to make certain that notices are posted
- v. Fume hoods monitored to assure proper face velocity
- vi. Evaporation of wastes forbidden

Please note the following:

- General (NO_x, CO, PM, CH₄ [other]): Based on emissions data provided by diesel emergency generator manufacturers. Emissions factors multiplied by annual usage.
- HAPs: Emissions are estimated based on chemical inventories in lab buildings including conservative usage and emissions rate assumptions.
- ODCs: All refrigerant equipment maintenance is performed by certified technicians in accordance with EPA requirements to minimize emissions.

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

Buildings

This subcategory seeks to recognize institutions that are taking steps to improve the sustainability performance of their buildings. Buildings are generally the largest user of energy and the largest source of greenhouse gas emissions on campuses. Buildings also use significant amounts of potable water. Institutions can design, build, and maintain buildings in ways that provide a safe and healthy indoor environment for inhabitants while simultaneously mitigating the building's impact on the outdoor environment.

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

Building Operations and Maintenance

Responsible Party

Moira Hafer

Sustainability Analyst
Office of Sustainability

Criteria

Institution owns and operates buildings that are:

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

And/or

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

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

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

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

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

	Yes or No
LEED for Existing Buildings or another 4-tier rating system used by an Established Green Building Council (GBC)	Yes
The DGNB system, Green Star Performance, or another 3-tier GBC rating system	No

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

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

Yang & Yamazaki Environment & Energy Building, certified LEED-EBOM Platinum

<http://www.usgbc.org/projects/stanfords-yang-yamazaki-environment-energy>

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

14,562,639 *Square Feet*

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

	Certified Floor Area
Minimum Level (e.g. LEED Certified)	0 <i>Square Feet</i>
3rd Highest Level (e.g. LEED Silver)	0 <i>Square Feet</i>
2nd Highest Level (e.g. LEED Gold)	0 <i>Square Feet</i>
Highest Achievable Level (e.g. LEED Platinum)	171,000 <i>Square Feet</i>

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

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

Highest Achievable Level	<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::

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

14,391,639 Square Feet

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

[Zone Management Project Delivery Process.pdf](#)

The date the guidelines or policies were formally adopted:

April 17, 2002

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

Please see the subsequent questions for complete details. All buildings on campus are operated to LEED-EBOM certified-level equivalent standards. For a complete list of campus buildings, please visit:

<http://campus-map.stanford.edu/>

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

At Stanford there are three major groups within the Land, Buildings, and Real Estate organization that work together to ensure sustainable building operation and maintenance: Sustainability and Energy Management (

http://lbre.stanford.edu/sem/sem_who_we_are

), Zone Management (

<http://bgm.stanford.edu/groups/zones/index>

), and Buildings & Grounds Maintenance (

<http://bgm.stanford.edu/>

).

The following examples showcase the number of relevant programs that contribute to sustainable building operations and align with LEED-EBOM criteria:

SUSTAINABLE SITES:

<http://bgm.stanford.edu/groups/grounds/index>

<http://transportation.stanford.edu/>

<http://hcp.stanford.edu/>

WATER EFFICIENCY:

http://lbre.stanford.edu/sem/water_efficiency

http://sustainable.stanford.edu/water_initiatives

ENERGY & ATMOSPHERE:

http://sustainable.stanford.edu/energy_initiatives

http://lbre.stanford.edu/sem/energy_services_group

<http://bgm.stanford.edu/groups/zones/index>

MATERIALS & RESOURCES:

http://bgm.stanford.edu/home_pssi_main

http://www.stanford.edu/group/fms/fingate/staff/buypaying/policy_notes/sustainable_purchase.htm

1

<http://www.stanford.edu/dept/rde/cgi-bin/drupal/dining/node/213>

INDOOR ENVIRONMENTAL QUALITY:

http://www.stanford.edu/dept/EHS/prod/mainrencon/Guide_Proj_Manag.pdf

http://lbre.stanford.edu/sem/energy_mgmt_systems

While Stanford has not formally pursued LEED-EBOM certification for any buildings where it doesn't align with the department's academic mission, a comprehensive LEED-EBOM (2009) equivalency analysis was completed in 2011/2012. The results of that study confirm universal certified-level equivalency with many buildings operating equivalent to a LEED-EBOM silver, gold, or even platinum performance. Stanford has not gone through the certification process for these buildings because this process has not been deemed compatible with the university's academic mission. In addition, in 2012–13, the Office of Sustainability developed a campus-wide Existing Building Rating System. The vision for this project merges best practices from the LEED for Existing Buildings: Operations and Maintenance (EBOM) rating system with Stanford-specific metrics to tell a more complete story of building performance on campus. The rating for each building will ultimately be packaged into a school-level report card that quantifies sustainability performance for academic departments in six topic areas: energy, water, waste, transportation, indoor environmental quality, and engagement, incorporating LEED-EBOM criteria. It also provides an action plan on how to improve the department's sustainability performance using existing campus programs, providing a business case for each program. These school-level report cards will be launched in 2015.

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

<http://sustainable.stanford.edu/buildings>

Responsible Party

Moira Hafer

Sustainability Analyst
Office of Sustainability

Criteria

Institution-owned buildings that were constructed or underwent major renovations in the previous five years are:

1) Certified under a green building rating system for new construction and major renovations (e.g. the LEED® for New Construction and Major Renovations, LEED for Commercial Interiors, LEED for Healthcare, and/or LEED for Core and Shell Green Building Rating Systems)

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

And/or

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

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

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

Submission Note:

Please note that Stanford does not have a blanket policy that requires LEED certification, but rather guidelines with equivalent standards and an emphasis on prioritizing selection of the most appropriate high-performance features for a particular building function. The decision of whether or not to seek formal certification lies with the particular school or department for whom the new building is intended. For the majority of new construction in the past three years, the decision was made not to pursue certification under LEED-NC, and instead, to put the money that would have been spent on certification towards more sustainability features. It is estimated that Stanford would have spent \$1.2 million in order to obtain LEED certification of all the new buildings within the last three years. Rather than paying consultants, contractors, and USGBC fees, Stanford used that funding to incorporate sustainability features such as heat recovery HVAC systems, PV installations, rainwater storage systems, enhanced building controls, and water cooled (instead of air cooled) chillers into its building portfolio. These significant features within Stanford's high-performance buildings add value without formal certification, which merely increases the cost of the overall project. By taking potential certification fees and putting them back into its projects, Stanford can leverage its resources to achieve a real and quantitative impact instead of a plaque and accolade.

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

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

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

The Knight Management Center (Graduate School of Business) was certified LEED-NC Platinum -- 360,000 sq-ft.

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

775,291 Square Feet

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

	Certified Floor Area
Minimum Level (e.g. LEED Certified)	0 Square Feet
3rd Highest Level (e.g. LEED Silver)	0 Square Feet
2nd Highest Level (e.g. LEED Gold)	0 Square Feet
Highest Achievable Level (e.g. LEED Platinum)	360,000 Square Feet

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

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	<i>0 Square Feet</i>
4th Highest Level	<i>0 Square Feet</i>
Mid-Level	<i>0 Square Feet</i>
2nd Highest Level	<i>0 Square Feet</i>
Highest Achievable Level	<i>0 Square Feet</i>

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

0 Square Feet

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

0 Square Feet

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

415,291 Square Feet

A copy of the guidelines or policies :

[stanford_sustainable_building_guidelines.pdf](#)

The date the guidelines or policies were adopted:

March 1, 2002

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

In its existing Guidelines for Sustainable Buildings, Stanford lists its project targets as 30% below Title 24 and 25% below code-allowed water consumption. In addition, Stanford's new buildings are now being designed to meet a whole-building, energy performance target. The target is unique to each new building, but based on performance of existing campus buildings of the same space type. Each new building is targeted to perform better than the peer buildings that were built before it.

Brief project notes for new buildings can be found online on the Department of Project Management website (

http://lbre.stanford.edu/dpm/our_projects

). Only projects completed within the past three years were included.

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

Title-24, California's Green Building Standards, and Santa Clara County all set sustainability standards with which Stanford must comply. In order to comply with these standards, a LEED-NC equivalency analysis is performed on each new building project and submitted to appropriate jurisdictions. On every project, Stanford allocates budget to include high-efficiency transformers, energy management systems, and recycled water systems.

Stanford's Department of Project Management (

<http://dpm.stanford.edu>

) is responsible for the development, design and construction of major capital projects at Stanford University. DPM reports to the Associate Vice President for Academic Projects and Operations within Land, Buildings, and Real Estate, and currently includes a staff of 28 professionals with backgrounds in architecture, engineering, construction and cost management. These professionals serve as Project Managers and Project Engineers, Quality Assurance Field Inspectors, and Project Coordinators, who work as a project team that involves multiple stakeholders to ensure the successful delivery of facilities that support the University's academic mission. Together with its colleagues in the departments of Sustainability and Energy Management (

<http://sem.stanford.edu>

) and Buildings and Ground Maintenance (

<http://bgm.stanford.edu>

), DPM strives to employ life cycle cost analysis and sustainability measures in the delivery of all capital projects.

For more information, please visit the following sites:

http://lbre.stanford.edu/dpm/PDP_Process
STARS Reporting Tool | AASHE

<http://sustainable.stanford.edu/guidelines>

http://maps.stanford.edu/fdg_available

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

<http://sustainable.stanford.edu/guidelines>

Indoor Air Quality

Responsible Party

Moira Hafer

Sustainability Analyst
Office of Sustainability

Criteria

Institution has an indoor air quality (IAQ) management program that includes regular auditing or monitoring, a mechanism for occupants to register complaints, and action plans to implement any corrective measures required in response to audits, monitoring or complaints.

Policies and plans adopted by entities of which the institution is part (e.g. government or university system) may count for this credit as long as the policies apply to and are followed by the institution.

"---" 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:

14,562,639 Square Feet

Gross floor area of building space:

14,562,639 Square Feet

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

A number of organizations work together to ensure IAQ practices at Stanford. In particular, please consider the following:

(1) Smoke-Free Environment Policy

http://adminguide.stanford.edu/23_4.pdf

(2) IAQ Policies & Requirements During Renovation Projects

http://www.stanford.edu/dept/EHS/prod/mainrencon/Guide_Proj_Manag.pdf

(3) Facilities Design Guidelines -- See Div. 15 Mechanical

http://maps.stanford.edu/fdg_available

(4) Occupant Complaint System (Work Order Request & Hotline)

(5) Monitoring & Control

http://lbre.stanford.edu/sem/energy_services_group

(6) Preventative Maintenance, Facilities Renewal, and Ongoing Commissioning

<http://bgm.stanford.edu/groups/zones/index>

(7) On-Site HVAC Shop & Technicians

http://bgm.stanford.edu/groups/build_maint/build_eng_trades

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

Dining Services

This subcategory seeks to recognize institutions that are supporting a sustainable food system. Modern industrial food production often has deleterious environmental and social impacts. Pesticides and fertilizers used in agriculture can contaminate ground and surface water and soil, which can in turn have potentially dangerous impacts on wildlife and human health. The production of animal-derived foods often subjects animals to inhumane treatment and animal products have a higher per-calorie environmental intensity than plant-based foods. Additionally, farm workers are often directly exposed to dangerous pesticides, subjected to harsh working conditions, and paid substandard wages. Furthermore, food is often transported long distance to institutions, producing greenhouse gas emissions and other pollution, as well as undermining the resiliency of local communities.

Institutions can use their purchasing power to require transparency from their distributors and find out where the food comes from, how it was produced, and how far it traveled. Institutions can use their food purchases to support their local economies; encourage safe, environmentally-friendly and humane farming methods; and help eliminate unsafe working conditions and alleviate poverty for farmers. These actions help reduce environmental impacts, preserve regional farmland, improve local food security, and support fair and resilient food systems.

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

Credit
Food and Beverage Purchasing
Low Impact Dining

Food and Beverage Purchasing

Responsible Party

Moira Hafer

Sustainability Analyst
Office of Sustainability

Criteria

Part 1

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

- Local and community-based

And/or

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

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

Local community- based products:

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

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

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

Part 2

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

Submission Note:

Note: Stanford has already surpassed the Real Food Campus Commitment (20% by 2020), so the university did not feel obligated to sign the commitment.

"---" 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:

47.70

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

[Dining Sustainable Purchasing Commitments 3 18 14.docx](#)

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

Serving seasonal, sustainable, healthy and culturally diverse food, R&DE offers options and accommodates food preferences for a diverse student, faculty, staff, and visitor population. R&DE is committed to meaningfully participating in the education of the world's future leaders by sharing knowledge and creating awareness of food culture, food systems, and food production. R&DE serves foods that are grown using sound environmental practices and encourage biodiversity with earth friendly systems from farms that respect the land and are committed to ensuring our future generation's food supply without compromise.

Below is a list of R&DE Stanford Dining's sustainable purchasing commitments; these are products that we always buy.

- Preference for organic and local products (in 2013 46% of our produce was organic or local)
- Organic apples (#1 on the Dirty Dozen)
- Organic, local spring mix from Earthbound Farms
- Organic tofu
- Cage-free eggs (all eggs- liquid and whole) from Wilcox Farms
- Monterey Bay Aquarium "good" and "best" choice seafood
- Wild Alaskan salmon from Taku River Reds
- Grass-fed hamburger patties from Bartels Farm
- Fair Trade coffee (regular and decaf) from Starbucks
- Pork butt from Niman Ranch (raised outdoors, vegetarian diet, no hormones or antibiotics)

New in 2013-14

- Organic, local herbs (basil, Thai basil, mint, rosemary & thyme) from Jacobs Farm
- Organic, local swiss chard from Coke Farm
- Organic, local milk (all but chocolate milk) from Straus Family Creamery
- Tuna fish from American Tuna (Seafood Watch "Best Choice")
- Organic & local chopped romaine from Earthbound Farms

R&DE Stanford Hospitality and Auxiliaries buys grass-fed beef from Bartels Farm, Marin Sun Farms, and Painted Hills Natural Beef, local, cage free eggs from Glaum Egg Ranch in Santa Cruz County, seafood approved by Monterey Bay Aquarium's Seafood Watch and NOAA Fishwatch, local, free range chickens from Mary's Chicken and Petaluma Poultry, and organic produce from many local farms. In 2013-14, we added humanely raised pork ribs to the concessions at the Stanford football stadium, and in 2014-15, we increased the amount of antibiotic-free chicken purchased and began a close partnership with Pie Ranch, a local farm based in Pescadero, CA, among other new purchasing initiatives.

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

No

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

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

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

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

R&DE Stanford Dining has a full-time sustainable food program manager who runs the Sustainable Food Program. The Sustainable Food Program is a collaborative effort that includes strategic partnerships with vendors and suppliers, students, staff, faculty and other campus stakeholders. Through these partnerships, the Sustainable Food Program seeks to create positive impact across these main areas: purchasing and reporting within established budgets and sustainability guidelines; education and outreach by lecturing, teaching, hosting sustainability events, training staff and acting as subject matter experts; collaboration with various groups, including students, R&DE division partners, faculty, community partners, and supply chain partners; sustainable operations include kitchen sustainability audits and food waste reduction; and wellness and culinary excellence. Sustainability and wellness go hand-in-hand, and often the freshest, seasonal, sustainably grown ingredients are not only more nutritious, but also taste better. The program is aligned with the themes of sustainability, wellness and education through the components of our EatWell program.

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

R&DE Stanford Dining and R&DE Stanford Hospitality and Auxiliaries both use an enterprise software called EATEC to order products and to generate reports. Our Sustainable Food Program Manager also uses velocity reports from the suppliers to keep track of our sustainable purchases.

Total annual food and beverage expenditures:

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

	Present?	Included?
--	----------	-----------

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

Has the institution achieved the following?:

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

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

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

<http://rde.stanford.edu/dining/sustainability>

Low Impact Dining

Responsible Party

Moira Hafer

Sustainability Analyst
Office of Sustainability

Criteria

Part 1

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

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

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

Or

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

Part 2

Institution:

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

And

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

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

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

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

24

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

R&DE Stanford Dining and R&DE Stanford Hospitality and Auxiliaries both use an enterprise software called EATEC to order products and to generate reports. EATEC helps manage inventory while lowering food and labor costs and increasing efficiency. We also ask our suppliers for reports that we cross-reference with the EATEC reports to ensure the reporting is correct.

Our Sustainable Food Program Manager runs reports throughout the year to ensure our chefs are complying with our sustainability standards. In R&DE Stanford Dining, those standards for animal products include: organic and local milk from Straus Creamery, grass-fed hamburgers from Bartels Farm, humane pork butt from Niman Ranch, wild Alaskan salmon from Taku River Reds fishery, Monterey Bay Aquarium Seafood Watch approved seafood, pole and line caught canned tuna from American Tuna, and cage-free eggs from Wilcox Farms.

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”):

R&DE Stanford Dining provides vegan meals in all dining halls on all days. The dining halls have “Performance Dining” options that are all vegetarian, with at least one or two vegan options at lunch and dinner. Each Performance Dining area has a bean or tofu dish, whole grain dish, vegetable side, and leafy greens dish (i.e. chard, kale, spinach, etc.). R&DE Stanford Dining always provides at least one vegetarian soup, and many are vegan as well. Each of the 11 dining halls also has a make-your-own salad bar with homemade salad dressings. R&DE Stanford Dining labels all vegetarian and vegan options as well as the top eight allergens for all food. Vegetarian and vegan options are distinguished from each other. In addition, R&DE Stanford Dining runs free cooking classes for students throughout the year, including vegan classes. This past year, a vegan mushroom cooking class was offered that was very popular. Finally, R&DE Stanford Hospitality and Auxiliaries has vegan and vegetarian options in all cafes, catering operations, and concessions on campus. Both R&DE Stanford Dining and Stanford Hospitality and Auxiliaries’ dining facilities are open to all members of the campus community and their guests.

In 2014-15, Stanford earned an A on Peta2’s Vegan Report Card and is currently in contention for Peta2’s Favorite Vegan-Friendly College Contest, with a 96% student satisfaction rating.

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

R&DE Stanford Dining and R&DE Stanford Hospitality and Auxiliaries is committed to reducing the impact of our animal-derived food purchases as much as we can. We also strive to constantly improve our Sustainable Food Program and continue to minimize our impact on the environment and purchase more humane options.

R&DE Stanford Dining partnered with the Stanford Design School and Stanford Medical School to run a study in the dining halls to determine how to get students to reduce meat consumption. We have taken the results from those studies and incorporated them in both the designs of our dining halls and our Performance Dining signage. Additionally, we design our menu to have plenty of delicious entrees and sides that do not have or do not focus on meat as the center of the plate. We are currently working with a PhD student in psychology

to test which messages will encourage students to eat less meat. In 2013, R&DE Stanford Dining collaborated with students from the Green Living Council to pilot a project called “Mix-it-up Mondays” which is similar to Meatless Mondays. The students ran an education campaign about the environmental impact of meat eating and then created a cooking demo and make-your-own kamut bar to increase vegetarian meals.

R&DE Stanford Dining has standards for sustainable animal products (these are products that we always purchase, with no exceptions) including: organic and local milk from Straus Creamery, grass-fed hamburgers, humane pork butt from Niman Ranch, wild Alaskan salmon from Taku River Reds fishery, Monterey Bay Aquarium Seafood Watch approved seafood, pole and line caught canned tuna from American Tuna, and cage-free eggs from Wilcox Farms. We added the organic and local milk (all types except chocolate milk because they do not make that) from Straus Creamery in September 2013 and added the American Tuna in August 2013. We increased the amount of wild Alaskan salmon we purchase directly from Taku River Reds, a family fishery, from 15,000 pounds to 25,000 pounds in school year 2013-14.

In spring 2013, R&DE Stanford Dining bought sustainably-raised, free-range, and local turkeys from BN Ranch for Easter dinner and other meals. We had a large outreach campaign to educate the campus community about why we chose these turkeys. We followed up that successful campaign with another one-time purchase of sustainably-raised, free-range, and local turkeys from Diestel Family Turkey Ranch for our 2013 Thanksgiving dinner.

R&DE Stanford Hospitality and Auxiliaries buys grass-fed beef from Bartels Farm, Marin Sun Farms, and Painted Hills Natural Beef, local, cage free eggs from Glaum Egg Ranch in Santa Cruz County, seafood approved by Monterey Bay Aquarium’s Seafood Watch and NOAA Fishwatch, and local, free range chickens from Mary’s Chicken and Petaluma Poultry. This past year, we added humanely raised pork ribs to the concessions at the Stanford football stadium.

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

<https://www.stanford.edu/dept/rde/cgi-bin/drupal/dining/vegetarian>

Annual dining services expenditures on food:

Annual dining services expenditures on conventionally produced animal products:

Annual dining services expenditures on sustainably produced animal products:

Energy

This subcategory seeks to recognize institutions that are reducing their energy consumption through conservation and efficiency, and switching to cleaner and renewable sources of energy such as solar, wind, geothermal, and low-impact hydropower. For most institutions, energy consumption is the largest source of greenhouse gas emissions, which cause global climate change. Global climate change is having myriad negative impacts throughout the world, including increased frequency and potency of extreme weather events, sea level rise, species extinction, water shortages, declining agricultural production, ocean acidification, and spread of diseases. The impacts are particularly pronounced for vulnerable and poor communities and countries. In addition to causing global climate change, energy generation from fossil fuels, especially coal, produces air pollutants such as sulfur dioxide, nitrogen oxides, mercury, dioxins, arsenic, cadmium and lead. These pollutants contribute to acid rain as well as health problems such as heart and respiratory diseases and cancer. Coal mining and oil and gas drilling can also damage environmentally and/or culturally significant ecosystems. Nuclear power creates highly toxic and long-lasting radioactive waste. Large-scale hydropower projects flood habitats and disrupt fish migration and can involve the relocation of entire communities.

Implementing conservation measures and switching to renewable sources of energy can help institutions save money and protect them from utility rate volatility. Renewable energy may be generated locally and allow campuses to support local economic development. Furthermore, institutions can help shape markets by creating demand for cleaner, renewable sources of energy.

Credit
Building Energy Consumption
Clean and Renewable Energy

Building Energy Consumption

Responsible Party

Moira Hafer

Sustainability Analyst
Office of Sustainability

Criteria

Part 1

Institution has reduced its total building energy consumption per gross square foot/metre of floor area compared to a baseline.

Part 2

Institution's annual building energy consumption is less than the minimum performance threshold of 28 Btu per gross square foot (2.6 Btu per gross square metre) of floor area per degree day.

Performance for Part 2 of this credit is assessed using EUI-adjusted floor area, a figure that accounts for significant differences in energy use intensity (EUI) between types of building space.

Submission Note:

Per STARS instructions regarding "source-site ratios" different from the default values provided, Stanford's justification for the use of 1.67 for each value reflects the actual documented plant efficiency of the Central Energy Facility.

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

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

	Performance Year	Baseline Year
Total building energy consumption	2,551,648 <i>MMBtu</i>	2,778,173 <i>MMBtu</i>

Purchased electricity and steam:

	Performance Year	Baseline Year
Grid-purchased electricity	729,551.65 <i>MMBtu</i>	649,275 <i>MMBtu</i>
District steam/hot water	541,080.35 <i>MMBtu</i>	735,919 <i>MMBtu</i>

Gross floor area of building space::

	Performance Year	Baseline Year
Gross floor area	14,831,648 <i>Gross Square Feet</i>	13,248,571 <i>Gross Square Feet</i>

Floor area of energy intensive space, performance year::

	Floor Area
Laboratory space	3,953,410 <i>Square Feet</i>
Healthcare space	0 <i>Square Feet</i>
Other energy intensive space	

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

	Degree Days
Heating degree days	1,737
Cooling degree days	2,066

Source-site ratios::

	Source-Site Ratio (1.0 - 5.0; see help icon above)
Grid-purchased electricity	1.67
District steam/hot water	1.67

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

	Start Date	End Date
Performance Year	Jan. 1, 2014	Dec. 31, 2014
Baseline Year	Sept. 1, 2004	Aug. 31, 2005

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

FY2005 was adopted as the baseline year because it correlates to when Stanford began tracking its building energy consumption in this way. Stanford has since begun reporting its building energy consumption by calendar year to more closely align with its greenhouse gas emissions inventory.

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

Stanford regulates building temperatures with an Energy Management & Control System (EMCS). The EMCS allows Stanford to adjust temperatures based on occupancy via building scheduling through the system. Operational hours for each building are actively managed, and each week Stanford adjusts the HVAC operating schedule in up to 60 buildings to best align with specific hours of use.

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

LED task lights have been successfully piloted and deployed in new campus buildings and in some retrofit projects. One example is the LED task lighting in Y2E2 provided to each occupant. The building primarily utilizes natural light, but desks are outfitted with a 6-watt LED fixture that provides task lighting. The same LED task lights were also installed in Sweet Hall during a recent major renovation.

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

Occupancy sensors for lighting have been installed as retrofit projects in most classroom buildings as well as the public spaces and bathrooms of most student housing on campus. Occupancy sensors and timers for lighting have been installed in buildings across campus as part of the Cardinal Green Office Program (

http://sem.stanford.edu/buildings_initiatives

). Stanford's Guidelines for Sustainable Buildings also makes explicit mention of occupancy sensors as a preferred design strategy to increase efficiency (

[http://sem.stanford.edu/sites/sem.stanford.edu/files/documents/Stanford_sustainable_guidelines.](http://sem.stanford.edu/sites/sem.stanford.edu/files/documents/Stanford_sustainable_guidelines.pdf)

[pdf](#)

), and thus these sensors are now standard practice for new construction projects.

An excellent example of sensors can be found in the Y2E2 building, which includes both sensors for occupancy and photocell technology for daylight control.

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:

As part of the Stanford Energy System Innovations (SESI) program (

<http://sustainable.stanford.edu/sesi>

), Ground Source Heat Exchange (GSHE) could augment the basic heat recovery scheme of SESI by providing a more sustainable way to meet the 20% excess winter heating and 30% excess summer cooling needs of the university that can't be met by building heat recovery. Phase I studies indicate that GSHE at Stanford is feasible. The university is now in Phase II studies that include exploratory borings to fully map subsurface hydrogeology, regulatory reviews, and other tasks necessary to determine the final feasibility of a GSHE addition to SESI.

For more information, please visit:

http://sustainable.stanford.edu/sites/sustainable.stanford.edu/files/documents/Stanford_SESI_Ge

[neral_Information_Brochure.pdf](#)

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

Stanford's current cogeneration plan was commissioned in 1987 and has efficiently produced electricity, steam, and chilled water since that time. However, on April 1, 2015, Stanford will launch its new Central Energy Facility through the SESI program, which employs heat recovery technology to recover up to 70% of the heat now discharged from the cooling system to meet at least 80 percent of simultaneous campus heating demands. In the new heat recovery design, the waste heat collected from buildings via the chilled water loop will be captured by new heat recovery chillers and moved to a new hot water loop. The new hot water loop will replace the current steam system for delivering heat to the campus. Due to the significant heat recovery and lower line losses of hot water, compared to steam, the new system is 70 percent more efficient than the combined heat and power process provided by the current cogeneration plant.

For more information, please visit the following:

http://lbre.stanford.edu/sem/central_energy_facility

http://sustainable.stanford.edu/climate_action

A video description of Stanford's past cogeneration technologies and the upcoming changes to the university's energy system can be found online:

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

Stanford is systematically reviewing the HVAC systems of 90 of its largest buildings, then adjusting or repairing the systems to ensure they work as designed. Technicians who conduct the reviews also recommend ways to further improve energy performance through ERP projects. The recommissioning of all 90 buildings was completed by the end of 2010 and all buildings are on a three-year renewal cycle.

Please see subsequent sections for details on major and minor retrofit programs.

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

Since the 1980s, Stanford has employed energy metering on all of its facilities to understand how and where energy is being used. Additionally, Stanford's Energy Management & Control System is a computer-based centralized system for scheduling Stanford's Central Energy Facility Steam and Chilled Water Plants, monitoring Stanford's Cogen plant, and providing HVAC control for many campus buildings. Stanford utilizes a SCADA (Supervisory Control & Data Acquisition) system that provides real-time information and diagnostics of the campus power network (

<http://scadaweb/hv/>

).

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

ERP Express—Laboratory Equipment

Sustainability and Energy Management (SEM) and the School of Medicine (SOM) have partnered to offer financial incentives to labs that put DNA and RNA samples into room temperature storage and dispose of old ultra-low temperature freezers. The FY11 Cash for Clunkers program makes it easier for researchers to try room temperature storage technology and earn rebates up to \$13,000. Researchers outside SOM can also earn cash back through ERP Express for Laboratory Equipment. A full history of the Room Temperature Biological Sample Storage program, including pilot project results, can be found online.

http://lbre.stanford.edu/sem/energy_retrofit_program

ERP Express—Office Equipment

Reduced electrical consumption within individual workstations and shared office areas is a major goal of the Building Level Sustainability Program. To support facility managers and building-level "green champions" seeking an extra incentive to make strategic purchases and operational decisions, ERP Express for Office Equipment offers small rebates for the purchase and installation of appliance timers and Smart Strips. Eligibility requirements, terms and conditions, as well as other important information about the rebate program

can be found online.

Plug Load Reduction Programs

In summer 2014, Stanford conducted a Plug Load Equipment Inventory to collect data on 55 types of electricity-consuming equipment in 220 buildings across Stanford's campus. The inventory resulted in a database of 110,000 pieces of electronic equipment, including relevant attributes of each type of equipment that influence its energy consumption (such as an Energy Star rating). Stanford analyzed this data and ultimately generated 33 potential plug load reduction program options that fall into 5 categories: energy efficiency measures for existing equipment (either efficiency upgrades or installation of efficiency devices such as appliance timers or smart strips), space heating, sustainability in information technology, green labs, and procurement policies. Stanford is currently exploring the expansion of each of these program categories to effectively address plug loads in the coming years. If all 33 viable program options are implemented, Stanford could save a total of \$2.3 million annually. See

<http://sustainable.stanford.edu/plug-load-inventory>

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

Trees are consciously placed to provide shading and cooling for buildings and pavement with an emphasis on deciduous trees along the southern and western building exposures.

http://sustainable.stanford.edu/landscape_and_grounds

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

Stanford has utilized vending machine sensors for a number of years as a result of a student initiative. As an example, all vending machines within the Mitchell Building, home to the School of Earth Sciences, are equipped with motion sensors.

The Plug Load Equipment Inventory in summer 2014 cataloged all the vending machines without sensors on campus. With this data in hand, Stanford will make a comprehensive effort in summer 2015 to install these energy-saving devices on all vending machines that do not yet have them.

A brief description of other energy conservation and efficiency initiatives employed by the institution:

WHOLE BUILDING RETROFITS PROGRAM

The university has allocated \$30 million for major capital improvements to the most energy-intensive buildings on campus. The first overhaul, of the Stauffer Chemistry Building, was finished in June 2007 and resulted in a 35 percent drop in electricity use, a 43 percent cut in steam use and 62 percent fall in chilled water use. It also reduced carbon dioxide emissions associated with the building by 762 metric tons per year and cut energy costs by 46 percent in the first 12 months.

As of August 2014, the university had completed 14 WBERP projects, which are saving annually 9.5 million kWh, 5 million ton-hrs of chilled water, and 71 million pounds of steam, representing over 14,000 metric tons of greenhouse gas emissions and savings nearly \$4 million per year. An additional 12 projects are in the pipeline, which are projected to save another \$2.3 million per year.

ENERGY RETROFIT PROGRAM (ERP)

The Energy Retrofit Program (ERP) has invested more than \$10 million over 15 years in improving energy efficiency through building-level technology upgrades, such as T8 lamps and electronic ballasts, variable-speed drives for motors, LED exit signs and spectrally selective window film. The result of these custom projects is an estimated cumulative savings of over 240 million kilowatt-hours of electricity—about 15 months of the university’s current use—and prevention of 72,000 metric tons of carbon dioxide equivalent emissions. A program overview, project history, guidelines, and application details for custom rebates can be found on the ERP website.

http://lbre.stanford.edu/sem/energy_retrofit_program

The website URL where information about the institution’s energy conservation and efficiency initiatives is available:

http://sustainable.stanford.edu/energy_initiatives

Responsible Party

Moira Hafer

Sustainability Analyst
Office of Sustainability

Criteria

Institution supports the development and use of clean and renewable energy sources, using any one or combination of the following options.

- Option 1: Generating electricity from clean and renewable energy sources on campus and retaining or retiring the rights to the environmental attributes of such electricity. (In other words, if the institution has sold Renewable Energy Credits for the clean and renewable energy it generated, it may not claim such energy here.) The on-site renewable energy generating devices may be owned and/or maintained by another party as long as the institution has contractual rights to the associated environmental attributes.
- Option 2: Using renewable sources for non-electric, on-site energy generation, such as biomass for heating.
- Option 3: Catalyzing the development of off-site clean and renewable energy sources (e.g. an off-campus wind farm that was designed and built to supply electricity to the institution) and retaining the environmental attributes of that energy.
- Option 4: Purchasing the environmental attributes of electricity in the form of Renewable Energy Certificates (RECs) or other similar renewable energy products that are either Green-e Energy certified or meet Green-e Energy’s technical requirements and are verified as such by a third party, or purchasing renewable electricity through the institution’s electric utility through a certified green power purchasing option.

Since this credit is intended to recognize institutions that are actively supporting the development and use of clean and renewable energy, neither the electric grid mix for the region in which the institution is located nor the grid mix reported by the electric utility that serves the institution count for this credit.

The following renewable systems are eligible for this credit:

- Concentrated solar thermal
- Geothermal systems that generate electricity
- Low-impact hydroelectric power
- Solar photovoltaic
- Wave and tidal power

- Wind

Biofuels from the following sources are eligible:

- Agricultural crops
- Agricultural waste
- Animal waste
- Landfill gas
- Untreated wood waste
- Other organic waste

Technologies that reduce the amount of energy used but do not generate renewable energy do not count for this credit. For example, daylighting, passive solar design, and ground-source heat pumps are not counted in this credit. The benefits of such strategies, as well as improved efficiencies achieved through using cogeneration technologies, are captured by *OP 1: Greenhouse Gas Emissions* and *OP 8: Building Energy Consumption*.

Transportation fuels, which are covered by *OP 1: Greenhouse Gas Emissions* and *OP 18: Campus Fleet*, are not included in this credit.

Submission Note:

Having recently achieved Direct Access to the California electricity market, Stanford now has the ability to determine its own sources of electricity. Stanford has committed to procuring both solar and geothermal renewable electricity to comprise 80% of its electricity consumption beginning in 2016.

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

Clean and renewable energy from the following sources::

	Performance Year
Option 1: Clean and renewable electricity generated on-site during the performance year and for which the institution retains or has retired the associated environmental attributes	2,743.79 <i>MMBtu</i>
Option 2: Non-electric renewable energy generated on-site	0 <i>MMBtu</i>
Option 3: Clean and renewable electricity generated by off-site projects that the institution catalyzed and for which the institution retains or has retired the associated environmental attributes	0 <i>MMBtu</i>

Option 4: Purchased third-party certified RECs and similar renewable energy products (including renewable electricity purchased through a certified green power purchasing option)

0 MMBtu

Total energy consumption, performance year:

2,675,350 MMBtu

A brief description of on-site renewable electricity generating devices :

The following installations are included in this credit:

Y2E2 #1, #2, & #3, Huang, Spilker, Knight, Synergy, Hoover, Res2, Jasper Ridge

In February 2014, Provost Etchemendy approved a 5.5 megawatt solar photovoltaic installation at 15 sites on campus, which are estimated to produce about 10% of campus electricity demand. Sustainability and Energy Management is also evaluating the potential for photovoltaics at other Stanford owned sites, including SLAC and the future Redwood City campus.

Please see the Renewable Energy Fact Sheet for additional information:

http://sustainable.stanford.edu/sites/default/files/Stanford_renewable_energy_aug14.pdf

A brief description of on-site renewable non-electric energy devices:

n/a

A brief description of off-site, institution-catalyzed, renewable electricity generating devices:

n/a

A brief description of the RECs and/or similar renewable energy products:

n/a

The website URL where information about the institution's renewable energy sources is available:

http://lbre.stanford.edu/sem/renewable_energy

Grounds

This subcategory seeks to recognize institutions that plan and maintain their grounds with sustainability in mind. Beautiful and welcoming campus grounds can be planned, planted, and maintained in any region while minimizing the use of toxic chemicals, protecting wildlife habitat, and conserving water and resources.

Credit
Landscape Management
Biodiversity

Landscape Management

Responsible Party

Moira Hafer

Sustainability Analyst
Office of Sustainability

Criteria

Institution's grounds include areas that are managed at one or more of the following levels:

- 1) Managed in accordance with an Integrated Pest Management (IPM) Plan
- 2) Managed in accordance with a sustainable landscape management program

And/or

- 3) Organic, certified and/or protected

The level at which an area of grounds is managed may be determined as outlined in the table below:

Management Level	Standards and/or Certifications Required
1) IPM Plan	IPM plan calls for: <ul style="list-style-type: none">• Using least-toxic chemical pesticides,• Minimum use of chemicals, and• Use of chemicals only in targeted locations and only for targeted species

<p>2) Sustainable Landscape Management Program</p>	<p>The program includes formally adopted guidelines, policies and/or practices that cover all of the following:</p> <ul style="list-style-type: none"> • Integrated pest management (see above) • Plant stewardship - protecting and using existing vegetation (e.g. through the use of a tree care plan), using native and ecologically appropriate plants, and controlling and managing invasive species • Soil stewardship - organic soils management practices that restore and/or maintain a natural nutrient cycle and limit the use of inorganic fertilizers and chemicals • Use of environmentally preferable materials - utilizing reused, recycled and local and sustainably produced landscape materials • Hydrology and water use - restoring and/or maintaining the integrity of the natural hydrology by promoting water infiltration, minimizing or eliminating the use of potable water for irrigation, and protecting/restoring riparian, wetland, and shoreline habitats and lost streams • Materials management and waste minimization - composting and/or mulching waste from groundskeeping, including grass trimmings • Snow and ice management (if applicable) - implementing technologies or strategies to reduce the environmental impacts of snow and ice removal
<p>3) Organic, Certified and/or Protected</p>	<p>Protected areas and land that is:</p> <ul style="list-style-type: none"> • Maintained in accordance with an organic land care standard or sustainable landscape management program that has eliminated the use of inorganic fertilizers and chemical pesticides, fungicides and herbicides in favor of ecologically preferable materials • Certified Organic • Certified under the Forest Stewardship Council (FSC) Forest Management standard • Certified under the Sustainable Sites Initiative™ (SITES™) and/or • Managed specifically for carbon sequestration (as documented in policies, land management plans or the equivalent)

Land that meets multiple criteria should not be double-counted. An area of grounds that does not meet the standards specified for a particular management level should be reported at the next appropriate level for which it does meet the standards. For example, a landscape management program that includes an IPM plan and meets some, but not all, of the other standards listed for a sustainable landscape management plan should be reported at level 1 (IPM Plan).

Submission Note:

Please visit the following websites for more details about Stanford's lands:

<http://lbre.stanford.edu/luep/>

<http://sustainable.stanford.edu/land>

http://sustainable.stanford.edu/landscape_and_grounds

<http://bgm.stanford.edu/groups/grounds/ipm>

<http://hcp.stanford.edu/>

Please note that the "building footprint" includes an approximation from Stanford's GIS map layers and represents the sum of building footprint, roads, paths, and parking lots. The value is approximate and reflects available data quality given the large overall land area. The value used is consistent with OP-27.

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

Figures required to calculate the total area of managed grounds::

	Area
Total campus area	8,180 Acres
Footprint of the institution's buildings	1,182 Acres
Area of undeveloped land, excluding any protected areas	4,908 Acres

Area of managed grounds that is::

	Area
Managed in accordance with an Integrated Pest Management (IPM) Plan	0 Acres
Managed in accordance with a sustainable landscape management program that includes an IPM plan and otherwise meets the criteria outlined	2,090 Acres

Managed organically, third party certified and/or protected

0 Acres

A copy of the IPM plan:

The IPM plan :

Stanford first launched an IPM program in 1997 through Buildings & Grounds Maintenance (BGM). By taking an IPM approach, the Grounds department attempts to use the most environmentally sound methods for controlling pests that negatively impact the health of plant life on campus. Every attempt is made to find the most innovative and least toxic way of controlling pests, using chemicals only as a last resort.

Goals of the IPM Program at Stanford include:

- Reduce pesticide use and associated exposure risks
- Reduce the cost of pest control on campus
- Minimize harm to the environment
- Improve long-term plant protection
- Train and educate staff members about the Grounds IPM program

Monitoring for pests and beneficial insects on Stanford plants is one of the main approaches used by the Grounds department as part of our Integrated Pest Management program.

For more information, including examples of alternative pest control methods and horticultural articles on Stanford's IPM program, please visit

<http://bgm.stanford.edu/groups/grounds/ipm>

A brief summary of the institution's approach to sustainable landscape management:

Principles now heralded as sustainable in the 21st century were fundamental to the Stanford campus since its inception over 100 years ago. Basic concepts introduced by Frederick Law Olmsted, landscape architect and the university's planner in the 1890's, as well as Stanford's Landscape Design Guidelines first published in 1989, encourage climate responsive designs, native plant materials and water conservation.

From large gathering space to intimate retreats, developed outdoor areas create a mosaic of formal and informal elements including cultivated gardens, plazas, usable lawns, tree lined alleys, drought tolerant native landscapes, oak groves, wildflowers and grasslands. The result is a dynamic and flexible environment that is essential to Stanford's rich and unique landscape character.

It is Stanford's goal today to continue on the path that its predecessors envisioned and use new technologies and understanding to expand Stanford's sustainable landscape and grounds practices. Examples of current accomplishments and activities in key landscape and grounds areas include the following:

VEGETATION MANAGEMENT

- Approximately 75% of the campus is native or drought resistant plantings with mulch or non-irrigated grass grounds and native oaks for canopy.
 - To date, over 800 mature trees have been transplanted with an 85% +/- survival rate.
- Since 1980, Stanford's Oak Reforestation Program works with non-profits, volunteers, community and school groups to annually plant oak seedlings, now totaling over 2000.
- Green waste from tree and shrub trimmings is converted into compost or wood chips and reused on the campus landscape.
 - Seasonal color relies on the choice of perennials and wildflower seedlings over more water intensive, non-native ornamental annual plantings.

INTEGRATED PEST MANAGEMENT

- Stanford employs an integrated pest management system to minimize the use of chemicals, synthetics, fossil fuels and water.

IRRIGATION

- Stanford's irrigation responds to site conditions using data collected from an on-site weather station with an automated Maxicom Irrigation Controller that conserves 20% more water than conventional irrigation methods.
- Non-domestic water sourced from Stanford's Searsville and Felt Lakes is used to irrigate at least 80% of the campus landscape.

LANDSCAPE DESIGN

- Swales and detention areas planted with native vegetation are integrated into new project landscape designs.
- Water is incorporated in landscapes for maximum use, enjoyment, air quality and moderation of climate where the largest numbers of people gather and is minimized in peripheral areas, borders or other non-intensive people spaces.
- Stanford's landscaped 'outdoor rooms' serve as meeting, classroom, break-out, circulation and gathering spaces replacing what would otherwise be constructed, enclosed and conditioned interior spaces.
- Since 2007, Stanford paired 125+ new or retrofitted custom designed (split to hold bottles, paper and compost) outdoor recycling containers with existing trash bins.
- Trees are consciously placed to provide shading and cooling for buildings and pavement with an emphasis on deciduous trees along the southern and western building exposures.
- Turf lawn is typically limited to use areas only.

RESEARCH AND DEVELOPMENT

- Campus Planners continue to research the manufacturing processes and material sources of new sustainable products and test their durability and performance over time. -- Current tests include exterior LED lights, recycled plastic furniture and posts, permeable pavements, newly developed drought resistant usable lawn and other plant materials.
- Responding to concerns caused by global climate change, the university is working with a non-profit to plant a range of oak test species and varieties collected from acorns to explore their adaptability to warming climate, pathogens and seasonal moisture.

A brief description of how the institution protects and uses existing vegetation, uses native and ecologically appropriate plants, and controls and manages invasive species:

About 60% of Stanford's 8,180 acres has been preserved as undeveloped oak woodland (the ~4908 acres noted in the prior section). Some undeveloped areas include Jasper Ridge Biological Preserve, the campus arboretum, and small oak groves across campus.

Native plants are prioritized in landscaping for maintained areas across campus, and Stanford places special care upon preserving native trees that need to be relocated during the course of construction projects. Extensive Facility Design Guidelines (

http://lbre.stanford.edu/sem/sites/all/lbre-shared/files/docs_public/Landscaping_Design_Guideli

nes.pdf

) and Landscape Design Guidelines (

http://lbre.stanford.edu/architect/sites/all/lbre-shared/files/docs_public/UA-CPD_Landscape%20D

esign%20Guidelines_V1p1.pdf

) address the native planting and invasive species.

A Waterwise Demonstration Garden was also created on campus to educate the community about native plantings and alternatives to traditional residential landscaping (

<http://bgm.stanford.edu/groups/grounds/special/waterwise>

).

A brief description of the institution's landscape materials management and waste minimization policies and practices:

Grounds keeping waste, including grass trimmings, is actively composted at Stanford. General yard waste is collected from the Grounds Department and the on-campus Faculty/Staff housing and taken to an off-campus facility from which the university is allowed to backhaul a certain percentage for use on campus. Brush collected by the Grounds Department is ground into mulch and used throughout the campus. Stanford also practices "grasscycling" by leaving cut grass on the 140 acres of campus turf areas.

In 2011, Stanford mulched, grasscycled, and chipped about 2050 tons of yard trimmings and sent about 2750 tons to an off-campus composting facility.

A brief description of the institution's organic soils management practices:

N/A

A brief description of the institution's use of environmentally preferable materials in landscaping and grounds management:

To date, over 800 mature trees have been transplanted with an 85% +/- survival rate.

Since 1980, Stanford's Oak Reforestation Program works with non-profits, volunteers, community and school groups to annually plant oak seedlings, now totaling over 2000. Green waste from tree and shrub trimmings is converted into compost or wood chips and reused on the campus landscape.

A brief description of how the institution restores and/or maintains the integrity of the natural hydrology of the campus:

Stanford's irrigation responds to site conditions using data collected from an on-site weather station with an automated Maxicom Irrigation Controller that conserves 20% more water than conventional irrigation methods. Non-domestic water sourced from Stanford's

Searsville and Felt Lakes is used to irrigate at least 80% of the campus landscape. Swales and detention areas planted with native vegetation are integrated into new project landscape designs.

A brief description of how the institution reduces the environmental impacts of snow and ice removal (if applicable):

N/A

A brief description of any certified and/or protected areas:

For details on the areas of campus with protected species and other sensitivities, please review the Habitat Conservation Plan:

<http://hcp.stanford.edu/>

Is the institution recognized by the Arbor Day Foundation's Tree Campus USA program (if applicable)?:

Yes

The website URL where information about the institution's sustainable landscape management programs and practices is available:

Responsible Party

Moira Hafer

Sustainability Analyst
Office of Sustainability

Criteria

The institution conducts one or both of the following:

- An assessment to identify endangered and vulnerable species (including migratory species) with habitats on institution-owned or -managed land

And/or

- An assessment to identify environmentally sensitive areas on institution-owned or -managed land

The institution has plans or programs in place to protect or positively affect the species, habitats and/or environmentally sensitive areas identified.

Assessments conducted and programs adopted by other entities (e.g. government, university system, NGO) may count for this credit as long as the assessments and programs apply to and are followed by the institution.

"---" 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?:

Yes

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:

San Francisquito Creek, including the Stanford portions of Los Trancos, Bear, and Corte Madera creeks, are designated as “Critical Habitat” for the local, federally protected, steelhead. The serpentine grasslands present at Jasper Ridge are “Critical Habitat” for the Bay checkerspot butterfly. There is a permanent 30-acre conservation easement in the lower foothills, which was designated in order to help preserve the California tiger salamander (there is also another 285 acres in the lower foothills designated “no build” for 50 years, also to help protect the tiger salamander). In summer of 2014, 90 acres of creek and riparian vegetation will be permanently set-aside in order to help protect the federally protected California red-legged frog.

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:

Scientists from the University have been studying the local flora and fauna since the founding of the University. The more than 100-years of work has resulted in a fantastic baseline database on the species and biological communities present in the area. Since the early 1990s, this baseline information has been expanded by targeted work specifically looking into species and communities considered to be at risk.

A brief description of identified species, habitats and/or environmentally sensitive areas:

Nearly 700 species of native plants, 20 species of reptiles and amphibians, and 50 species of mammals have been recorded from Stanford lands. Additionally, more than 180 species of birds are observed on University lands with some regularity. Included in this diversity are many species accorded some level of either local, state, or federal protection. Three terrestrial species with federal protection are California tiger salamander, California red-legged frog, and Bay checkerspot butterfly. The local form of steelhead is also federally protected.

At a community-level, the wetlands, the serpentine grasslands, and the oak woodlands are all considered environmentally sensitive.

A brief description of plans or programs in place to protect or positively affect identified species, habitats and/or environmentally sensitive areas:

Since the 1990s, the university has engaged in campus-wide conservation planning. The culmination of this effort came in the summer of 2013 when Stanford implemented a Habitat Conservation Plan, including approximately 3,500 acres of Stanford land (the plan for the remainder of the university's land was approved at the same time, but has been put on hold pending the outcome of the major environmental planning effort concerning Searsville Reservoir).

Additionally, Stanford's Jasper Ridge Biological Preserve contains more than 1,000 acres of land set aside to support biological research. The management of this academic facility supports the preservation of local biodiversity while acting as a living laboratory for students and faculty. More information about Jasper Ridge Biological Preserve is available at

<http://jrpbp.stanford.edu/>

The website URL where information about the institution's biodiversity policies and programs(s) is available:

<http://hcp.stanford.edu/>

Purchasing

This subcategory seeks to recognize institutions that are using their purchasing power to help build a sustainable economy. Collectively, colleges and universities spend many billions of dollars on goods and services annually. Each purchasing decision represents an opportunity for institutions to choose environmentally and socially preferable products and services and support companies with strong commitments to sustainability.

Credit
Electronics Purchasing
Cleaning Products Purchasing
Office Paper Purchasing
Inclusive and Local Purchasing
Life Cycle Cost Analysis
Guidelines for Business Partners

Responsible Party

Moira Hafer

Sustainability Analyst
Office of Sustainability

Criteria

Part 1

Institution has an institution-wide stated preference to purchase computers and/or other electronic products that are EPEAT registered or meet similar multi-criteria sustainability standards for electronic products. This can take the form of purchasing policies, guidelines, or directives.

Policies and directives adopted by entities of which the institution is part (e.g. government or university system) may count for this credit as long as the policies apply to and are followed by the institution.

Part 2

Institution purchases EPEAT registered products for desktop and notebook/laptop computers, displays, thin clients, televisions and imaging equipment.

This credit does not include servers, mobile devices such as tablets and smartphones, or specialized equipment for which no EPEAT certified products are available.

Submission Note:

Purchase totals include data from Apple, Dell, HP, and Lenovo for calendar year 2013.

"---" 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:

[Stanford Sustainable Purchasing Guidelines.pdf](#)

The electronics purchasing policy, directive, or guidelines :

For computer purchases, 100% of recommended computers are rated EPEAT Gold. Procurement includes Energy Star requirements in all RFPs for electronic products. Stanford has worked with IT vendors to get these at an excellent price, which motivates students, faculty and staff to make the environmentally sound choice.

For more details, please visit:

<https://itservices.stanford.edu/service/help/hardware/rec/computers>

A brief description of steps the institution has taken to ensure that the purchasing policy, directives, or guidelines are followed:

Stanford is a member of the Climate Savers Computing Initiative (

[https://www.energystar.gov/index.cfm?fuseaction=join_change_the_world.showPledgeDriverDetails&c
pd_id=16165](https://www.energystar.gov/index.cfm?fuseaction=join_change_the_world.showPledgeDriverDetails&cpd_id=16165)

), and thus has an institution-wide stated preference for EPEAT Silver or higher rated computers and monitors. At the present time, 100% of university-recommended systems are EPEAT Gold. Vendors have agreed to ship computers with energy-saving features turned "on" (fully enabled). In addition to the EPEAT requirements, all Requests for Proposals (RFPs) for copiers, printers, servers, and computers that route through the procurement office now include both Energy Star and end-of-life recycling requirements.

Please see the following:

http://sustainable.stanford.edu/sustainable_it

<http://sustainable.stanford.edu/sustainable-it-initiatives>

http://med.stanford.edu/sustainability/what_you/

Does the institution wish to pursue to pursue Part 2 of this credit (expenditures on EPEAT registered electronics)?:

Yes

Expenditures on EPEAT registered desktop and laptop computers, displays, thin clients, televisions, and imaging equipment::

	Expenditure Per Level
--	-----------------------

EPEAT Bronze	0 <i>US/Canadian \$</i>
EPEAT Silver	975,371.30 <i>US/Canadian \$</i>
EPEAT Gold	15,280,817.66 <i>US/Canadian \$</i>

Total expenditures on desktop and laptop computers, displays, thin clients, televisions, and imaging equipment:

16,256,189 *US/Canadian \$*

The website URL where information about the institution's electronics purchasing policy, directive, or guidelines is available:

<https://itservices.stanford.edu/service/help/hardwarerec/computers>

Cleaning Products Purchasing

Responsible Party

Moira Hafer

Sustainability Analyst
Office of Sustainability

Criteria

Part 1

Institution has an institution-wide stated preference to purchase cleaning and janitorial products that are Green Seal™ or UL Environment (EcoLogo)™ certified and/or meet similar multi-criteria sustainability standards for cleaning and janitorial products. This can take the form of purchasing policies, guidelines, or directives.

Policies and directives adopted by entities of which the institution is part (e.g. government or the university system) may count for this credit as long as the policies apply to and are followed by the institution.

Part 2

Institution's main cleaning or housekeeping department(s) and/or contractor(s) purchase Green Seal or UL Environment (EcoLogo) certified cleaning and janitorial products.

Cleaning and janitorial products include, at minimum:

- Cleaning/degreasing agents
 - General-purpose, bathroom, glass, and carpet cleaners
 - Biologically-active cleaning products (enzymatic and microbial products)
 - Floor-care products, e.g. floor finish and floor finish strippers
 - Hand cleaners
 - Sanitary paper products, e.g. toilet tissue, facial tissue, paper towels, napkins, and placemats
 - Plastic film products (e.g. garbage bags/liners)
 - Laundry care products including powder, liquid or pre-measured dosage laundry detergents, stain removers and dryer sheets
 - Specialty surface cleaning products and odor removers, including but not limited to: boat cleaning products; deck and outdoor furniture cleaning products; graffiti removers; metal cleaning products; motor vehicle (automotive/tire/wheel) cleaning products; motor vehicle windshield washing fluid; optical lens cleaning products; oven cleaning products; upholstery cleaning products; and other cleaning products sold for specific specialty uses
-

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

Does the institution have an institution-wide stated preference to purchase third party certified cleaning and janitorial products?:

Yes

A copy of the green cleaning product purchasing policy, directive, or guidelines:

The green cleaning product purchasing policy, directive, or guidelines:

Green cleaning products are specifically included in Stanford's sustainable purchasing policy. Consistent with Stanford's sustainability goals, the purpose of its sustainable purchasing policy is to support and facilitate the purchase of products and materials that minimize the harmful effects to the environment from their production, transportation, use and disposition. It is Stanford's preference to purchase and use environmentally preferable products whenever they perform satisfactorily and can be acquired at similar total value (cost/quality). A related purpose is to develop and implement common purchasing programs to be used by all Stanford personnel that support suppliers of environmentally preferable products, services and practices.

For complete details, please visit the following:

http://www.stanford.edu/group/fms/fingate/staff/buypaying/policy_notes/sustainable_purchase.htm

1

http://sustainable.stanford.edu/sites/sem.stanford.edu/files/documents/Stanford_sustainable_procurement_guidelines.pdf

A brief description of steps the institution has taken to ensure that the purchasing policy, directives, or guidelines are followed:

Stanford's custodial provider is DTZ, a selection made based on a variety of criteria, including a comprehensive sustainability program. For more information, please see

<http://www.greenservice.com/>

All products are ordered through an online tool that is monitored by DTZ's corporate Purchasing Department. Each product supplier page is provided a shopping cart list that only allows DTZ to order items designated for each account. Any item outside this shopping cart is routed to the on-site manager for approval. Any chemical that does not comply with criteria is reviewed by management. Approval for this product is granted only if an alternative solution is unavailable or has an impact on the facilities' cleanliness.

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:

542,202.11 US/Canadian \$

Total expenditures on cleaning and janitorial products:

667,289.36 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:

DTZ is known as a leader and pioneer in the Facilities industry with its GreenClean© program. DTZ is committed to providing all our clients with programs that allow them and DTZ to meet or exceed Federal sustainability standards.

GreenClean is not just products--it is a holistic approach to services that takes into account:

- (1) The health, safety, and environmental risks of products and processes
- (2) The function and activities of the facility and occupants
- (3) The cleaning, maintenance, and sanitation needs of the facility

The DTZ GreenClean program has identified 134 products across 17 categories as being certifiably green. For detailed information, see the Cleaning Tools and Equipment page (

http://bgm.stanford.edu/custodial_green_clean

).

To learn more about DTZ sustainability programs, go to

<http://www.greenservice.com>

A copy of the sections of the cleaning contract(s) that reference certified green products:

[OP-13 \(Cleaning Products\) Contract Excerpt 072011.pdf](#)

The sections of the cleaning contract(s) that reference certified green products:

see attached PDF contract excerpt

The website URL where information about the institution’s green cleaning initiatives is available:

http://bgm.stanford.edu/custodial_sustainability

Office Paper Purchasing

Responsible Party

Moira Hafer

Sustainability Analyst
Office of Sustainability

Criteria

Part 1

Institution has an institution-wide stated preference to purchase office paper that has recycled content, is certified by the Forest Stewardship Council (FSC), and/or is certified to meet similar multi-criteria sustainability standards for paper. This can take the form of purchasing policies, guidelines, or directives.

Policies and directives adopted by entities of which the institution is part (e.g. government or the university system) may count for this credit as long as the policies apply to and are followed by the institution.

Part 2

Institution purchases office paper with post-consumer recycled, agricultural residue, and/or FSC certified content.

Submission Note:

All data has been reported 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?:

Yes

A copy of the paper purchasing policy, directive or guidelines:

The paper purchasing policy, directive or guidelines:

Recycled content and otherwise sustainable office paper is specifically included in Stanford's sustainable purchasing policy. Consistent with Stanford's sustainability goals, the purpose of its sustainable purchasing policy is to support and facilitate the purchase of products and materials that minimize the harmful effects to the environment from their production, transportation, use and disposition. It is Stanford's preference to purchase and use environmentally preferable products whenever they perform satisfactorily and can be acquired at similar total value (cost/quality). A related purpose is to develop and implement common purchasing programs to be used by all Stanford personnel that support suppliers of environmentally preferable products, services and practices.

For complete details, please visit:

http://www.stanford.edu/group/fms/fingate/staff/buypaying/policy_notes/sustainable_purchase.htm

1

A brief description of steps the institution has taken to ensure that the purchasing policy, directives, or guidelines are followed :

After gradual moves towards higher adoption of recycled-content paper campus-wide, Stanford launched a campaign to highlight sustainable purchasing practices on campus in June 2011. One of the specific actions taken was the removal of "new/virgin" reamed paper part numbers from the university's online ordering catalog. Users no longer have the ability to automatically order or reorder these part numbers. Only recycled content paper SKU's are available in the ordering system as of today. All users who had a blanket order for automatic weekly paper delivery were converted to recycled-content paper.

More details on the campaign, including the recycled-paper component can be found on the following website:

<http://sustainable.stanford.edu/purchasing>

Does the institution wish to pursue Part 2 of this credit (expenditures on office paper)?:

Yes

Expenditures on office paper with the following levels of post-consumer recycled, agricultural residue, and/or FSC certified content::

	Expenditure Per Level
10-29 percent	548.20 <i>US/Canadian \$</i>
30-49 percent	224,580.32 <i>US/Canadian \$</i>
50-69 percent	46,893.97 <i>US/Canadian \$</i>
70-89 percent (or FSC Mix label)	0 <i>US/Canadian \$</i>
90-100 percent (or FSC Recycled label)	18,133 <i>US/Canadian \$</i>

Total expenditures on office paper :

290,155.49 *US/Canadian \$*

The website URL where information about the paper purchasing policy, directive, or guidelines is available:

http://www.stanford.edu/group/fms/fingate/staff/buypaying/policy_notes/sustainable_purchase.htm

1

Inclusive and Local Purchasing

Responsible Party

Moira Hafer

Sustainability Analyst
Office of Sustainability

Criteria

Part 1

Institution has an institution-wide stated intent to support disadvantaged businesses, social enterprises, and/or local community-based businesses.

Support could take the form of giving preference during RFP processes, conducting targeted outreach to these businesses about opportunities to work with the institution, and/or other efforts to increase purchases made from such businesses.

Part 2

Institution makes purchases from companies that include disadvantaged businesses, social enterprises and/or local community-based businesses.

Purchases that meet multiple criteria listed above should not be double counted. Food and beverage purchases, which are covered by *OP 6: Food and Beverage Purchasing* and *OP 7: Low Impact Dining*, are not included in this credit.

Submission Note:

Stanford's current inclusive and local purchasing spend--including the categories Minority Owned, Minority Owned and Small Business Owned, Small Business Owned, Women Owned, Women Owned and Minority Owned, Women owned and Small Business Owned, Women Owned, Minority Owned, and Small Business Owned--is \$236,543,852.00, which equates to a percentage total of spend of 11%. This is based upon calendar year 2013.

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

Does the institution have an institution-wide stated intent to support disadvantaged businesses, social enterprises, and/or local community-based businesses?:

Yes

A copy of the policy, guidelines or directive governing inclusive and local purchasing:

The policy, guidelines or directive governing inclusive and local purchasing:

Stanford University is committed to increasing opportunities for small and disadvantaged businesses. A relevant excerpt from Stanford's policy is pasted below for reference.

For complete policy details, please visit:

<https://adminguide.stanford.edu/chapter-5/subchapter-5/policy-5-5-1>

Stanford University is committed to increasing significantly the opportunities for minority, women and disabled people to engage in business with the University.

a. Purpose

This policy statement supports a long-range plan to enhance Stanford's external affirmative action. The plan serves to promote diversity through the judicious use of the University's financial and other resources to increase opportunities for small businesses and businesses owned by targeted concerns to participate in economic opportunities arising from University business activities.

b. Scope

The classes covered by this policy, as defined by the Federal Government, include Asian, Black, Latino/Hispanic and Native American, women of all racial/ethnic background, people who are disabled or physically challenged, veterans, and other targeted concerns.

c. Implementation

The President and Provost will provide the leadership for promulgating this policy; however, responsibility for its implementation rests with individual vice presidents, deans, directors of major institutions and centers, the Chief Executive Officer of the Stanford Management Company, and the heads of other organizations not covered above.

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:

11

The website URL where information about the institution's inclusive and local purchasing policies and/or program is available:

http://www.stanford.edu/group/fms/fingate/suppliers/dobusiness/policy_initiative.html#diversity_smallBus

Life Cycle Cost Analysis

Responsible Party

Moira Hafer

Sustainability Analyst
Office of Sustainability

Criteria

Institution employs Life Cycle Cost Analysis (LCCA) as a matter of policy and practice when evaluating energy- and water-using products and systems. Practices may include structuring RFPs so that vendors compete on the basis of lowest total cost of ownership (TCO) in addition to (or instead of) purchase price.

"---" 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)?:

Yes

A brief description of the LCCA policy(ies) and practice(s):

Stanford University has a long history of designing and constructing quality building projects. In continuing this tradition, Stanford seeks to ensure that new and renovated buildings meet student, staff, and faculty needs as effectively and efficiently as possible. To this end, Stanford's Department of Land, Buildings and Real Estate has developed a thorough Project Delivery Process (PDP) that addresses all aspects of planning, budgeting, design and construction.

Cost effectiveness is a key component of design at Stanford, and initial project costs are the focus of many activities in the PDP. The long term cost implications of building projects, however, range far beyond initial design and construction expenses.

To improve the cost-effectiveness of its building and renovation programs, Stanford must invest in designs and systems with improved long term performance. The Guidelines for Life Cycle Cost Analysis (LCCA) instruct Project Teams to consider not only the "first costs" of a building but also long term costs, including utilities, operations, and maintenance.

The full text of the guidelines can be found online here:

http://lbre.stanford.edu/sites/all/lbre-shared/files/docs_public/LCCA121405.pdf

LCCA reaches beyond the PDP at Stanford to sustainable purchasing broadly across all divisions of the university. For more information on LCCA and purchasing guidelines, please visit:

http://www.stanford.edu/group/fms/fingate/staff/buypaying/policy_notes/sustainable_purchase.htm

1

The website URL where information about the institution's LCCA policies and practices is available:

http://lbre.stanford.edu/sites/all/lbre-shared/files/docs_public/LCCA121405.pdf

Guidelines for Business Partners

Responsible Party

Moira Hafer

Sustainability Analyst
Office of Sustainability

Criteria

Institution has and acts on policies, guidelines and/or agreements that set expectations about the social and environmental responsibility of its business partners. The policies, guidelines and/or agreements require new and/or existing vendors and contractors and/or franchisees to adhere to:

1) Minimum environmental standards and practices defined by the institution, for example as outlined by the institution's sustainability policies

And/or

2) Minimum standards and practices governing employee wages, benefits, working conditions and rights that are consistent with fundamental International Labor Organization (ILO) conventions.

All enterprises with employees on-site as part of regular campus operations (e.g. contractors and franchisees) and other standing and/or formal business relationships (e.g. regular vendors and contracted services) are included.

Businesses that produce and/or sell licensed articles bearing the institution's trademarked logo ("licensees") are not included. They are covered in *EN 15: Trademark Licensing*.

The credit acknowledges institutional engagement in selecting its business partners and guiding them toward sustainability. Policies, guidelines or practices of the businesses themselves do not count for this credit in the absence of institutional selection criteria and/or guidance. Requiring compliance with existing legislation does not count on its own, but may be included as part of broader requirements that meet the criteria outlined above.

Policies adopted by entities of which the institution is part (e.g. government or university system) may count for this credit as long as the policies apply to and are followed by the institution.

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

How many of the institution's business partners are covered by policies, guidelines and/or agreements that require adherence to minimum environmental standards?:

All

How many of the institution's business partners are covered by policies, guidelines and/or agreements that require adherence to minimum standards governing employee wages, benefits, working conditions and rights?:

All

A copy of the policies, guidelines, and/or agreements with the institution's business partners (or a representative sample):

The policies, guidelines, and/or agreements with the institution's business partners (or a representative sample):

see attached document

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:

There are two main components of Stanford's strategy regarding vendor/supplier roles and responsibilities: sustainability and environmental responsibility, and living wage, as further detailed below.

SUSTAINABLE AND ENVIRONMENTAL RESPONSIBILITY

Seller agrees to use good faith efforts to be environmentally responsible and reduce waste removal costs through:

- Minimizing packaging and using packaging materials that can be recycled
- Offering products that produce less waste than previously-offered products
- Implementing efficient logistics and marketing efforts
- Promoting recycling and reuse programs

LIVING WAGE

Stanford already pays a living wage to its employees and now adopts this living wage and benefit policy to guide its procurement of such services from contractors. Through these guidelines, Stanford seeks to establish minimum pay, access to healthcare benefits and compensated time off for service workers. These guidelines are not intended to prevent contractors from providing wages and benefits in excess of the minimums created here.

For more details, please visit:

http://www.stanford.edu/group/fms/fingate/staff/buypaying/policy_notes/living_wage_benefit_guid

[e.html](#)

The policy has been in effect since 2007 and has made a big difference in Stanford's ability to use local suppliers and to accommodate students and suppliers to become employed by Stanford.

The website URL where information about the institution's guidelines for its business partners is available:

http://www.stanford.edu/group/fms/fingate/docs/purchase_order_SU_term_condition.pdf

Transportation

This subcategory seeks to recognize institutions that are moving toward sustainable transportation systems. Transportation is a major source of greenhouse gas emissions and other pollutants that contribute to health problems such as heart and respiratory diseases and cancer. Due to disproportionate exposure, these health impacts are frequently more pronounced in low-income communities next to major transportation corridors. In addition, the extraction, production, and global distribution of fuels for transportation can damage environmentally and/or culturally significant ecosystems and may financially benefit hostile and/or oppressive governments.

At the same time, campuses can reap benefits from modeling sustainable transportation systems. Bicycling and walking provide human health benefits and mitigate the need for large areas of paved surface, which can help campuses to better manage storm water. Institutions may realize cost savings and help support local economies by reducing their dependency on petroleum-based fuels for transportation.

Credit
Campus Fleet
Student Commute Modal Split
Employee Commute Modal Split
Support for Sustainable Transportation

Responsible Party

Moira Hafer

Sustainability Analyst
Office of Sustainability

Criteria

Institution supports alternative fuel and power technology by including in its motorized vehicle fleet vehicles that are:

- A. Gasoline-electric hybrid
- B. Diesel-electric hybrid
- C. Plug-in hybrid
- D. 100 percent electric
- E. Fueled with Compressed Natural Gas (CNG)
- F. Hydrogen fueled
- G. Fueled with B20 or higher biofuel for more than 4 months of the year

And/or

- H. Fueled with locally produced, low-level (e.g. B5) biofuel for more than 4 months of the year (e.g. fuel contains cooking oil recovered and recycled on campus or in the local community)

For this credit, the institution's motorized fleet includes all cars, carts, trucks, tractors, buses and similar vehicles used for transporting people and/or goods, including both leased vehicles and vehicles that are institution-owned and operated. Heavy construction equipment (e.g. excavators and pavers), maintenance equipment (e.g. lawn-mowers and leaf blowers), and demonstration/test vehicles used for educational purposes are not included in this credit.

Vehicles that meet multiple criteria (e.g. hybrid vehicles fueled with biofuel) should not be double-counted.

Submission Note:

Stanford has plans to increase the number of electric vehicles in its Marguerite bus fleet and decrease the number of buses powered on biodiesel accordingly. Thus, in May 2015, some of the numbers in this credit will change, with 23 fully electric buses in the Marguerite fleet and an associated decrease to 48 biodiesel buses.

"---" 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	13
Diesel-electric, non-plug-in hybrid	5
Plug-in hybrid	0
100 percent electric	463
Fueled with compressed natural gas (CNG)	0
Hydrogen fueled	0
Fueled with B20 or higher biofuel for more than 4 months of the year	0
Fueled with locally produced, low-level (e.g. B5) biofuel for more than 4 months of the year	63

A brief description of the institution's efforts to support alternative fuel and power technology in its motorized fleet:

Stanford's Marguerite transit system is in the last stages of a pilot project with three full EV transit busses. The pilot has gone well so far and it is now expected that our transit vehicle replacements will now be full EV vehicles for most routes.

Stanford's general fleet is also moving toward PEV and PHEV vehicles where the vehicle duties allow. NEVs and the charging infrastructure they require exist throughout campus. At the moment, two Level-2 charging stations for fleet vehicles use only are installed on campus.

The website URL where information about the institution's support for alternative fuel and power technology is available:

Student Commute Modal Split

Responsible Party

Moira Hafer
Sustainability Analyst
Office of Sustainability

Criteria

Institution's students commute to and from campus using more sustainable commuting options such as walking, bicycling, vanpooling or carpooling, taking public transportation, riding motorcycles or scooters, riding a campus shuttle, or a combination of these options.

Students who live on campus should be included in the calculation based on how they get to and from their classes.

Submission Note:

Student classification includes undergraduate students and graduate students. Postdoctoral scholars are not included in this tally.

Motorcycles, scooters, and mopeds are counted as "drive-alone" in Stanford's annual Commute Survey, so a separate figure is not available.

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

Total percentage of students that use more sustainable commuting options:

86.04

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)	13.96
Walk, bicycle, or use other non-motorized means	77.38
Vanpool or carpool	2.05
Take a campus shuttle or public transportation	6.62
Use a motorcycle, scooter or moped	0

A brief description of the method(s) used to gather data about student commuting:

Commute and modal split information is sampled using Stanford's annual transportation and commute survey, administered each spring.

The website URL where information about sustainable transportation for students is available:

<http://transportation.stanford.edu/>

Employee Commute Modal Split

Responsible Party

Moira Hafer

Sustainability Analyst
Office of Sustainability

Criteria

Institution's employees (faculty, staff, and administrators) get to and from campus using more sustainable commuting options such as walking, bicycling, vanpooling or carpooling, taking public transportation, riding motorcycles or scooters, riding a campus shuttle, telecommuting, or a combination of these options.

Employees who live on campus should be included in the calculation based on how they get to and from their workplace.

Submission Note:

Motorcycles, scooters, and mopeds are counted as "drive-alone" in Stanford's annual Commute Survey, so a separate figure is not available.

Figures include only commuters to the Stanford campus. Commuters to off-campus worksites are not included.

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

Total percentage of the institution's employees that use more sustainable commuting options:

50.61

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)	49.39
Walk, bicycle, or use other non-motorized means	16.47
Vanpool or carpool	8.49
Take a campus shuttle or public transportation	25.66

Use a motorcycle, scooter or moped	---
Telecommute for 50 percent or more of their regular work hours	---

A brief description of the method(s) used to gather data about employee commuting:

Commute modal split information is sampled using Stanford's annual transportation and commute survey administered each spring.

The website URL where information about sustainable transportation for employees is available:

<http://transportation.stanford.edu/>

Support for Sustainable Transportation

Responsible Party

Moira Hafer

Sustainability Analyst
Office of Sustainability

Criteria

Part 1

The institution demonstrates its support for active (i.e. non-motorized) transportation on campus in one or more of the following ways:

Option A: Institution:

- Provides secure bicycle storage (not including office space), shower facilities, and lockers for bicycle commuters. The storage, shower facilities and lockers are co-located in at least one building/location that is accessible to all commuters.
- Provides short-term bicycle parking (e.g. racks) within 50 ft (15 m) of all occupied, non-residential buildings and makes long-term bicycle storage available within 330 ft (100 m) of all residence halls (if applicable).
- Has a “complete streets” or bicycle accommodation policy (or adheres to a local community policy) and/or has a continuous network of dedicated bicycle and pedestrian paths and lanes that connects all occupied buildings and at least one inter-modal transportation node (i.e. transit stop or station)

And/or

- Has a bicycle-sharing program or participates in a local bicycle-sharing program

Option B: Institution is certified as a Bicycle Friendly University (at any level) by the League of American Bicyclists (U.S.) or under a similar third party certification for non-motorized transportation.

Part 2

Institution has implemented one or more of the following strategies to encourage more sustainable modes of transportation and reduce the impact of student and employee commuting. The institution:

- Offers free or reduced price transit passes and/or operates a free campus shuttle for commuters. The transit passes may be offered by the institution itself, through the larger university system of which the institution is a part, or through a regional program provided by a government agency.
- Offers a guaranteed return trip (GRT) program to regular users of alternative modes of transportation
- Participates in a car/vanpool or ride sharing program and/or offers reduced parking fees or preferential parking for car/vanpoolers
- Participates in a car sharing program, such as a commercial car-sharing program, one administered by the institution, or one administered by a regional organization
- Has one or more Level 2 or Level 3 electric vehicle recharging stations that are accessible to student and employee commuters
- Offers a telecommuting program for employees, either as a matter of policy or as standard practice
- Offers a condensed work week option for employees, either as a matter of policy or as standard practice
- Has incentives or programs to encourage employees to live close to campus

- Other strategies

"---" 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:

Stanford has fifteen different bike locker compounds with secure storage capacity for over 256 bikes. There are also three bike cage locations on campus that are accessed via proximity card readers. In addition, the campus contains over 18,000 free-standing outdoor bike parking spaces. Stanford provides shower facilities and clothes lockers for bike commuters. Clothing lockers are available in twelve different campus buildings and shower facilities can be found in all dormitories and residence halls, as well as numerous academic and administrative buildings.

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:

Bike Rack and bike locker compounds are designed by Campus Planning to provide a convenient and accessible way to park bikes in a safe manner. Bike racks are designed in a state-of-the-art way to keep bikes upright and locked and to deter theft. Bike lockers provide safe storage for commuters through the provision of an individual storage unit rented on an annual basis.

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:

Safety is the highest priority for all users on the campus. The circulation plan for bicycles and pedestrians was created by Campus Planning with input from Parking & Transportation Services, Stanford Public Safety, and Diversity and Access to assure safe passage for all users to minimize conflicts and address ongoing changes in the campus environment.

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:

Each department, school, and program at Stanford, no matter how large or how small, can start a bike share program. An online guide walks interested groups through the process (

http://sustainable.stanford.edu/sites/sem.stanford.edu/files/documents/how_to_bike_share.pdf

). Such fleets have been established for many groups on campus, including the School of Medicine, the Vice Provost for Undergraduate Education, the Department of Sustainability and Energy Management, and many others. Stanford has nearly 100 bikes publicly available for free through various bike-sharing programs on and off campus.

Although there are many avenues for bike fleet creation, many groups have chosen to work with the Campus Bike Shop to lease a fleet of shared bicycles. Program details are available online (

<http://campusbikeshop.com/articles/stanford-departments-bikes-lease-program-pg258.htm>

).

Stanford employs a full-time Bicycle Program Coordinator, and she serves as a resource to all those who participate in bike share programs, connecting the groups together and providing advice and guidance.

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:

Stanford was awarded the first Platinum level designation as a Bicycle Friendly University in 2011 that is valid through 2015. Platinum is the highest designation recognizing our efforts in the areas of education, encouragement, enforcement, engineering and environment to improve the bicycling environment. We attribute the success of the program to our collaborative efforts with a multitude of departments on campus including Campus Planning, Public Safety, School of Medicine, Environmental Health & Safety, Sustainability and Energy Management, Graduate School of Business, and the Stanford d.school.

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):

Stanford's Marguerite Shuttle:

<http://transportation.stanford.edu/marguerite/>

The Marguerite is a free, comprehensive campus shuttle system, also open to the public. It connects with local transit and Caltrain, as well as shopping and dining options. A "Midnight Express" night safety service runs all year. The fleet includes three 100% electric buses, five diesel-electric hybrid buses, and 49 diesel buses running on biodiesel fuel. Stanford established an automated Transportation Management System, with real-time schedules viewable online.

Eco Pass/Go Pass:

http://transportation.stanford.edu/alt_transportation/EcoPass.shtml

Stanford offers passes for free use of VTA buses and light rail, Dumbarton Express, Highway 17 Express, Monterey-San Jose Express, and Caltrain (commuter train) for eligible Stanford employees.

Line U Stanford Express:

http://transportation.stanford.edu/alt_transportation/BayAreaTransit.shtml#lineu

Free use of East Bay express bus that connects Bay Area Rapid Transit (BART), Amtrak and ACE trains to Stanford campus.

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:

<http://transportation.stanford.edu/erh>

Stanford offers an Emergency Ride Home program to anyone who registers for the program in advance online. If they have a qualifying emergency (e.g., personal or family illness or injury) on a day they use alternative transportation for their commute, Stanford will arrange a cab or a rental car to get them home.

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:

Stanford provides two ridematching services. Zimride is a ridesharing system offered at Stanford and currently includes more than 6,000 participants in the Stanford community. Zimride users can post or request a commute or one-time trip, and the system will match ideal carpool partners with one another. In addition, Stanford provides ridematching via the

511.org

website, which helps to find shared rides between Stanford-affiliated commuters.

Carpool incentives for commuters include subsidized parking, preferential parking before 10 a.m., and one free daily parking permit per month for each carpooler. Vanpool incentives include free designated parking and a \$300 per month subsidy.

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:

<http://transportation.stanford.edu/zipcar>

Stanford participates in the Zipcar program. Stanford affiliates are incentivized to join the program through a \$35 driving credit, which offsets the first-year membership fee. Commute Club members receive additional driving credits. There are currently 62 Zipcars on campus available at 25 different locations.

Stanford also has an Enterprise car rental office on campus that rents cars on an hourly basis.

Does the institution have one or more Level 2 or Level 3 electric vehicle recharging stations that are accessible to student and employee commuters?:

Yes

A brief description of the electric vehicle recharging stations:

There are currently six Level 2 chargers on campus available to all EV drivers.

http://transportation.stanford.edu/parking_info/ev.shtml

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:

Stanford supports a "flexplace" program where employees, with the consent of their supervisor, can work off-site or telecommute. Stanford provides guidelines, sample letters of understanding, and other resources to assist in setting up a telecommute option for interested employees.

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:

Stanford supports "flextime" or compressed/alternative work weeks, in which employees still work 40 hrs/week but do not do so within standard 8-hour workdays. Stanford recognizes that such flexible working options can improve cost savings and reduce commuting time. These options can be implemented at the discretion of management.

Does the institution have incentives or programs to encourage employees to live close to campus?:

Yes

A brief description of the incentives or programs to encourage employees to live close to campus:

The Department of Faculty and Staff Housing (FHS) assists employees with the search for housing close to campus. Eligible faculty and staff can purchase or rent on-campus housing. FHS also oversees more than 700 on-campus and off-campus rental units. Eligible persons have priority for these single-family homes, apartments, and condominiums. Other members of the Stanford community are accommodated as space allows. Each location is managed by professional property managers.

Does the institution have other incentives or programs to encourage more sustainable modes of transportation and reduce the impact of student and employee commuting?:

Yes

A brief description of other sustainable transportation initiatives and programs:

<http://commuteclub.stanford.edu>

The Commute Club is a free club/rewards program for commuters who do not purchase a parking permit. Membership rewards include \$25 per month in “Clean Air Cash” or \$12.50 per month in “Carpool Credit,” monthly Zipcar credit, hourly Enterprise car rental vouchers, automatic enrollment in Emergency Ride Home program, automatic entry into seasonal prize drawings, exclusive membership gifts, and more. Commute Club members can purchase up to eight daily parking permits per month for days they need to drive.

http://transportation.stanford.edu/alt_transportation/capri.shtml

Capri is a program to encourage off-peak commuting and reduce congestion. Stanford commuters with parking permits can earn credits when their vehicle enters and exits campus on weekdays during designated off-peak hours. Credits can then be used to win cash rewards.

The Capri program also includes the “MyBeats” app, which rewards active commuters with credits when they walk or bike to and from campus.

http://transportation.stanford.edu/alt_transportation/BikingAtStanford.shtml#bikepromo

The Folding Bike program offers a discount to qualified commuters to receive a \$100 stipend to offset the purchase price of a folding bike to use on alternative transportation modes, e.g. bus and train. We partner with our Campus Bike Shop on this promotion that also includes a free one-week trial rental.

The website URL where information about the institution’s sustainable transportation program(s) is available:

http://transportation.stanford.edu/alt_transportation/AlternativeTransportation.shtml

Waste

This subcategory seeks to recognize institutions that are moving toward zero waste by reducing, reusing, recycling, and composting. These actions mitigate the need to extract virgin materials, such as trees and metals. It generally takes less energy and water to make a product with recycled material than with virgin resources. Reducing waste generation also reduces the flow of waste to incinerators and landfills which produce greenhouse gas emissions, can contaminate air and groundwater supplies, and tend to have disproportionate negative impacts on low-income communities. Waste reduction and diversion also save institutions costly landfill and hauling service fees. In addition, waste reduction campaigns can engage the entire campus community in contributing to a tangible sustainability goal.

Credit
Waste Minimization
Waste Diversion
Construction and Demolition Waste Diversion
Hazardous Waste Management

Waste Minimization

Responsible Party

Moira Hafer
 Sustainability Analyst
 Office of Sustainability

Criteria

Part 1

Institution has implemented source reduction strategies to reduce the total amount of waste generated (materials diverted + materials disposed) per weighted campus user compared to a baseline.

Part 2

Institution’s total annual waste generation (materials diverted and disposed) is less than the minimum performance threshold of 0.45 tons (0.41 tonnes) per weighted campus user.

This credit includes on-campus dining services operated by the institution or the institution’s primary on-site contractor.

Total waste generation includes all materials that the institution discards, intends to discard or is required to discard (e.g. materials recycled, composted, donated, re-sold and disposed of as trash) except construction, demolition, electronic, hazardous, special (e.g. coal ash), universal and non-regulated chemical waste, which are covered in *OP 24: Construction and Demolition Waste Diversion* and *OP 25: Hazardous Waste Management*.

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

Waste generated::

	Performance Year	Baseline Year
Materials recycled	3,438.49 Tons	4,315.50 Tons
Materials composted	7,572.05 Tons	3,896.70 Tons
Materials reused, donated or re-sold	74.10 Tons	0 Tons
Materials disposed in a solid waste landfill or incinerator	7,664.97 Tons	11,052.38 Tons

Figures needed to determine "Weighted Campus Users":

	Performance Year	Baseline Year
Number of residential students	11,838	9,363
Number of residential employees	0	0
Number of in-patient hospital beds	0	0
Full-time equivalent enrollment	16,034	12,151
Full-time equivalent of employees	13,063	8,012
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	Jan. 1, 2014	Dec. 31, 2014
Baseline Year	Jan. 1, 2000	Dec. 31, 2000

A brief description of when and why the waste generation baseline was adopted:

Stanford's waste diversion programs started in the 1970s, and significant progress with respect to diversion has occurred since 2000, thus that is the baseline year used for this credit.

A brief description of any (non-food) waste audits employed by the institution:

Stanford has completed 27 waste audits over the last 6 years. The landfilled dumpsters from different buildings are selected and a team of volunteers sorts the material into 12 categories. Key findings include over 25% of the waste sent to landfill is recyclable and 39% of the waste sent to landfill is compostable. The waste audits help the university determine next steps in its Zero Waste Program.

A brief description of any institutional procurement policies designed to prevent waste:

Wherever possible, Stanford strives to minimize waste through its purchases. Minimization of packaging is a central aspect of the sustainable purchasing guidelines used on campus. For more details, please visit:

1

A brief description of any surplus department or formal office supplies exchange program that facilitates reuse of materials:

Stanford has a Surplus Property Sales department which houses surplus university assets and resells them to university affiliates or any members of the surrounding community. Items sold through surplus property include machinery, electronics, furniture, and office supplies. Stanford also has a furniture reutilization program that ensures excess furniture does not end up in the landfill. A REUSE website maintained by Surplus Property Sales enables Stanford departments to transfer materials between each other.

A brief description of the institution's efforts to make materials available online by default rather than printing them:

Stanford recently switched its course bulletin to an online-only format in order to save paper and other resources. Students can view transcripts, course schedules, course directories, grades, and many other academic resources online through Axess, Stanford's web-based record management system. None of these materials are printed except by individual request.

A brief description of any limits on paper and ink consumption employed by the institution:

All students must pay a printing fee of \$0.10 per page to release a job on any Stanford-owned printer.

A brief description of any programs employed by the institution to reduce residence hall move-in/move-out waste:

Stanford hosts multiple campus "free stores," where students can drop off any unwanted goods and take anything they would like for free. Also, Stanford established and launched a formal "Give & Go" campaign to reduce waste in residence halls during the annual move-out period (

<http://www.stanford.edu/dept/rde/cgi-bin/drupal/housing/give-go>

). In addition, Student Housing maintains a comprehensive website resource for move-out, with details about all the materials collected and the corresponding collection points on campus.

A brief description of any other (non-food) waste minimization strategies employed by the institution:

Stanford's Deskside Recycling and Mini Trash Bin Program is the newest waste collection system based on the concept of minimizing waste and maximizing recycling. It consists of two bins, one 14 quart blue recycling bin and one 1.15 gallon mini black trash bin that hangs on the side of the recycling bin. Custodians are responsible for emptying both the recycling and trash bins on a weekly schedule. To date, over 5,000 sets of bins have been placed in 61 buildings on campus.

A brief description of any food waste audits employed by the institution:

As part of R&DE Stanford Dining's "Love Food Hate Waste" program, the university purchased at least one Lean Path system for every dining hall in order to weigh and track food waste. Stanford piloted the program in three dining halls and fully implemented the program in all dining halls in Fall 2013. The system tracks and weighs all kitchen food waste and then assigns the food waste to categories and each culinary staff member. Staff monitor and assess progress and utilize the analytics of the waste data to help control and reduce food waste. The Sustainable Food Program Manager also runs spot checks on the compost bins, takes photos of food waste, and uses these images in culinary staff trainings. The food waste reduction system and use of the system is incorporated into new staff onboarding for all levels of dining hall staff.

As part of Stanford's participation in Recyclemania, Stanford Dining holds educational campaigns, such as "Caught Green-Handed" in the dining halls and cafes to educate students, staff, and faculty about composting and Recyclemania.

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:

As described previously, R&DE Stanford Dining has installed one to two Lean Path weighing systems in every dining hall. Staff must weigh all excess pre-consumer food waste before they compost it. The data is used to help reduce food waste and to make staff more aware of this pressing issue. The Sustainable Food Program Manager has trained staff on the Lean Path system and given trainings to dining hall staff about the problems of food waste in the United States to create a larger contextual reference for focusing on the issue.

Stanford works with its suppliers and partners to develop sourcing practices that reduce waste prior to coming to Stanford. This would include procuring meats, seafood, and produce in the most ready-to-use state for our food service operations. Staff work strategically with vendors/partners in the dining halls and utilize their expertise and training to ensure Stanford maximizes the utilization of product once it enters the dining facilities.

Stanford's inventory management practices use industry best standards and practices for just in time ordering, quality control steps reviewing temperature and quality of products received, and FIFO (first in, first out) inventory process. The vendor management team works closely with vendors on quality control concerns to have products coming into the kitchens that are of the highest quality to reduce food spoilage issues. There are semi-annual business reviews to review procurement standards, outcomes, and process to ensure Stanford Dining is meeting the goals of the organization and to discuss measures to improve effectiveness of its procurement process.

Stanford tracks customers' swipes to understand trends in dining hall attendance over time, and thus, is able to alter production to minimize overproduction. The university also closes dining halls when counts are expected to be extremely low, such as a home football game, in order to minimize food waste.

A brief description of programs and/or practices to track and reduce post-consumer food waste:

Stanford Dining has implemented trayless dining in each of its dining halls. This voluntary initiative is primarily designed to decrease food waste and to reduce the incentive to over-consume food. Eliminating trays has also reduced the amount of water and energy that is otherwise required to wash them.

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):

R&DE Stanford Dining eliminated disposable food and beverage containers from our dining halls and replaced them with reusable serviceware in 2013. Stanford Dining also gives all new students on the meal plan and dining hall staff a reusable cup with lid and straw at the beginning of the year. When needed, such as special events and our Late Night dining, Stanford Dining uses only BPI-certified compostable wares. We have recently created updated signage to make it even easier for customers to sort their waste.

R&DE Stanford Hospitality & Auxiliaries uses BPI-certified compostable products (cups, plates, bowls, and straws) in all cafes and catering projects on campus. All dining halls and cafes have full recycling and composting programs for customers. We have recently created updated signage to make it even easier for customers to sort their waste.

In addition, a list of compostable break room supplies is available in Smart Mart (the university's online procurement system) such that individual office buildings can be sure to stock their cabinets with compostable to-go products.

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 of our dining halls use all reusable service ware. We also participate in a trayless program and have reduced the size of plates and glasses in the dining halls to encourage taking only the food that students will eat. The dining halls are all-you-care-to-eat and we do not allow food to be taken home, so we do not provide compostable service ware.

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:

Stanford Dining provides reusable water bottles to all incoming freshmen and transfer students to help reduce disposable bottled beverage consumption on campus. Students can use these containers to receive discounts at select campus cafes (discount value varies by location). In addition, most campus cafes offer a discount if a patron brings a reusable mug. A student sustainability group recently inventoried and made a list of these venues available to the student body.

A brief description of other dining services waste minimization programs and initiatives:

Because our dining halls are all-you-care-to-eat, we have employed a few methods to encourage students to take less food on their first trip through the dining hall and to take seconds if they want them. We have purchased smaller plates, bowls, and cups to minimize portion size and have gone trayless in all dining halls. For some meat entrees, our staff serves students pre-determined portions to prevent them from piling their plates high with food they might not eat.

We have ten Sustainable Food Program interns who work to help reduce waste and increase composting through audits and educational events. Students are stationed at compost bins during events to educate their peers about Stanford's composting programs. We host multiple zero-waste events, such as New Student Orientation (1,600 new students), which sets the sustainability tone for incoming freshmen, Spring Faire (all dining halls), and Commencement.

We have partnered with two student groups to divert excess food--SPOON (Stanford Project on Hunger) and the Heart and Home Women's Shelter. Both groups pick up food from us multiple times a week to feed the hungry. We also donated a full set of serviceware and other kitchen supplies to the Heart and Home Women's Shelter that recently opened in Palo Alto.

We implemented waste minimization as part of the planning for our internal Residential & Dining Enterprises events. This past year, we held a green events training (which included waste minimization) for about 30 department staff who plan and run events. We piloted a [STARS Reporting Tool](#) | [AASHE](#)

few of our ideas, including printing less, using herbs as centerpieces, eliminating the dates on posters so they can be reused, and food donation at our 2013 R&DE holiday party. It was a huge success and our staff is working to minimize waste at all of our events.

The dining halls have post-consumer disposal stations where students scrape their own plates into compost containers before placing the dishware in the dishroom. The compost bins are open so students are able to see individually and collectively the amount of food that is being wasted. This practice has reduced post-consumer waste by 35%.

We utilize newsletters, Facebook, and other social media to discuss and highlight food waste issues. The Sustainable Food Program Manager and the student interns write all of the material for these outlets on a bi-weekly basis discussing sustainable initiatives including food waste.

Lastly, a campus-wide standard for sustainable events was developed by R&DE Stanford Dining and is used for all campus-wide events including those we do not cater. This procedure includes the process for collecting food waste.

The website URL where information about the institution's waste minimization initiatives is available:

http://bgm.stanford.edu/home_pssi_main

Waste Diversion

Responsible Party

Moira Hafer

Sustainability Analyst
Office of Sustainability

Criteria

Institution diverts materials from the landfill or incinerator by recycling, composting, reusing, donating, or re-selling.

This credit includes on-campus dining services operated by the institution or the institution's primary on-site contractor.

This credit does not include construction, demolition, electronic, hazardous, special (e.g. coal ash), universal and non-regulated chemical waste, which are covered in *OP 24: Construction and Demolition Waste Diversion* and *OP 25: Hazardous Waste Management*.

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

Materials diverted from the solid waste landfill or incinerator:

11,084.64 Tons

Materials disposed in a solid waste landfill or incinerator :

7,664.97 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:

Stanford University's Waste Reduction and Recycling Program was established almost 40 years ago and reaches all areas of campus. Over 5000 carefully-signed recycling bins are in place on campus including in each building, all residence halls, and numerous outdoor gathering points. Food waste is collected from all dining halls, cafes, and housing areas. Stanford established a special event recycling and composting program. Yard trimmings are collected from the Grounds Department. Numerous outreach and educational opportunities are provided to all stakeholders on campus. Staff work with students on special projects and Stanford has participated in the nationwide RecycleMania competition each year since 2007.

For more information, please visit the following websites:

http://bgm.stanford.edu/home_pssi_main

<http://sustainable.stanford.edu/waste>

http://sustainable.stanford.edu/be_cardinal_green_recyclemania

A brief description of any food donation programs employed by the institution:

Stanford Dining donates leftover usable food to the student-run program SPOON (Stanford Project on Hunger,

<http://hunger.stanford.edu/>

) to distribute to the Palo Alto Opportunity Center. The partnership with SPOON results in about 12,000 pounds of donated food annually. Stanford Dining also donates to the Heart and Home Women's Shelter.

A brief description of any pre-consumer food waste composting program employed by the institution:

All dining halls collect pre- and post-production food waste, which is sent to an off-site composting facility. The finished compost is then returned to campus for use in one of seven Dining Hall Gardens, on the Stanford Educational Farm, and for various landscaping needs. Stanford annually composts over 1 million tons of food waste from its dining halls and other campus eateries.

A brief description of any post-consumer food waste composting program employed by the institution:

Stanford annually composts over 3 million pounds of food waste from its dining halls and other campus eateries (3,302,936 pounds or 1,651.45 tons). A major focus of the Sustainable Food Program is to reduce the impact of Stanford Dining's operations through efficiency measures, education of our staff and customers, collaborative efforts with our partners across campus and creative design solutions to complex behavioral challenges. The post-consumer composting program is an ideal example of these initiatives. Stanford employs Student Compost Coordinators, works with student groups, and sponsors class projects in the School of Engineering to monitor and improve the post-consumer composting program.

Does the institution include the following materials in its waste diversion efforts?:

	Yes or No
Paper, plastics, glass, metals, and other recyclable containers	Yes
Food donations	Yes
Food for animals	Yes

Food composting	Yes
Cooking oil	Yes
Plant materials composting	Yes
Animal bedding composting	Yes
Batteries	Yes
Light bulbs	Yes
Toner/ink-jet cartridges	Yes
White goods (i.e. appliances)	Yes
Laboratory equipment	Yes
Furniture	Yes
Residence hall move-in/move-out waste	Yes
Scrap metal	Yes
Pallets	Yes
Motor oil	Yes
Tires	Yes

Other materials that the institution includes in its waste diversion efforts:

Plastic film, grasscycling material, brush to mulch program material, logs to chips program material, wood waste (in addition to pallets).

Construction and Demolition Waste Diversion

Responsible Party

Moira Hafer

Sustainability Analyst
Office of Sustainability

Criteria

Institution diverts non-hazardous construction and demolition waste from the landfill and/or incinerator.

Soil and organic debris from excavating or clearing the site do not count for this credit.

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

Construction and demolition materials recycled, donated, or otherwise recovered:

4,522.17 Tons

Construction and demolition materials landfilled or incinerated :

678.37 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:

Stanford sends all mixed construction and demolition debris to a local construction and demolition recycling facility. Stanford sends source-separated boxes of concrete to the same facility. All construction contractors must use the campus' contracted hauling service, which greatly simplifies and streamlines Stanford's monitoring and record keeping.

For more information, please visit the following website:

http://bgm.stanford.edu/pssi_construction

Hazardous Waste Management

Responsible Party

Moira Hafer

Sustainability Analyst
Office of Sustainability

Criteria

Part 1

Institution has strategies in place to safely dispose of all hazardous, special (e.g. coal ash), universal, and non-regulated chemical waste and seeks to minimize the presence of these materials on campus.

Part 2

Institution has a program in place to recycle, reuse, and/or refurbish electronic waste generated by the institution and/or its students. Institution takes measures to ensure that the electronic waste is recycled responsibly, for example by using a recycler certified under the e-Stewards and/or R2 standards.

"---" 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:

Using information generated by the California SB-14 law and reports, Stanford identified high volume wastes for minimization. These wastes are related to utilities and maintenance operations, and source reduction is the preferred method. One source reduction method is to minimize the amount of water used when cleaning cooling towers to concentrate the sludge generated. Research hazardous wastes vary widely and do not generally lend themselves to source reduction. One successful waste minimization activity undertaken for research wastes has been to replace thimerosal (contains mercury) with other preservatives in biological research.

A brief description of how the institution safely disposes of hazardous, universal, and non-regulated chemical waste:

All regulated wastes are disposed either through off-site high temperature incineration, fuels blending, treatment such as metals removal for aqueous wastes, or landfill at RCRA approved facilities. Only wastes that do not lend themselves to other technologies are landfilled.

A brief description of any significant hazardous material release incidents during the previous three years, including volume, impact and response/remediation:

No significant releases.

A brief description of any inventory system employed by the institution to facilitate the reuse or redistribution of laboratory chemicals:

Stanford makes use of the Chemtracker online chemical inventory system for all campus labs. As an additional waste reduction measure, Stanford administers a surplus chemical program through which surplus chemicals from campus labs are made available free of charge to all members of the Stanford Research Community, rather than being disposed of as hazardous waste.

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):

The University provides a number of options for insuring that all e-waste generated via business operations is recycled. The Property Management Office (PMO) instructs individuals responsible for each department's assets in how to properly request disposal of all electronic items.

For components (i.e. printers, monitors, computers, etc.), a given Department Property Administrator (DPA) initiates the disposal process by submitting an online disposal request form. PMO schedules and coordinates the pickup via the Surplus Property Store (SPS). SPS is a group within the PMO. SPS personnel pick up a given electronic item and assess its quality and condition for resale. If deemed "reusable" it is sold intact to university personnel and/or the public. If it is not deemed reusable, it is containerized for shipment to the designated recycling facility. These shipments occur weekly. PMO also coordinates e-waste drop-off stations at campus cleanup events.

For smaller electronic items (i.e. cell phones, keyboards, circuit boards, etc.), Environmental Health & Safety (EH&S) has approximately 100 self-service drop-off locations throughout campus. These drop-off locations are serviced on a monthly basis and all e-waste collected is evaluated and sent to SPS for reuse or recycling. This program is described on the EH&S website.

A brief description of steps taken to ensure that e-waste is recycled responsibly, workers' basic safety is protected, and environmental standards are met:

Stanford University accepts proposals from various electronic waste recycling companies through a formal bid process. Each recycler is rated on a number of factors, including, but not limited to: environmental protection, financial stability, compliance with state and federal laws, and price and level/quality of service. The top three candidates are audited and ultimately a recycler is chosen. Among requirements for being considered, a recycler must recycle all e-waste domestically, recycle 100% of the e-waste received (i.e. no landfill) and have the ability to provide verifiable records of recycling/destruction for each waste shipment. The recycler awarded the contract for recycling e-waste generated via University operations is given a fixed term contract to recycle all wastes. The contract is non-exclusive and if the recycler fails to meet the university's standards, Stanford reserves the right to switch vendors.

The website URL where information about the institution's hazardous and electronic-waste recycling programs is available:

<http://hazardouswaste.stanford.edu/>

Water

This subcategory seeks to recognize institutions that are conserving water, making efforts to protect water quality and treating water as a resource rather than a waste product. Pumping, delivering, and treating water is a major driver of energy consumption, so institutions can help reduce energy use and the greenhouse gas emissions associated with energy generation by conserving water. Likewise, conservation, water recycling and reuse, and effective rainwater management practices are important in maintaining and protecting finite groundwater supplies. Water conservation and effective rainwater and wastewater management also reduce the need for effluent discharge into local surface water supplies, which helps improve the health of local water ecosystems.

Credit
Water Use
Rainwater Management
Wastewater Management

Responsible Party

Moira Hafer

Sustainability Analyst
Office of Sustainability

Criteria

Part 1

Institution has reduced its potable water use per weighted campus user compared to a baseline.

Part 2

Institution has reduced its potable water use per gross square foot/metre of floor area compared to a baseline.

Part 3

Institution has reduced its total water use (potable + non-potable) per acre/hectare of vegetated grounds compared to a baseline.

Submission Note:

(1) Gallons consumed represents total water use and includes both domestic and lake water (non-potable) as reported in the Sustainable Stanford Year in Review Metrics & Trends section:

<http://sustainable.stanford.edu/resources/2013-2014-sustainability-stanford-year-review>

(2) The area of so-called "vegetated grounds" in acres has not changed substantially since 2000. Stanford's lands are vast (8180 acres) and the building footprint / hardscape (approximately 1182 acres) has not varied significantly. Negligible changes to the vegetated grounds are further confirmed through Stanford's General Use Permit and the accompanying Sustainable Development Study. Please see the following links for more details:

<http://stanford.edu/dept/govcr/documents/general-use-permit.pdf>

<http://sds.stanford.edu/>

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

Level of water risk for the institution's main campus:

High

Total water use::

	Performance Year	Baseline Year
Total water use	1,103,355,605 <i>Gallons</i>	1,325,797,088 <i>Gallons</i>

Potable water use::

	Performance Year	Baseline Year
Potable water use	738,045,616 <i>Gallons</i>	954,678,384 <i>Gallons</i>

Figures needed to determine "Weighted Campus Users"::

	Performance Year	Baseline Year
Number of residential students	11,838	9,363
Number of residential employees	0	0
Number of in-patient hospital beds	0	0
Full-time equivalent enrollment	16,034	12,151
Full-time equivalent of employees	13,063	8,012
Full-time equivalent of distance education students	0	0

Gross floor area of building space::

	Performance Year	Baseline Year
Gross floor area	14,831,648 <i>Square Feet</i>	12,386,396 <i>Square Feet</i>

Area of vegetated grounds::

	Performance Year	Baseline Year
Vegetated grounds	6,998 <i>Acres</i>	6,998 <i>Acres</i>

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

	Start Date	End Date
Performance Year	Jan. 1, 2014	Dec. 30, 2014
Baseline Year	July 1, 1999	June 30, 2000

A brief description of when and why the water use baseline was adopted:

The water use baseline of FY2000 aligns well with the inception of the formal water conservation program at Stanford and therefore makes the most sense as a baseline against which water savings should be measured. It is the year the campus refers to for all water-based comparisons reported internally and externally. Stanford has traditionally tracked its water consumption by fiscal year; however, since the inception of the drought in California in January 2014, Stanford has monitored its water consumption even more closely than in previous years, allowing for easy calculation of calendar year data. Because of this, Stanford has opted to use calendar year 2014 as its performance year, since that data reflects the most current state of Stanford's water consumption and conservation efforts.

Water recycled/reused on campus, performance year:

1,886,695 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:**INDOOR USE OF RECYCLED WATER:**

The service area for Stanford's reclaimed-water facility is now more than 1 million GSF. Cooling tower blowdown at the Central Energy Facility provides water for toilet and urinal flushing in the Science and Engineering Quad and Graduate School of Business, as well as several School of Medicine buildings.

IRRIGATION WITH SURFACE WATER:

Approximately 85% of Stanford's irrigation water comes from nonpotable lake water collected in two campus reservoirs. Landscaped areas are irrigated via the university's lake water system and allows Stanford to preserve potable water for domestic, research, academic, and academic support facility use.

COOLING TOWER EFFICIENCY:

Stanford's cogeneration plant runs water through cooling towers for approximately 18 cycles. However, as of April 1, 2015, Stanford's cogeneration plant will be decommissioned and replaced with a heat recovery system. Because the new energy system recovers heat from the chilled water loop, the need for evaporative cooling towers is eliminated. This will allow Stanford to reduce its overall water consumption by 15%.

REVERSE OSMOSIS REUSE AT SCHOOL OF MEDICINE

Existing reverse osmosis (RO) wastewater is being reused for quenching (reducing the temperature) of the 180F wastewater from new cage washing equipment. Water savings from RO reuse is estimated around 180,000 gallons/year.

Please note: the recycled water figure above reflects recycled water use for FY13. Stanford does not currently have the final recycled water use for CY14, our current performance year, but because this field is optional and does not affect Stanford's score, the decision was made to continue showing the FY13 figure.

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

All buildings on Stanford's campus are individually metered for water consumption. In addition, most buildings have a separate outdoor irrigation meter. This information has provided the necessary level of detail to enable Stanford to reduce domestic water consumption significantly since 2000, despite campus growth.

A brief description of any building retrofit practices employed by the institution, e.g. to install high efficiency plumbing fixtures and fittings:

Over the past 15 years, Stanford has replaced more than 12,000 academic and student housing bathroom fixtures with water-efficient fixtures, including low-flow showerheads, sink aerators, high efficiency toilets and urinals. Almost 90% of the academic and student housing inefficient toilets have been retrofitted.

Additionally, in 2014, Stanford Dining replaced water fixtures such as kitchen sprayers in all of its dining halls, which allowed the department to reduce its water consumption by 9%.

A brief description of any policies or programs employed by the institution to replace appliances, equipment and systems with water-efficient alternatives:

(1) In February 2015, Stanford Residential & Dining Enterprises (R&DE) approved installation of new sprinkler heads on all R&DE maintained lawns (primarily around Student Housing facilities). This will lead to a 46% reduction in R&DE's water consumption, which equates to 33 million gallons of water saved.

(2) Since May 2008, Stanford Utilities Services has provided 363 rebates to Faculty/Staff for installing residents' high efficiency toilets or clothes washers and over 95 water wise house call inspections.

(3) 77 water misers (devices that monitor the steam condensate temperature and apply cold water only when needed as opposed to continuous flow) have been installed on campus autoclaves and steam sterilizers.

(4) All once-through cooling for equipment has been replaced with re-circulating systems.

(5) Replaced single pass water seal vacuum pumps at the School of Medicine, Herrin and Mudd Chemistry labs with new efficient equipment.

A brief description of any water-efficient landscape design practices employed by the institution (e.g. xeriscaping):

Stanford's landscape design guidelines encourage selecting drought-resistant plants and discourage planting water-intensive turf lawns unless absolutely necessary. As part of Stanford's Water Conservation Master Plan, selected water-intensive landscape areas were retrofitted with lower water-use plant materials. A Water Wise Garden serves as an educational model for the entire campus community regarding native and drought-tolerant plants (

<http://bgm.stanford.edu/groups/grounds/special/waterwise>

). In addition, the majority of campus irrigation occurs at night to minimize evaporation loss.

A brief description of any weather-informed irrigation technologies employed by the institution:

Stanford uses a Maxicom central control system throughout most irrigated landscape areas on campus. Based on evapotranspiration and weather station data, computers at the Grounds Department calculate sprinkler run times and communicate irrigation schedules to field controllers which automatically run the sprinklers.

A brief description of other water conservation and efficiency strategies employed by the institution:

- (1) From 2011 to present, Stanford Utilities Services has installed >30 real time water monitoring devices on existing meters and implemented Best Management Practices (BMPs) to ensure new landscaping and buildings are working efficiently. Real time monitoring has also improved responsiveness to leaks and reduced the amount of time that leaks go unnoticed.
- (2) Stanford created a demonstration program to test new water efficient equipment and fixtures for campus-wide applications for new and existing facilities.

The website URL where information about the institution's water conservation and efficiency initiatives is available:

http://lbre.stanford.edu/sem/Water_Efficiency

Responsible Party

Moira Hafer

Sustainability Analyst
Office of Sustainability

Criteria

Part 1

Institution uses Low Impact Development (LID) practices as a matter of policy or standard practice to reduce rainwater/stormwater runoff volume and improve outgoing water quality for new construction, major renovation, and other projects that increase paved surface area on campus or otherwise significantly change the campus grounds.

The policy, plan, and/or strategies cover the entire campus. While the specific strategies or practices adopted may vary depending on project type and location, this credit is reserved for institutions that mitigate rainwater runoff impacts consistently during new construction. Implementing a strategy or strategies for only one new development project is not sufficient for Part 1 of this credit.

Part 2

Institution has adopted a rainwater/stormwater management policy, plan, and/or strategies that mitigate the rainwater runoff impacts of ongoing campus operations and treat rainwater as a resource rather than as a waste product.

The policy, plan, and/or strategies address both the quantity and quality (or contamination level) of rainwater runoff through the use of green infrastructure. Though specific practices adopted may vary across the campus, the policy, plan, and/or strategies cover the entire institution. Implementing strategies for only one building or area of campus is not sufficient for Part 2 of this credit.

Policies adopted by entities of which the institution is part (e.g. state government or the university system) may count for both parts of this credit as long as the policies apply to and are followed by the institution.

Submission Note:

Stanford complies with the, "C.3. New Development and Redevelopment" conditions set forth in the California Regional Water Quality Control Board, San Francisco Bay Region, Municipal Regional Stormwater NPDES Permit, Order R2-2009-0074, NPDES Permit No. CAS612008. This regulation outlines site design, source control and treatment requirements for all new and major remodel construction projects.

"---" 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:

Stanford University employs multiple strategies to reduce storm water runoff from new development and existing campus operations. Stanford developed two masterplans for managing and implementing storm water treatment and runoff:

(A) The Stanford University Campus-wide Stormwater Treatment Master Plan

(B) The Stanford University Campus-wide Storm Drainage Master Plan

In addition, Stanford University complies with several permit requirements associated with the California Regional Water Quality Control Board, San Francisco Bay Region, Municipal Regional Stormwater NPDES Permit, Order R2-2009-0074, NPDES Permit No. CAS612008, as implemented by Stanford's permitting authority Santa Clara County. Permit conditions require Stanford to comply with storm water pollution prevention principles including:

(1) Site Design Controls (minimize impervious surfaces, conserve natural areas, minimize site runoff)-- example installations include:

(1a) Installation of porous pavement (Oak Road and Stock Farm Road Parking Lot and Lasuen Parking Lot)

(1b) Rain water harvesting to in-ground tank used for irrigation (Knight Graduate School of Business Project)

(2) Source Control (minimize contact between pollutants and storm water runoff)-example installations include:

(2a) Covered loading docks (Medical School Loading Dock)

(2b) Appropriate covers, drains and storage precautions for outdoor material storage areas and loading docks (Medical School Loading Dock, East Campus Dining Facility, Lagunita Dining)

(3) Treatment Devices--example installations include:

(3a) Bioswales and Bioretention (Knight Graduate School of Business Project, Olmstead Terrace Project, Coaches Rental Housing Project, Arrillaga Outdoor Education and Recreation Center, Arrillaga Family Sports Center, Bing Concert Hall, East Campus Dining Facility, SRAF Building)

(3b) Swales (Knight Graduate School of Business Project, Campus Drive Bowdoin to Arguello, Campus Drive Panama Street to Via Ortega, Automotive Innovation Facility Project)

(3c) Infiltration Trenches (Stern-Wilbur Recreation Field, Galvez Parking Lot, Lasuen Parking Lot)

(3d) Regional continuous deflection separation devices (Welch Road and Pasteur Drive - CDS Unit, Stanford Stadium - CDS Unit)

(3e) Regional detention basins (Sand Hill Road and Stock Farm Road, El Camino Real and Serra Street)

(3f) Regional Bioswale (Roth Way and Lomita Drive)

Please see the following website for more information:

http://www.scvurppp-w2k.com/site_design.shtml

Has the institution adopted a rainwater/stormwater management policy, plan, or strategies that mitigate the rainwater runoff impacts of ongoing campus operations through the use of green infrastructure? :

Yes

A brief description of the institution's rainwater/stormwater management policy, plan, and/or strategies for ongoing

campus operations:

The campus storm water/rainwater management policy comprises compliance with all applicable regulations and conditions of the General Use Permit. Flood control is provided by a subsurface storm drain collection system that discharges to detention basins that regulate the peak flow rate discharged from campus in both the 10-year and 100-year storms. Overland flow paths and flood barriers protect structures on campus and provide for an overland release of runoff.

Storm water quality is managed through distributed treatment facilities such as bioswales, bioretention, vegetated swales, pervious pavements, interceptor trees, and CDS units. Additional Hydromodification Controls are in place for projects as required by the permit. New development and redevelopment projects on campus follow LID Site design guidelines and green building standards.

A brief description of any rainwater harvesting employed by the institution:

Knight Management Center Graduate School of Business Project - rain water harvesting (collected roof runoff is stored in an underground tank [75,000 gallons of storage] and reused for irrigation on site).

Rainwater harvested directly and stored/used by the institution, performance year:

A brief description of any rainwater filtering systems employed by the institution to treat water prior to release:

Regional Stormwater Swirl Separators (2 total) - removes trash and small particulate from tributary campus runoff.

A brief description of any living or vegetated roofs on campus:

Parking Structure 6

A brief description of any porous (i.e. permeable) paving employed by the institution:

Porous pavement has been installed at the Oak Road and Stock Farm Road parking lots (there are 3 different types installed – pervious pavers, pervious asphalt and pervious concrete).

A brief description of any downspout disconnection employed by the institution:

Required for projects subject to the NPDES permit, encouraged as a site design measure for all other campus projects.

A brief description of any rain gardens on campus:

Rain gardens or bioretention areas are present at the following areas: Knight Graduate School of Business Project, Coaches Rental Housing Project, Arrillaga Outdoor Education and Recreation Center, Arrillaga Family Sports Center, Bing Concert Hall, East Campus Dining Facility, SRAF Building

A brief description of any stormwater retention and/or detention ponds employed by the institution:

To control the quantity of water released from campus, there are two detention basins, located at Stock Farm Road and Oak Road and El Camino Real and Serra Street.

A brief description of any bioswales on campus (vegetated, compost or stone):

Vegetated swales can be found in the following locations across campus:

- Olmstead Terrace Housing Project
- Coaches Rental Housing Project
- Automotive Innovation Facility Project
- Campus Drive (Bowdoin Street to Arguello Mall)
- Campus Drive (Panama Street to Via Ortega)\
- Roth Way and Lomita Drive
- Madera Childcare Center
- Arboretum Child Care
- Equestrian Center

A brief description of any other rainwater management technologies or strategies employed by the institution:

- (1) Preserving existing vegetation and tree cover (tree protection)
- (2) Programmatic approach to compliance with the California Construction General Permit (Order 2009-0009-DWQ [as amended by 2010-00140DWQ and 2012-0006-DWQ]).
- (3) Bioretention, Hydromodification (CUDO systems), CDS Units, Vegetated swales, disconnected downspouts, interceptor trees, and pervious pavement.

The website URL where information about the institution's rainwater management initiatives, plan or policy is available:

http://lbre.stanford.edu/sem/storm_water

Wastewater Management

Responsible Party

Moira Hafer
Sustainability Analyst
Office of Sustainability

Criteria

Institution's wastewater is handled naturally on campus or in the local community. Natural wastewater systems include, but are not limited to, constructed treatment wetlands and Living Machines. To count, wastewater must be treated to secondary or tertiary standards prior to release to water bodies.

This credit recognizes natural handling of the water discharged by the institution. On-site recycling/reuse of greywater and/or blackwater is recognized in *OP 26: Water Use*.

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

Planning & Administration

Coordination, Planning & Governance

This subcategory seeks to recognize colleges and universities that are institutionalizing sustainability by dedicating resources to sustainability coordination, developing plans to move toward sustainability, and engaging students, staff and faculty in governance. Staff and other resources help an institution organize, implement, and publicize sustainability initiatives. These resources provide the infrastructure that fosters sustainability within an institution. Sustainability planning affords an institution the opportunity to clarify its vision of a sustainable future, establish priorities and help guide budgeting and decision making. Strategic planning and internal stakeholder engagement in governance are important steps in making sustainability a campus priority and may help advocates implement changes to achieve sustainability goals.

Credit
Sustainability Coordination
Sustainability Planning
Governance

Sustainability Coordination

Responsible Party

Moira Hafer

Sustainability Analyst
Office of Sustainability

Criteria

Institution has at least one sustainability committee, office, and/or officer tasked by the administration or board of trustees to advise on and implement policies and programs related to sustainability on campus. The committee, office, and/or officer focus on sustainability broadly (i.e. not just one sustainability issue, such as climate change) and cover the entire institution.

An institution that has multiple committees, offices and/or staff with responsibility for subsets of the institution (e.g. schools or departments) may earn points for this credit if it has a mechanism for broad sustainability coordination for the entire campus (e.g. a coordinating committee or the equivalent). A committee, office, and/or officer that focuses on just one department or school within the institution does not count for this credit in the absence of institution-wide coordination.

"---" 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:

For details on the governance model for Sustainability at Stanford, please review the subsequent portions of this credit and/or visit the following website:

<http://sustainable.stanford.edu/governance>

There have been numerous activities and substantive accomplishments from Stanford's various sustainability committees. A sample of major achievements is provided below, but a record of SWG meeting agendas can be found online (

http://sustainable.stanford.edu/swg_agendas

).

SUSTAINABILITY 3.0 STRATEGIC PLANNING

A group of faculty, staff, and student leaders initiated Sustainability 3.0 in June 2011 with the plan to deliver a strategic blueprint for the STARS Reporting Tool | AASHE

future of sustainability at Stanford. The Sustainability 3.0 process seeks to identify and map a shared and actionable vision for sustainability at Stanford over the next five to ten years, building on the Initiative on Environment and Sustainability that launched in October 2003 and the formalization of Sustainable Stanford that began in 2007.

Major goals stemming from the Sustainability 3.0 effort include leading sustainability by example through on- and off-campus actions, and maintaining a global influence through sustainability in research, education, and operations. To achieve these goals, the planning committee has unveiled four key strategies:

- (1) Ensure that sustainability is a top and lasting priority for Stanford University in research, teaching, and action.
- (2) Establish clear policies for implementing sustainability in every part of campus: implement, monitor, and achieve.
- (3) Educate and train the Stanford community to work towards sustainability goals and build a fully committed and engaged community.
- (4) Reach beyond Stanford. Influence sustainability research, education, and action beyond the university.

CELEBRATING SUSTAINABILITY

Sustainability 3.0 planning outcomes were unveiled to the university community at the Celebrating Sustainability event held on May 7, 2012 at Paul Brest Hall. Members of the planning committee unveiled the common goals, strategies, and actions that will guide sustainability at Stanford in future years. Celebrating Sustainability is now an annual event.

For more information, please visit the following websites:

[http://sustainable.stanford.edu/sites/sustainable.stanford.edu/files/documents/Sustainability3.](http://sustainable.stanford.edu/sites/sustainable.stanford.edu/files/documents/Sustainability3.0_Summary_2012.pdf)

[0_Summary_2012.pdf](http://sustainable.stanford.edu/sites/sustainable.stanford.edu/files/documents/Sustainability3.0_Summary_2012.pdf)

<http://sustainable.stanford.edu/vision>

<http://sustainable.stanford.edu/celebrate>

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:

Administrators, faculty, staff, and students throughout the university are working to research and implement sustainability. Following are the key dimensions of the collaborative governance model for sustainability at Stanford.

PROVOST'S COMMITTEE ON SUSTAINABILITY (2012)

An executive committee of deans, institute leads and senior campus leadership, the Provost's Committee on Sustainability began formally convening starting in the 2012-13 academic year. The committee facilitates collaboration across schools, institutes, the Office of Sustainability, and students; exerts leadership across campus; brings campus-wide sustainability issues to the attention of the Provost and the President; and implements leadership recommendations. Formation of the Provost's Committee is the outcome of one of the many key recommendations derived from the year-long strategic exercise, Sustainability 3.0, unveiled in May 2012.

SUSTAINABILITY WORKING GROUP (2006)

The Sustainability Working Group (SWG) prepares policy and program recommendations to advance and implement sustainability practices on campus. Goals include:

- (1) Continuously improve Stanford's leadership in demonstrating environmental sustainability in campus operations.
- (2) Use faculty, staff and student expertise in the evolving field of sustainability.
- (3) Advance opportunities for hands-on sustainability-related learning and service in the campus community.

SWG, chaired by the director of the Office of Sustainability, meets the first Thursday of every month and involves representatives from all parts of the university.

The Office of Sustainability connects campus organizations and entities and works collaboratively with them to steer sustainability initiatives to fulfill President Hennessy's vision that sustainability will "become a core value in everything we do." The Office works on long-range sustainability analysis and planning, evaluations and reporting, communication and outreach, academic integration, conservation behavior and training, and sustainability governance strategy.

SUSTAINABILITY WORKING TEAMS (2008)

The Sustainability Working Teams, assembled in 2008, develop program recommendations, assess progress, and help implement policy recommendations in major operational areas related to sustainability. The teams are composed of campus subject matter experts, representatives from key Stanford community groups, and individuals with authority to take action in the relevant operational areas. Each team activates when a specific initiative is underway and may be dormant when a given project has been implemented.

Members of each committee, including affiliations and role (e.g. staff, student, or faculty):

The membership of Stanford's Sustainability Working group and Sustainability Working Teams are too numerous to list here, but include faculty, staff, students, and key senior administrators. Contact information for the chairs of each committee can be found on the Sustainable Stanford website (

<http://sustainable.stanford.edu/governance>

).

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

<http://sustainable.stanford.edu/governance>

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:

STARS Reporting Tool | AASHE

Sustainability and Energy Management (SEM), a department within Land, Buildings & Real Estate (LBRE), leads initiatives in campus infrastructure and programs in energy and climate, water, transportation, green buildings, and sustainable information technology, as well as various special initiatives. All of SEM's projects are centered around the long-term sustainability of the campus, and many of the employees within each of SEM's various groups focus exclusively on sustainability as part of their daily work. For example, the Office of Sustainability is housed in SEM and connects campus organizations and entities, and works collaboratively with them to steer sustainability initiatives and reach milestones. The office works on long-range sustainability analysis and planning, assessment and reporting, sustainability governance strategy, conservation behavior and training, communication and outreach, and academic integration. Complementing operational efficiency measures undertaken by campus facilities managers, distinct and education-oriented programmatic initiatives spearheaded by the Office of Sustainability make sustainability more actionable and visible throughout the campus community.

Please note, SEM employs 95 staff members, including 5 who work in the Office of Sustainability and 21 who work directly on sustainability initiatives within other SEM groups. However, there are hundreds of other professionals throughout the Stanford community involved with sustainability projects in their daily work, some of whom are listed on the staff page of the Sustainable Stanford website. (

http://sustainable.stanford.edu/program_staff

)

Full-time equivalent (FTE) of people employed in the sustainability office(s):

95

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

http://sustainable.stanford.edu/program_staff

Does the institution have at least one sustainability officer?:

Yes

Name and title of each sustainability officer:

Joseph Stagner

A brief description of each sustainability officer position:

Joe leads the Sustainability and Energy Management Department, which includes 95 staff members in Utilities, Parking & Transportation, Business Services, and the Office of Sustainability. He leads the university's long-range sustainability infrastructure planning and implementation.

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

http://sustainable.stanford.edu/program_staff

Responsible Party

Moira Hafer
Sustainability Analyst
Office of Sustainability

Criteria

Institution has current and formal plans to advance sustainability. The plan(s) cover one or more of the following areas:

- Curriculum
- Research (or other scholarship appropriate for the institution)
- Campus Engagement
- Public Engagement
- Air & Climate
- Buildings
- Dining Services/Food
- Energy
- Grounds
- Purchasing
- Transportation
- Waste
- Water
- Diversity & Affordability
- Health, Wellbeing & Work
- Investment
- Other

The plan(s) may include measurable objectives with corresponding strategies and timeframes to achieve the objectives.

The criteria may be met by any combination of formally adopted plans, for example:

- Strategic plan or equivalent guiding document
- Campus master plan or physical campus plan
- Sustainability plan
- Climate action plan
- Human resources strategic plan
- Diversity plan

For institutions that are a part of a larger system, plans developed at the system level are eligible for this credit.

Submission Note:

The attached URL links to a report on President Hennessy's address to the Academic Council in April 2014. The address focused on sustainability at Stanford and featured a panel of four campus sustainability experts: Pamela Matson, dean of the School of Earth Sciences; Shirley Everett, senior associate vice provost of Residential and Dining Enterprises; Joseph Stagner, executive director of sustainability and energy management; and Fahmida Ahmed, associate director of sustainability and energy management. Hennessy's remarks--as well as the brief presentations by each panelist--featured not only Stanford's current sustainability initiatives, but also its plans to continue advancing sustainability on campus in the future.

<http://news.stanford.edu/news/2014/april/academic-council-sustainability-041714.html>

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

Does the institution have current and formal plans to advance sustainability in the following areas? Do the plans include measurable objectives?:

	Current and Formal Plans (Yes or No)	Measurable Objectives (Yes or No)
Curriculum	Yes	Yes
Research (or other scholarship)	Yes	Yes
Campus Engagement	Yes	Yes
Public Engagement	No	No
Air and Climate	Yes	Yes
Buildings	Yes	Yes
Dining Services/Food	Yes	Yes
Energy	Yes	Yes
Grounds	Yes	Yes
Purchasing	Yes	Yes
Transportation	Yes	Yes
Waste	Yes	Yes

Water	Yes	Yes
Diversity and Affordability	No	No
Health, Wellbeing and Work	Yes	Yes
Investment	Yes	Yes
Other	No	No

A brief description of the plan(s) to advance sustainability in Curriculum:

The Provost’s Committee on Sustainability oversees Sustainability 3.0, a sustainability initiative created to identify and map a shared and actionable vision for sustainability at Stanford over the next 5 to 10 years. The Provost’s Committee states in its 2013-2014 Sustainability 3.0 strategic plan that one of its objectives is to develop sustainability in undergraduate curriculum, including introductory courses and instruction packages for external use. This initiative also seeks to develop a certificate program focused on sustainability through Stanford’s School of Earth Sciences.

The measurable objectives, strategies and timeframes included in the Curriculum plan(s):

Stanford currently offers 487 sustainability courses and courses that include sustainability, but the Provost’s Committee hopes to increase that number further. In fact, the Sustainability 3.0 strategic plan states many measurable objectives for advancing sustainability in curriculum at Stanford. The first objective is developing a Sustainability 101 online class for incoming students. The next objective is implementing interdisciplinary problem-solving courses on sustainability issues, from introductory "thinking matters" courses, which are taken by all freshman, to freshman seminars, to "helix" sets that are linked and coordinated across the university. These types of courses will require faculty buy-in, so Sustainability 3.0 outlines the creation of incentives for faculty participation in these courses as another objective for advancing sustainability in curriculum. Lastly, Stanford plans to enact "sustainability challenges and impacts" classes that explicitly link education and problem solving within the university as well as with partners outside. In addition to these objectives regarding new courses, Stanford also plans to enhance older curricula and programs to increase impact. For example, Stanford will reinvigorate its Green Fund by including staff- and faculty-sponsored projects that are focused on sustainability that students can implement. In addition to the money students will receive through the Green Fund to implement these projects, students will be eligible for research units as part of the incentive. Lastly, a sustainability certificate program is ardently being pursued by the School of Earth Sciences, with a consultant currently on board to advise on the development of the program and curriculum.

Accountable parties, offices or departments for the Curriculum plan(s):

The Provost’s Committee partners on these initiatives with the Vice President of Undergraduate Education, the Haas Center for Public Service, the School of Earth Sciences, the Woods Institute for the Environment, and the Precourt Institute for Energy, in addition to other faculty members and school deans.

A brief description of the plan(s) to advance sustainability in Research (or other scholarship):

The Sustainability 3.0 2013-2014 Strategic Plan includes an outlined goal to expand Stanford's solution-oriented research activities and link them firmly with decision making in the university and beyond. This action seeks to advance the positive outcomes of the Initiative on Environment and Sustainability, which helped produce such entities as the Woods Institute for the Environment and the Precourt Institute for Energy after its launch in October 2003.

The measurable objectives, strategies and timeframes included in the Research plan(s):

Sustainability 3.0 lays out several objectives for its expansion of sustainability-focused and practical research activities. First, Stanford seeks to identify and fill gaps in faculty expertise, especially across the social sciences. Next, Stanford plans to analyze the successes and shortcomings across Stanford's research endeavors in an effort to link research with decision-making. Lastly, Stanford will engage the graduate community by creating strong connections between Stanford operations and academics in an effort to identify graduate research opportunities and incentivize graduate research contributions to campus-wide and global sustainability solutions. In addition to the above tactics, Stanford will implement new programs in the field of research to accomplish its objectives. For instance, the university will develop and carry out scholarly analysis of current and past Stanford research focused on interdisciplinary problem solving for sustainability goals, identifying what works and why in an effort to link knowledge to action. The university will also publish and share this experience locally to improve ongoing efforts. Lastly, Stanford will enhance its "Uncommon Dialogues" which bring together leaders from government, NGOs, and businesses with Stanford experts to develop practical solutions to pressing environmental challenges. The expansion of this program will create an ongoing dialogue among researchers and decision makers for sustainability and will help secure additional funding for faculty and students to engage in problem solving research in concert with decision makers. Work on these outcomes has been active in the 2013-2014 academic year.

Accountable parties, offices or departments for the Research plan(s):

This initiative is spearheaded by the Woods Institute for the Environment and the Precourt Institute for Energy.

A brief description of the plan(s) to advance Campus Engagement around sustainability:

The Sustainability 3.0 2013-2014 Strategic Plan outlines a goal of engaging the broader Stanford campus through outreach campaigns, training programs, and incentives. The outcomes of this goal will build upon existing programs, such as Stanford's Cardinal Green Buildings campaign, Stanford's annual participation in the nationwide Recyclemania campaign, and other building level programs that have been executed by the Office of Sustainability since its inception in 2007.

The measurable objectives, strategies and timeframes included in the Campus Engagement plan:

The Provost Committee's primary objective for accomplishing this goal is to enhance the mechanisms through which employees and students can engage in existing sustainability campaigns and programs. As part of this endeavor, Stanford enhanced its Cardinal Green brand in the 2013-2014 academic year by tying together all of its sustainability programs and campaigns under the Cardinal Green brand. Next, Stanford's Office of Sustainability began development of an interactive web portal that will allow Stanford community members to access information specific to their individual and/or building-level participation in sustainability programs. Within these profiles, faculty, staff and students will all have the opportunity to find out how to get involved, and they will be eligible to receive incentives for participation in these sustainability campaigns. Development of this web portal began in 2013 and is set for completion by Fall 2014. Another aspect of this web portal will be the development of school, department, and dorm level sustainability report cards accompanied by incentives for participation in sustainability campaigns. These report cards will show not just energy budget allocation, but also that for water, waste, and behavioral programs. These report cards will help create awareness among entire schools, departments, and dorms and should result in fuller staff, faculty, and student participation in sustainability initiatives.

Accountable parties, offices or departments for the Campus Engagement plan(s):

The Office of Sustainability is primarily responsible for the execution of Stanford's sustainability campaigns and programs, with significant input from the Sustainability Working Group and direction and oversight from the Provost's Committee on Sustainability. The dorm-level report cards will be implemented by Stanford's Residential and Dining Enterprises Student Housing division.

A brief description of the plan(s) to advance Public Engagement around sustainability:

Stanford's Haas Center for Public Service places a lot of emphasis on community-engaged learning, especially in the area of sustainability. The Haas Center has plans to continue to engage students in the sustainability of the local community in this way.

The measurable objectives, strategies and timeframes included in the Public Engagement plan(s):

Stanford is rapidly expanding its community engaged learning (e.g., service-learning) program in sustainability with the addition of a Director of Community Engaged Learning in Environmental Sustainability. This Director is consulting with faculty to expand the course offerings to students that allow them to engage with an off-campus community in the realm of environmental sustainability. The goal is to go from ~5 classes in the 2013-14 academic year to at least 11 in the 2014-15 academic year, with an additional 6 classes the following year. One goal of community-engaged learning is to increase student civic engagement with crucial public issues, like global change. Another goal is to facilitate the interaction between faculty, students, and the public around projects and ideas that are related to long-term (local and global) sustainability.

Accountable parties, offices or departments for the Public Engagement plan(s):

The Haas Center for Public Service is responsible for advancing sustainability in the area of public engagement.

A brief description of the plan(s) to advance sustainability in Air and Climate:

The Stanford University Energy and Climate Plan, first developed in 2009 and revised in 2013, outlines an in-depth framework for Stanford's plans to advance sustainability in the areas of Air and Climate in both the near future and the long term. This document was created through strategic partnerships between Stanford's Department of Sustainability and Energy Management and Stanford faculty experts. Stanford's Energy and Climate Plan, when fully implemented in April 2015, will immediately reduce campus GHG emissions by 50% and potable water use by 15%, while also opening a path to full energy sustainability over time through greening the campus electricity supply. Stanford has committed to procuring both solar and geothermal renewable electricity for 80% of its electricity supply beginning in 2016.

The Energy and Climate Plan can be found online at:

http://sustainable.stanford.edu/sites/sustainable.stanford.edu/files/documents/Stanford_Energy_&_Climate_Plan_2nd_Edition.pdf

The measurable objectives, strategies and timeframes included in the Air and Climate plan(s):

Stanford has been one of the most progressive universities in pursuing efficient energy supply through use of natural gas-fired cogeneration for virtually all its energy since 1987. However, fossil fuel use in cogeneration is the largest contributor of GHG emissions for Stanford, and conversion to new options that assure reliability, contain cost, and reduce GHGs is an essential third strategy in the Energy and Climate Plan. In this regard, in December 2011, Stanford's Board of Trustees gave concept approval to the \$438 million Stanford Energy System Innovations (SESI) program, which is a collection of operationally distinct projects designed to meet the university's energy demand while reducing greenhouse gas emissions and water consumption. SESI represents a significant transformation of the university from 100% fossil-fuel-based cogeneration to a more efficient electric heat recovery system. SESI will result in immense benefits for Stanford University in the years to come. When completed in April 2015, the current set of projects anticipated under the SESI program, including Stanford's commitment to procure renewable energy beginning in 2016, will reduce campus greenhouse gas emissions 80% below current levels, save 15% of campus potable water, open up the energy supply platform to future technologies, enable the campus to better manage its power portfolio, and yield utilities savings. This comes after a decision by the Provost in early 2014 to approve solar PV installation on campus parking structures and existing buildings. It is expected that this additional solar installation will meet at least 10% of the campus electricity demand.

The implementation of SESI began in 2012 and is on schedule to be fully complete in April 2015. All in all, the project required over twenty miles of hot water piping to be installed, which was completed in November 2014, along with conversions to the mechanical rooms of 155 buildings. This work was carefully sequenced in multiple phases to minimize disruption to campus life. The project also entailed construction of a new electrical substation, which was completed in early 2014, as well as a new state of the art Central Energy Facility (CEF), which is now occupied. Full plant commissioning began in Fall 2014. Once all phases of the hot water conversion are complete, a full transition from the existing cogeneration plant to the new heat recovery plant will be made, and the cogeneration plant will be decommissioned and removed. This process is on schedule to be completed by April 1, 2015.

For more details, please visit:

<http://sesi.stanford.edu>

http://sustainable.stanford.edu/sites/sustainable.stanford.edu/files/documents/Stanford_Energy_

[_Climate_Plan_2nd_Edition.pdf](http://sustainable.stanford.edu/sites/sustainable.stanford.edu/files/documents/Stanford_Energy_&_Climate_Plan_2nd_Edition.pdf)

http://sustainable.stanford.edu/sites/sustainable.stanford.edu/files/documents/FactSheet_FAQ_SE

[SI.pdf](http://sustainable.stanford.edu/sites/sustainable.stanford.edu/files/documents/FactSheet_FAQ_SESI.pdf)

<http://www.stanforddaily.com/2014/02/12/solar-panel-installation-approved-by-provost/>

Accountable parties, offices or departments for the Air and Climate plan(s):

Stanford's Department of Sustainability and Energy Management (SEM) along with management from the Land, Buildings, and Real Estate division that houses SEM, are primarily responsible for the execution of SESI and the long-term Energy and Climate Plan.

A brief description of the plan(s) to advance sustainability in Buildings:

Stanford is continually guided by its original master plan designer—Frederick Law Olmsted, the visionary founder of American landscape architecture—and directed by Stanford's Guidelines for Sustainable Buildings, which currently state that new buildings must use 30% less energy on average than current energy code requirements (these guidelines are currently being updated to become more performance-based, requiring that each new building's energy performance improve upon that of existing buildings on campus).

Olmsted envisioned a resource-conserving campus that would respond to its climate and context to achieve beauty and functionality. The guidelines, which all new building projects are expected to follow, update that vision for today's context. Ensuring that new buildings are as efficient as possible is essential to reducing campus greenhouse gas emissions, which is why Stanford has followed these strict guidelines since 2002, with revisions in 2008. Energy generation for heating, cooling and electricity in buildings accounts for 85 percent of Stanford's carbon dioxide emissions—and from 2000 to 2025, we expect to build 2 million square feet of new academic facilities and new housing for 2,400 more students, faculty and staff. Through the ongoing advancement of programs such as the Cardinal Green Office Program, the Energy Retrofit Program (ERP), and the Whole Building Energy Retrofit Program (WBERP), Stanford has developed strategic plans to reduce the energy consumption of its buildings significantly.

The measurable objectives, strategies and timeframes included in the Buildings plan(s):

The Cardinal Green Office Program offers building occupants an opportunity to become leaders in sustainability by implementing sustainable practices in their office spaces. This program has continued to develop since its creation in 2009, reaching broader audiences and leading to increased energy savings. Since its inception, the Cardinal Green Office Program has served almost 80 buildings by providing energy audits, recommendations, and rebates for energy-saving devices like smart power strips and programmable timers. The Office of Sustainability's objectives for the future of the program include weaving it even more fully into the Cardinal Green brand in order to increase awareness, and to develop a building rating system in conjunction with the Cardinal Green Office Program that will consider many sustainability criteria to produce a report card for each building on campus. One pilot program for this building rating system has already been performed, and plans have been made to roll it out on a larger scale in 2015.

Additionally, one of the university's key goals is to recover 5–10 percent of the space in existing campus buildings. Studies conducted to date have found that many offices could recover up to 10 percent of their space. To encourage more efficient use of office space, Stanford requires selected schools to pay a charge for underutilized space. Several schools are working to reduce their space charge through efforts such as conducting master space plan studies and renovating spaces in conformance with the Space Planning Guidelines.

Lastly, the Facilities Energy Management team within SEM operates the WBERP and ERP programs. WBERP was allocated \$30 million for major capital improvements to the most energy-intensive buildings on campus. The first overhaul, of the Stauffer Chemistry Building, was finished in June 2007 and resulted in a 35 percent drop in electricity use, a 43 percent cut in steam use and a 62 percent fall in chilled water use. It also reduced carbon dioxide emissions associated with the building by 762 metric tons per year and cut energy costs by 46 percent in the first 12 months. As of August 2014, the university had completed 14 WBERP projects, which are saving annually 9.5 million kWh, 5 million ton-hrs of chilled water, and 71 million pounds of steam, representing over 14,000 metric tons of greenhouse gas emissions and savings nearly \$4 million per year. An additional 12 projects are in the pipeline, which are projected to save another \$2.3 million per year. This program operates in conjunction with ERP, which provides rebates for lighting retrofits, energy efficiency devices

for office equipment, and efficient lab equipment, among others. Together with the Cardinal Green Office Program, one goal of ERP for the future is to increase adoption of the ERP rebates across campus. For more information, visit

<http://sustainable.stanford.edu/buildings>

Accountable parties, offices or departments for the Buildings plan(s):

The Department of Project Management (DPM), the Department of Sustainability and Energy Management (SEM), and Zones Management work together to identify opportunities for building energy efficiency and implement energy efficiency programs across campus.

A brief description of the plan(s) to advance sustainability in Dining Services/Food:

Stanford Dining’s mission states, “In support of the academic mission of the university and in partnership with Residential Education, we proudly serve great tasting, healthy, sustainable food in a fiscally responsible manner.” As a result of that mission, Stanford Dining has integrated sustainability into all of its strategic planning processes, including guiding documents for dining halls, campus restaurants, cafes, and retail food services.

The measurable objectives, strategies and timeframes included in the Dining Services/Food plan(s):

A master plan for campus restaurants, cafes, and retail food services at Stanford was developed in 2006 based on a study performed by a consultant on the current situation of campus restaurants, cafes, and retail food services at Stanford. The goals of the master plan were to (1) understand the impact of adding new retail locations as desired by various academic constituencies; (2) improve resource utilization (space & capital); and (3) provide a “level playing field” and platform for service provider success. Key findings in performing market research for the master plan were that the campus community (especially faculty, staff, and graduate students) were looking for healthier and less expensive food options. Accordingly, the Advisory Committee, reporting to the Provost, was formed to provide outreach, education, management tools, and contract guidelines to the campus community. In 2014, the Provost’s Committee on Sustainability evaluated methods of integrating standardized recycling and composting protocols into these café contracts. Visit

[http://lbre.stanford.edu/sites/all/lbre-shared/files/docs_public/DCPSM_mpfinalreport_Revised_v1](http://lbre.stanford.edu/sites/all/lbre-shared/files/docs_public/DCPSM_mpfinalreport_Revised_v1.pdf)
[.pdf](#)

Additionally, sustainability factors into all the guiding documents for R&DE Stanford Dining. One such document states that, “As an award-winning environmental leader, Stanford Dining has a robust and growing sustainability program managed by our full-time Sustainable Food Program Manager.” It also continues on to discuss initiatives and plans in the following categories: purchasing local and sustainably grown food, resource conservation and management, waste reduction and recycling, and innovation and education. Visit

[http://web.stanford.edu/dept/rde/cgi-bin/drupal/dining/sites/default/files/2012DiningTourBrochu](http://web.stanford.edu/dept/rde/cgi-bin/drupal/dining/sites/default/files/2012DiningTourBrochure10_03.pdf)
[re10_03.pdf](#)

Finally, the following strategic objectives are published for the Sustainable Food Program: develop additional food-related curricula with faculty that explore theoretical frameworks through the lens of meaningful, practical, and hands-on experiences; continue to design awareness events and ongoing sustainability campaigns that align with and support the program's strategic partners; expand opportunities for students to design, implement, and manage Sustainable Food Program initiatives; establish an ongoing initiative with faculty, researchers and student groups to implement creative design solutions that promote and encourage healthy and sustainable eating habits and behaviors in dining halls; fully integrate culinary standards and sustainable food purchasing metrics into internal reporting processes, with the goal of doubling sustainable food purchases by 2015; achieve 100 percent transparency for all food purchases, including origin, production method, ownership structure and labor practices. New initiatives being implemented throughout the 2013-2014 academic year include: grass-fed hamburger patties from Bartels Farms, local and organic milk from Straus Family Creamery, sustainable tuna from American Tuna, local and organic chard from Coke Farm, local and organic romaine from Earthbound Farms, and local and organic herbs from Jacobs Farm. Visit

<http://web.stanford.edu/dept/rde/cgi-bin/drupal/dining/sustainable-food-program>

Accountable parties, offices or departments for the Dining Services/Food plan(s):

Stanford's Residential and Dining Enterprises division oversees all food-related objectives, strategies, and programs.

A brief description of the plan(s) to advance sustainability in Energy:

Given Stanford's plans for significant growth to support its academic mission, a successful long-range Energy and Climate Plan requires a balance among investments in new buildings, existing buildings, and energy supply. While the innovations in Stanford's energy supply are covered in the Air & Climate portion of this credit, the energy consumption of new and existing buildings is another crucial aspect of the university's Energy and Climate Plan that was developed in 2009 with revisions in 2013.

The measurable objectives, strategies and timeframes included in the Energy plan(s):

First, constructing high-performance new buildings to minimize the impacts of growth on campus energy systems and GHG emissions is a key strategy. The Guidelines for Sustainable Buildings, originally published in 2002 and updated in 2008, in combination with the guidelines for Life Cycle Cost Analysis and the Project Delivery Process manual, provide the framework for minimizing energy demand in new construction and major renovation projects on campus. Second, while the university has pursued aggressive energy conservation for many years and has employed building-level energy metering of all of its facilities since the 1980s, the continuation and expansion of programs like the Whole Building Energy Retrofit Program (WBERP) is another key strategy of the Energy and Climate Plan.

Accountable parties, offices or departments for the Energy plan(s):

Stanford's Department of Sustainability and Energy Management (SEM) and the Facilities Energy Management team within SEM are primarily responsible for programs to reduce campus energy consumption.

A brief description of the plan(s) to advance sustainability in Grounds:

Stanford has a long history of preserving its lands and plans to continue doing so, especially prioritizing the protection of endangered species, with the guidance of the Habitat Conservation Plan.

The measurable objectives, strategies and timeframes included in the Grounds plan(s):

Stanford's Habitat Conservation Plan (HCP), completed in December 2011 and formally released with the final National Environmental Policy Act (NEPA) document in November 2012, establishes a comprehensive conservation program that protects, restores and enhances habitat areas; monitors and reports on covered species populations; and avoids and minimizes impacts on species and their habitats. The HCP also provides major new commitments of land protection, personnel, and resources dedicated to habitat conservation. The goals of the HCP include: (1) comply with the federal Endangered Species Act; (2) support Stanford's mission as a research and teaching institution; (3) coordinate multiple conservation actions; and (4) provide a 50-year framework to plan for future land use and to promote all phases of conservation. Also, Stanford's habitat conservation plan strategies include: (1) concentrate conservation efforts in high-priority areas; (2) establish long-term habitat protection; (3) protect and restore riparian areas; (4) enhance habitat areas; (5) implement a conservation credit system; and (6) perform monitoring and adaptive management practices. Visit

<http://hcp.stanford.edu>

Implementation of the HCP began in Spring 2013. These formal efforts supplement the ongoing efforts of Stanford's Building & Grounds Maintenance Department to maintain Stanford's grounds in a sustainable way. Examples of these practices include a tree relocation program, incorporating local and drought tolerant plants into Stanford's landscape, utilizing IPM practices, and hosting walking tours showcasing grounds sustainability. Visit

<http://hcp.stanford.edu>

Accountable parties, offices or departments for the Grounds plan(s):

Stanford's Department of Land Use and Environmental Planning (LUEP) and Building and Grounds Maintenance (BGM) are jointly responsible for advancing sustainability in grounds.

A brief description of the plan(s) to advance sustainability in Purchasing:

The Procurement Department has worked with the Office of Sustainability to develop a strategic plan for sustainability in purchasing in the coming years. For instance, in conjunction with Office Max (Stanford's office supply supplier), has developed a program to replace older printers on campus with newer models. The Procurement Department has worked with the Office of Sustainability to begin developing programs to distribute these upgraded printers to the departments who engage in proper recycling of printer cartridges.

The measurable objectives, strategies and timeframes included in the Purchasing plan(s):

The Office of Sustainability, together with Procurement and Office Max, has begun developing plans to put on a campaign around Procurement. This campaign will focus in part around ink and toner cartridge recycling based on the idea of offering Office Max's printer upgrades as incentives. The Building Level Sustainability Program has already begun promoting the ink and toner cartridge recycling program on campus, but this effort will continue to be refined as the team is able to set in motion plans to allocate and implement printer

upgrades, in addition to modifying other details of the current system.

Accountable parties, offices or departments for the Purchasing plan(s):

The Procurement Department has worked with Office Max and the Office of Sustainability to develop the above plans for sustainability in Purchasing.

A brief description of the plan(s) to advance sustainability in Transportation:

Transportation demand management (TDM) remains a priority sustainability program at Stanford, with implications beyond the university's main campus. Stanford's Parking & Transportation Services is assessing various aspects of campus growth in its continued commitment to support the academic mission of the university. With projected job growth and commute trends in Silicon Valley pointing to increased traffic congestion, Stanford has developed and launched a Regional Transportation Planning Initiative under the leadership of Land, Buildings & Real Estate. Many new and exciting TDM programs have been developed as a result of this initiative, which includes a framework for long-term growth.

The measurable objectives, strategies and timeframes included in the Transportation plan(s):

Within the context of long-term transportation planning, Stanford is expanding its relationships with the region's public transit providers. This is being pursued to improve service coming to campus as well as help advocate for long-term funding and system improvements. This proactive approach will help encourage greater use of public transit by the university's commuting population while enhancing the availability of public transit service for the entire Bay Area. As an example of how the university is pursuing this objective, Stanford recently became a founding member of the Caltrain Commuter Coalition, which is working to stabilize operating funds for Caltrain and build support for Caltrain's electrification program.

In addition, the existing electric vehicle (EV) policy is undergoing a review as a result of the long-term transportation plan. This review includes assessing the number and location of charging stations to be installed in the future and determining charging-level options. In keeping with the university's addition of new photovoltaic solar arrays on campus to increase renewable and efficient energy supplies through the Stanford Energy System Innovations program, one goal of the long-term transportation plan is to expand the number of EV charging stations on campus and to transition more of the university's free Marguerite shuttle fleet to 100-percent electric buses.

Accountable parties, offices or departments for the Transportation plan(s):

P&TS operates all of Stanford's transportation services and resides in the Department of Sustainability and Energy Management.

A brief description of the plan(s) to advance sustainability in Waste:

Stanford has plans set forth to comply with California's mandate to achieve a 75% diversion rate by 2020. In order to accomplish this, Stanford will strengthen its current waste programs by implementing new methods of recycling, working towards universal composting across campus, and continuing its work at the building level to spread awareness and create incentives for waste reduction, among other activities. The university is also working on a long-range waste plan.

The measurable objectives, strategies and timeframes included in the Waste plan(s):

Stanford has several measurable objectives for waste reduction in the coming years. Stanford bases its strategic waste plans off of the waste audits off of the 27 waste audits that have been performed. For example, Stanford identified that 17% of the material being sent to the landfill was paper, so the university established a uniform desk-side recycling program to be deployed across campus. After a pilot project in operations buildings, this program was fully launched in summer 2014. As of February 2015, over 5,000 sets of bins (each set includes one paper recycling bin and one mini trash can) have been deployed in a total of 61 buildings on campus.

Secondly, Stanford continues its endeavors to make sure all recycling and composting bins are labeled uniformly. Stanford has re-labeled over half the bins on campus and will steadily continue to re-label the remaining bins. These labels clearly show what types of products should be put in which bins, and their consistency across campus will translate to higher levels of recognition among individuals and, in turn, improved individual recycling habits.

Additionally, Stanford plans to expand its composting program. In 2014-15, Student Housing expanded its paper towel composting program to an additional 11 residences, and it will continue to expand this program gradually over the coming years. Student Housing also has formal plans to make some of their residences Zero Waste. This program was rolled out in 2015 and began with several of the high-profile row houses. Finally, the university currently operates a voluntary composting program and continues to strategically add shared compost dumpsters across campus to make it easier for building occupants to discard organic waste from the small compost bins in their buildings. While this program has been effective, the university continues to strategically evaluate how composting could be improved on campus, since waste audits have shown that organic waste comprises 31% of material sent to the landfill.

Lastly, the building rating system currently being developed by the Office of Sustainability will include waste as an integral part of the rating. The Office of Sustainability will work together with Peninsula Sanitary Services Inc (PSSI), Stanford's recycling contractor, to collect building-level data on waste generated and integrate it into that building's report card. This awareness campaign will be accompanied by recommendations on how to reduce building-level waste and incentives for doing so. This system will come online in the 2014-2015 academic year.

Accountable parties, offices or departments for the Waste plan(s):

PSSI is the entity responsible for waste collection on Stanford's campus. PSSI works closely with Buildings and Grounds Maintenance (BGM) and partners with the Department of Sustainability and Energy Management (SEM) on many of its sustainability endeavors.

A brief description of the plan(s) to advance sustainability in Water:

Stanford's award-winning water conservation program has reduced potable water use by 20% over the last decade—despite continued campus growth—through commitment, dedication, innovation and implementation of a comprehensive set of water saving measures informed by the Water Conservation, Reuse and Recycling Master Plan, which was developed in 2003.

The measurable objectives, strategies and timeframes included in the Water plan(s):

The Water Conservation, Reuse and Recycling Master Plan was developed in 2003 based on a comprehensive study of Stanford's water use trends. It considers domestic water from the San Francisco Public Utilities Commission, Stanford's Lake Water System, and reclaimed water availability, and it includes both existing water conservation programs at the time and projected water use trends both campus-wide and by department to determine appropriate future water conservation, reuse, and recycling measures. The master plan lays out a total of 14 feasible water efficiency measures, many of which have been implemented to date. For instance, ultra-low flush toilet replacement, showerhead retrofit and urinal replacement were the top three recommendations, all of which have been implemented by Stanford and have contributed to the 20% decrease in total water consumption in the past 15 years. Additional steps in the master plan include Faculty/Staff Housing Water Audits, 50 of which were performed just in 2013-14, and converting the football practice fields to lake water irrigation, conversations about which were conducted throughout 2013-14. Visit

http://lbre.stanford.edu/sites/all/lbre-shared/files/docs_public/FINALStanfordConservation_Reco

[mmended_Plan10_16_033\[1\].pdf](#)

Additionally, since the announcement of the drought in California in January 2014, Stanford has completed a detailed analysis of campus water use to review its water consumption and develop a set of measures to voluntarily reduce water use even further. This effort supplements the strategies identified in the master plan and shows that up to an additional 5% savings can be achieved through further conservation measures both behaviorally and operationally. Stanford's Water Wise campaign, which the Office of Sustainability runs each spring, encourages the community to adopt such measures as taking shorter showers and doing full loads of laundry. Since January 2014, Stanford has continued to refine irrigation practices and implement other water conservation technologies. Stanford also conducted several studies to determine the effects of its water systems on the university's overall sustainability. For example, in 2014, Stanford surveyed campus researchers to determine the effects of mixing groundwater with the water the university receives from the San Francisco Public Utilities Commission. The results of this study showed that it would be possible to pursue this water blend, and Stanford is now exploring possible implementation strategies. Additionally, Stanford has been conducting studies of the effects of Searsville Dam and Reservoir, and in March 2014 Stanford unveiled a new Resource Recovery Center that studies the potential of wastewater to produce both clean water and energy. These studies will continue to be analyzed to provide valuable insight into the future of Stanford's water programs. The new Stanford Energy System Innovations (SESI) energy project, scheduled to come online in April 2015, will further reduce campus potable water use by another 15%, bringing Stanford's total water consumption down by 35% since its 2000 baseline. For more information, visit

<http://sustainable.stanford.edu/waterwise>

Accountable parties, offices or departments for the Water plan(s):

The Department of Sustainability and Energy Management (SEM) manages Stanford's water plans.

A brief description of the plan(s) to advance Diversity and Affordability:

n/a

The measurable objectives, strategies and timeframes included in the Diversity and Affordability plan(s):

n/a

Accountable parties, offices or departments for the Diversity and Affordability plan(s):

n/a

A brief description of the plan(s) to advance sustainability in Health, Wellbeing and Work:

BeWell@Stanford serves as the overarching health and wellness resource for Stanford University. By facilitating a culture of wellness at Stanford, the program encourages individuals, departments and families to adopt and maintain healthy lifestyle behaviors. The program is continually expanding its offerings to faculty, staff, and students to not only encourage adoption of its health and well-being programs, but also to directly incorporate sustainability into its offerings. Stanford also operates the Health Improvement Program, which provides fitness classes and other wellness activities to the Stanford community. As a leading wellness initiative in higher education and a valued program among staff and faculty, both the BeWell and HIP programs are guided by formal plans and strategies to ensure they reach their goals.

The measurable objectives, strategies and timeframes included in the Health, Wellbeing and Work plan(s):

As BeWell continues to be a leading university wellness program, it is consistently adapting its practices and strategies to allow for continuous improvement. BeWell offers many activities that count as "berries." After the accumulation of 6 berries, employees receive an added financial incentive. One of BeWell's strategies for improvement is to continually reevaluate its berry options to give employees credit for new healthy behaviors and allow them to focus on the healthy lifestyle choices that most interest them. For instance, in 2013-2014, employees' 9 favorite berries remained unchanged, while 11 more options were added for increased program flexibility. During this time, berries were added specifically in the "Commit to Community" category, where there are options such as "Environmental Class" and "Environmental Self-Report." Additionally, the BeWell staff collect surveys after each class or activity to evaluate the effectiveness of that option and make improvements in future years.

BeWell also continually reevaluates the structure of its overarching program to meet its objectives. A recent development in this area in the 2014-15 academic year was an added "Engagement" section of the BeWell program platform. This engagement requirement includes coaching, action, and reflection, and is now a mandatory component of each individual plan in order for individuals to receive their BeWell incentives.

Accountable parties, offices or departments for the Health, Wellbeing and Work plan(s):

The BeWell program staff work through Stanford University Human Resources and in partnership with the Health Improvement Program, which is operated out of the School of Medicine.

A brief description of the plan(s) to advance sustainability in Investment:

The Board of Trustees' Special Committee on Investment Responsibility (SCIR) is advised by the Advisory Panel on Investment Responsibility (APIRL), which continually works to address "substantial social injuries" by adopting social issue policies and proxy voting guidelines and engaging corporations. Methods include: holding written, verbal, and/or in person dialogues as necessary; notifying corporate boards and management of intent to disinvest or, if all other methods of engagement have failed to influence changes in business practices, use of divestment (such as the recent decision to divest from coal companies on May 6, 2014).

The measurable objectives, strategies and timeframes included in the Investment plan(s):

The university—operating through the APIRL and the SCIR—has developed certain Investment Responsibility Core Social Issue Policy Statements and Proxy Voting Guidelines which cover and address many current issues, including Environmental Sustainability. Where it has decided upon such a guideline, the University's Statement on Investment Responsibility directs that the University will "normally vote according to existing University Investment Responsibility Proxy Voting Guidelines." For example, in May 2014, acting on a recommendation of Stanford's APIRL, the Board of Trustees announced that Stanford will not make direct investments in coal mining companies. The Board of Trustees concurred with the advisory panel that divesting from coal is consistent with the university's Statement

on Investment Responsibility given the current availability of alternatives to coal that have less harmful environmental impacts. The resolution means that Stanford will not directly invest in approximately 100 publicly traded companies for which coal extraction is the primary business, and will divest of any current direct holdings in such companies. Stanford also will recommend to its external investment managers, who invest in wide ranges of securities on behalf of the university, that they avoid investments in these public companies as well. A student-led organization known as Fossil Free Stanford petitioned the university last year to divest from 200 fossil-fuel extraction companies as part of a national divestment campaign. The request by Fossil Free Stanford was reviewed over the last several months by APIRL's Environmental Sustainability Subcommittee, which met with the group, conducted its own extensive research and took input from other constituencies. The subcommittee's recommendation was subsequently approved by the full APIRL, the Trustees' Special Committee on Investment Responsibility and the Board of Trustees.

In the investment context, in addition to the action on coal, Stanford's existing proxy voting guidelines adopted earlier by the Board of Trustees mandate that the university vote "yes" on proxy resolutions asking companies to adopt sustainability principles, reduce greenhouse gas emissions and increase the energy efficiency of their operations.

Visit

<http://apir.stanford.edu>

to learn more.

Accountable parties, offices or departments for the Investment plan(s):

n/a

A brief description of the plan(s) to advance sustainability in other areas:

n/a

The measurable objectives, strategies and timeframes included in the other plan(s):

n/a

Accountable parties, offices or departments for the other plan(s):

n/a

The institution's definition of sustainability:

In pursuing its academic mission, Stanford University is committed to being a leader in the research, teaching and institutional practice of sustainability. The university is therefore committed to following core sustainability principles in all facets of planning and operations so that Stanford can lessen its environmental impact, ensure a healthy community and contribute to global solutions. Targeted policies and practices—as well as individual, everyday actions—are essential to realizing our vision of incorporating sustainability into every aspect of campus life.

For more details, please visit:

<http://sustainable.stanford.edu/principles>

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:

While Stanford University does not have one overarching strategic plan, the Sustainable Development Study completed in 2009 as a condition of Stanford's General Use Permit acts as a long-term plan for the university's growth as a whole. The executive summary of the SDS can be found here:

<http://sds.stanford.edu/documents/SDS%20ExecSum.pdf>

Additionally, the Provost's Committee on Sustainability has been charged with bringing key leaders on campus together to focus on sustainability as a core value at Stanford. The goals of this committee are to encourage and promote collaborations among sustainability programs across schools, institutes, Office of Sustainability, and students; exert leadership across campus by engaging deans and the cabinet, and advising the Sustainability Working Group; and bring campus-wide issues on sustainability to the attention of the Provost and President and inform, advise, and converse with the Provost and President on new sustainability initiatives. The Provost's Committee compiles their own strategic plan each academic year that guides the sustainability initiatives at Stanford for that year.

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

<http://news.stanford.edu/news/2014/april/academic-council-sustainability-041714.html>

Responsible Party

Moira Hafer

Sustainability Analyst
Office of Sustainability

Criteria

Part 1

Institution's students participate in governance in one or more of the following ways:

A. All enrolled students, regardless of type or status, have an avenue to participate in one or more governance bodies (through direct participation or the election of representatives)

B. There is at least one student representative on the institution's governing body. To count, student representatives must be elected by their peers or appointed by a representative student body or organization.

And/or

C. Students have a formal role in decision-making in regard to one or more of the following:

- Establishing organizational mission, vision, and/or goals
- Establishing new policies, programs, or initiatives
- Strategic and long-term planning
- Existing or prospective physical resources
- Budgeting, staffing and financial planning
- Communications processes and transparency practices
- Prioritization of programs and projects

Part 2

Institution's staff participate in governance in one or more of the following ways:

A. All staff members, regardless of type or status, have an avenue to participate in one or more governance bodies (through direct participation or the election of representatives)

B. There is at least one non-supervisory staff representative on the institution's governing body. To count, staff representatives must be elected by their peers or appointed by a representative staff body or organization.

And/or

C. Non-supervisory staff have a formal role in decision-making in regard to one or more of the areas outlined in Part 1.

Part 3

Institution's faculty participate in governance in one or more of the following ways:

A. All faculty members, regardless of type or status, have an avenue to participate in one or more governance bodies (through direct participation or the election of representatives)

B. There is at least one teaching or research faculty representative on the institution's governing body. To count, faculty representatives must be elected by their peers or appointed by a representative faculty body or organization.

And/or

C. Faculty have a formal role in decision-making in regard to one or more of the areas outlined in Part 1.

Participatory or shared governance bodies, structures and/or mechanisms may be managed by the institution (e.g. committees, councils, senates), by stakeholder groups (e.g. student, faculty and staff committees/organizations), or jointly (e.g. union/management structures).

Structures or mechanisms adopted by entities of which the institution is part (e.g. government or university system) may count for this credit as long as they apply and are adhered to by the institution.

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

Do all enrolled students, regardless of type or status, have an avenue to participate in one or more governance bodies (through direct participation or the election of representatives)?:

Yes

A brief description of the mechanisms through which students have an avenue to participate in one or more governance bodies:

The Nominations Commission (NomCom) is a branch of the ASSU composed of 7 students from the undergraduate and graduate populations that is responsible for nominating students as voting members to university committees, Stanford Board of Trustee committees, and the Stanford Student Enterprises board of directors. University Committees are critical to allowing students' voices to be heard at the administrative level. The Board of Trustees, the Academic Council, the Provost, the President, the Dean of the School of Humanities and Sciences, the Dean of Student Affairs, and the Chief Information Officer convene almost 50 committees for yearlong terms to address a variety of issues affecting all walks of student life.

NomCom has a direct impact on issues across the university through the students they nominate to committees. The term for the 7 NomCom members begins at the start of winter quarter and runs through the end of the next fall quarter. This term was adjusted by an amendment to the bylaws and passed in November 2013 by the Undergraduate Senate and the Graduate Student Council. The current NomCom chairs are Anuj Patel and Jackie M. Robinson. They can be contacted by students or other Stanford affiliates at

assu.stanford.edu

with any questions or concerns pertaining to NomCom or selection to university committees.

The 2014 Nominations Commission, serving from January 2014 until the end of December 2014, selecting students for the 2014-2015 academic year is: Sumia Ahmad, Sarah Houamed, Jonathan Leong, Marisa Messina, Minh Nguyen-Dang, Anuj Patel (co-chair), and Jackie M. Robinson (co-chair).

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:

See response to the prior section and the following websites for complete details:

<http://nomcom.stanford.edu/?q=node/3>

<http://nomcom.stanford.edu/?q=node/2>

Do students have a formal role in decision-making in regard to the following?:

	Yes or No
Establishing organizational mission, vision, and/or goals	Yes
Establishing new policies, programs, or initiatives	Yes
Strategic and long-term planning	Yes
Existing or prospective physical resources	Yes
Budgeting, staffing and financial planning	Yes
Communications processes and transparency practices	Yes
Prioritization of programs and projects	Yes

A brief description of the formal student role in regard to each area indicated, including examples from the previous three years:

As student involvement is quite extensive, please see responses to the prior section and the following websites for complete details:

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)?:

No

A brief description of the mechanisms through which all staff have an avenue to participate in one or more governance bodies:

N/A

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:

N/A

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	No
Establishing new policies, programs, or initiatives	No
Strategic and long-term planning	No
Existing or prospective physical resources	No
Budgeting, staffing and financial planning	No
Communications processes and transparency practices	No

A brief description of the formal staff role in regard to each area indicated, including examples from the previous three years:

N/A

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:

According to the Articles of Organization of the Faculty, originally adopted by the Board of Trustees in 1904 and revised in 1977, the powers and authority of the faculty are vested in the Academic Council consisting of:

- (1) the President of the University
- (2) tenure-line faculty: Assistant, Associate, and Full Professor
- (3) nontenure-line faculty: Associate and Full Professor followed by the parenthetical notation (Teaching), (Performance), (Applied Research), or (Clinical)
- (4) nontenure-line research faculty: Assistant Professor (Research), Associate Professor (Research), Professor (Research)
- (5) Senior Fellows in specified policy centers and institutes
- (6) certain specified officers of academic administration.

In the Spring of 1968, the Academic Council approved the charter for a Senate to be composed of 55 representatives elected by the Hare System of Proportional Representation and, as ex officio nonvoting members, deans of the academic schools and certain major officers of academic administration.

In the allocation of representation, each school constitutes a major constituency. The Senate may create from time to time other major constituencies as conditions warrant. Approximately one-half of the representatives are allocated to constituencies on the basis of the number of students in those constituencies and the remainder on the basis of the number of members of the Academic Council from each constituency.

The Faculty Senate is the legislative body of the Academic Council and has responsibility for academic and research policy as well as the authority to grant degrees. In addition to formulating policy, the Senate reviews, via the committees, two types of curriculum proposals, broadly speaking: proposals or reviews of degree granting programs, and, periodically, broad curriculum reforms resulting from ad-hoc university level review committees which examine university wide curriculum such as general education requirements, writing requirements and other similar classes all undergraduates must take. The Senate also reviews interdisciplinary degree granting programs (IDPs) as well as proposals for new degree granting programs, including honors and joint degree programs (JDPs) and name changes of departments and programs.

The Senate discharges its academic and research policy and oversight responsibilities via the hard work of seven standing Committees of the Academic Council (

<https://facultysenate.stanford.edu/academic-council-committees>

). These committees are charged by the Senate. There are four Senate committees: the Committee on Committees, the Steering Committee, the Committee of Tellers and the Planning and Policy Board.

Is there at least one teaching or research faculty representative on the institution's governing body who was elected by peers or appointed by a representative faculty body or organization?:

Yes

A brief description of faculty representation on the governing body, including how the representatives are selected:

The Senate is composed of 55 voting members serving staggered 2 year terms and 15 ex officio members. Standing guest seats are reserved for the student representatives, the Registrar, the Vice Provost for Academic Affairs, the Vice Provost for Student Affairs, the Vice Provost of Faculty Development and Diversity and the Emeriti Council representative. The Chair, Vice Chair and Steering Committee members are elected from within the Senate body.

Members of the Academic Council are eligible to serve on the Senate and are placed in units based on school and discipline. Senators are elected annually by the Hare System of Proportional Representation; all Academic Council faculty may vote for faculty within their unit. Elected Senators serve as free agents, not as representatives of a particular program, unit or school. The number of seats per unit is allocated relative to the size of the school and disciplines within that unit.

The Steering Committee is elected by the incoming Senate from a slate of Senators nominated by the Committee on Committees. One of the Steering Committee's first tasks is to appoint members of the incoming Senate to serve on the Committee on Committees. Each Board of Trustees subcommittee has at least one faculty member appointed via the Committee on Committees and the Nominations Committee.

Full Professors in the Academic Council are also elected to the Advisory Board, which handles the promotion and tenure of Academic Council faculty.

Do faculty have a formal role in decision-making in regard to the following?:

	Yes or No
Establishing organizational mission, vision, and/or goals	Yes
Establishing new policies, programs, or initiatives	Yes
Strategic and long-term planning	Yes
Existing or prospective physical resources	Yes
Budgeting, staffing and financial planning	Yes
Communications processes and transparency practices	Yes

A brief description of the formal faculty role in regard to each area indicated, including examples from the previous three years:

As faculty involvement is quite extensive, a few key examples are provided below for reference only. For further details on all areas described above, please view the recent Faculty Senate minutes, archived online and available to the public:

<https://facultysenate.stanford.edu/senate/46th-senate-minutes>

STUDY OF UNDERGRADUATE EDUCATION AT STANFORD

The Report of the Study of Undergraduate Education at Stanford (SUES) is a 127-page document published in 2012. It was presented by the SUES committee, co-chaired by James Campbell, Professor of History, and Susan McConnell, Professor of Biology. Over 100 faculty participated in the two-year study. It is widely regarded as a landmark document and already the basic undergraduate curriculum has begun to change substantively as a result of its findings.

REPORT ON ONLINE EDUCATION

A report on Online Education was given on April 19, 2012 and was the first formal internal presentation of this new phenomenon in higher education: the presentation of college courses online, soon to be known as MOOC's (Massive Online Open Courses). It led to the establishment of a new office, the office of the Vice Provost for Online Education. Stanford is one of the leaders in this field and the work is driven by members of the Academic Council.

JOINT MAJORS PROGRAM

For full details, please visit:

<http://news.stanford.edu/news/2014/february/faculty-senate-three-022114.html>

RECONSIDERATION OF ROTC ON CAMPUS

For full details, please visit:

http://fsi.stanford.edu/news/william_perry_david_kennedy_argue_for_return_of_rotc_to_stanford_2

0100305/

The website URL where information about the institution's governance structure is available:

<http://facts.stanford.edu/administration/>

Diversity & Affordability

This subcategory seeks to recognize institutions that are working to advance diversity and affordability on campus. In order to build a sustainable society, diverse groups will need to be able to come together and work collaboratively to address sustainability challenges. Members of racial and ethnic minority groups and immigrant, indigenous and low-income communities tend to suffer disproportionate exposure to environmental problems. This environmental injustice happens as a result of unequal and segregated or isolated communities. To achieve environmental and social justice, society must work to address discrimination and promote equality. The historical legacy and persistence of discrimination based on racial, gender, religious, and other differences makes a proactive approach to promoting a culture of inclusiveness an important component of creating an equitable society. Higher education opens doors to opportunities that can help create a more equitable world, and those doors must be open through affordable programs accessible to all regardless of race, gender, religion, socio-economic status and other differences. In addition, a diverse student body, faculty, and staff provide rich resources for learning and collaboration.

Credit
Diversity and Equity Coordination
Assessing Diversity and Equity
Support for Underrepresented Groups
Support for Future Faculty Diversity
Affordability and Access

Diversity and Equity Coordination

Responsible Party

Moira Hafer

Sustainability Analyst
Office of Sustainability

Criteria

Part 1

Institution has a diversity and equity committee, office and/or officer tasked by the administration or governing body to advise on and implement policies, programs, and trainings related to diversity and equity on campus. The committee, office and/or officer focuses on student and/or employee diversity and equity.

Part 2

Institution makes cultural competence trainings and activities available to all members of one or more of the following groups:

- Students
 - Staff
 - Faculty
 - Administrators
-

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

Does the institution have a diversity and equity committee, office, and/or officer tasked by the administration or governing body to advise on and implement policies, programs, and trainings related to diversity and equity on campus?:

Yes

Does the committee, office and/or officer focus on one or both of the following?:

	Yes or No
Student diversity and equity	Yes
Employee diversity and equity	Yes

A brief description of the diversity and equity committee, office and/or officer, including purview and activities:

FACULTY/STAFF:

There are two committees that meet the intent of this credit at Stanford: the Diversity Cabinet (university-wide) and the Panel on Faculty Equity and Quality of Life (faculty only).

The Diversity Cabinet serves as the university's executive body charged with keeping the issue of diversity at the forefront of the university's agenda. Comprised on the basis of roles rather than people, the Cabinet consists of executive officers who have the power to make key decisions. The group provides strategic advice to the Provost on how to continue to improve campus diversity.

Please visit the following website for more information:

<https://facultydevelopment.stanford.edu/diversity-cabinet>

The Panel on Faculty Equity and Quality of Life (rotational membership, comprised of faculty members from different schools) administers the Faculty Quality of Life Survey, and also collects and assesses data from the university's seven schools concerning non-salary forms of compensation and support.

In addition, the the Diversity & Access Office was created to advance Stanford University's equal opportunity and affirmative action goals and commitment to diversity. Our office ensures University compliance with federal, state and local regulations concerning non-discrimination and disability access.

To accomplish our mission, we work collaboratively with Vice Presidents, Deans, Department Chairs, Administrative Managers and Human Resources staff who have direct responsibility for achieving the University's objectives.

Our office provides an array of services and resources designed to ensure equal opportunity and address bias and discrimination prohibited by law or official University policy, as well as assists individuals with disabilities who have requests for accommodations in the workplace and to access Stanford facilities, programs and activities.

For more information, please visit:

<https://diversityandaccess.stanford.edu/>

STUDENTS:

Stanford University was originally founded as a tuition-free institution and has a history of supporting the education of first generation and/or low-income students. The Office of Financial Aid keeps this spirit alive with its generous need-based financial aid packages.

In April of 2011 Stanford created the Diversity and First Gen Office to support the campus life of first generation and/or low income students. It uses office initiative and campus partnerships to promote a supportive academic environment. It also offers leadership in the integration of socio economic issues into campus diversity programs. Here at the Diversity and First Gen Office we continuously seek ways to foster a successful and collaborative university setting.

The Diversity and First Gen Office's mission is creating an interconnected Stanford community.

Specifically, the Diversity and First Gen Office builds student capacity and confidence to become interconnected with people from different backgrounds. Our contribution to Stanford's diversity landscape is to provide campus leadership in addressing life with multiple identities and inter-group relationships that overlap with social class. Within this mission is a special focus on enriching the experience of [STARS Reporting Tool](#) | [AASHE](#)

first generation college students by supporting their transitions, empowerment, and community building.

For more information, please visit:

<https://studentaffairs.stanford.edu/diversityandfirstgen/about>

The full-time equivalent of people employed in the diversity and equity office:

5.50

The website URL where information about the diversity and equity committee, office and/or officer is available:

<https://diversityandaccess.stanford.edu/>

Does the institution make cultural competence trainings and activities available to all members of the following groups?:

	Yes or No
Students	Yes
Staff	Yes
Faculty	Yes
Administrators	Yes

A brief description of the cultural competence trainings and activities:

Stanford's Diversity and Access Office provides resources on diversity for staff (including administrators) and students. The office provides facilitated training programs on diversity and cultural competency for interested employees. One program is a staff development seminar which introduces participants to members of the university community from varying backgrounds over the course of a year. Stanford's Vice Provost for Faculty Development and Diversity provides numerous programs for faculty across the campus.

Please visit the following websites for more details:

<https://diversityandaccess.stanford.edu/>

The Diversity and First Gen (DGen) Office recognizes that diversity is a complicated idea that requires intentionality and sustained education to yield benefits. The DGen Office will act as a campus resource and steward for building student and staff capacity for learning and collaborating by difference. It offers a series of diversity programs and structured activities to promote skills to build confidence in addressing diversity (see programs under Diversity Plan). DGen's diversity training highlights socioeconomic diversity, interdependency, multiple identities and intersections, and allyship by inviting students to explore the impact and implications of social identities, (such as race, gender, class, religion, physical ability, sexual orientation, immigration status, and nationality), on their ability to welcome diversity and collaborate by differences.

Please visit the following websites for more details:

<https://studentaffairs.stanford.edu/diversityandfirstgen/about/diversitytraining>

The website URL where information about the cultural competence trainings is available:

<https://diversityandaccess.stanford.edu/>

Assessing Diversity and Equity

Responsible Party

Moira Hafer

Sustainability Analyst
Office of Sustainability

Criteria

Institution assesses diversity and equity on campus and uses the results to guide policy, programs, and initiatives. The assessment(s) address one or more of the following areas:

1. **Campus climate**, e.g. through a survey or series of surveys to gather information about the attitudes, perceptions and experiences of campus stakeholders and underrepresented groups
 2. **Student diversity and educational equity**, e.g. through analysis of institutional data on diversity and equity by program and level, comparisons between graduation and retention rates for diverse groups, and comparisons of student diversity to the diversity of the communities being served by the institution
 3. **Employee diversity and employment equity**, e.g. through analysis of institutional data on diversity and equity by job level and classification, and comparisons between broad workforce diversity, faculty diversity, management diversity and the diversity of the communities being served by the institution
 4. **Governance and public engagement**, e.g. by assessing access to and participation in governance on the part of underrepresented groups and women, the centrality of diversity and equity in planning and mission statements, and diversity and equity in public engagement efforts
-

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

Has the institution assessed diversity and equity in terms of campus climate?:

Yes

A brief description of the campus climate assessment(s) :

Stanford has been conducting regular assessments of its climate vis-à-vis diversity for many years. In 2012-2013, the University completed a comprehensive formal review of all of its community centers, which are housed under the Vice Provost for Student Affairs.

With respect to faculty, in 2008, the University conducted a campus-wide survey on the Quality of Life of Stanford Faculty. The survey finds that faculty satisfaction is high and that the overall satisfaction at Stanford is similar, and in some cases higher, than at several peer private research universities. The survey also examines work climate, perceived workload, opportunities for advancement, sense of inclusion, and perceptions of opportunities for women and faculty of color, and shows improvement in these areas over time. As a follow up to the survey, an interview study with underrepresented minority faculty examines their experience of collegiality, recognition, mentoring and voice in decision-making. The first report on the findings with accompanying recommendations was released in 2013. The second report is due for release in May 2014.

Has the institution assessed student diversity and educational equity?:

Yes

A brief description of the student diversity and educational equity assessment(s):

Stanford sends out an exit survey to all graduating seniors every other year. Items in the survey specifically address diversity issues, including assessing student satisfaction with the level of diversity on campus, student participation in racial/cultural awareness programs, and the extent to which students have interacted with those of different backgrounds from themselves while at Stanford. Stanford also compiles annual reports of student (and faculty) demographic profiles as part of our Common Data Set and Stanford Facts.

Has the institution assessed employee diversity and employment equity?:

Yes

A brief description of the employee diversity and employment equity assessment(s):

The University compiles annual reports of employee demographic profiles, including a breakdown of the gender and race/ethnicity of all staff along with a separate breakdown of just Stanford Faculty. The ensuing conversations engage the school's most senior leader (dean) and other officers with decision-making responsibilities related to hiring and compensation.

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):

The University compiles annual reports of faculty in leadership positions, with gender and race/ethnicity breakdowns. The Faculty Senate discussed the leadership pipeline for women at the University in Spring 2014, with goals to monitor and develop the opportunities for growing Stanford leaders, with particular attention to gender.

<http://.facultydevelopment.stanford.edu/data-reports>

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

<https://diversityandaccess.stanford.edu/diversity>

Support for Underrepresented Groups

Responsible Party

Moira Hafer

Sustainability Analyst
Office of Sustainability

Criteria

Part 1

Institution has mentoring, counseling, peer support, academic support, or other programs in place to support underrepresented groups on campus.

This credit excludes programs to help build a diverse faculty throughout higher education, which are covered in *PA 7: Support for Future Faculty Diversity*.

Part 2

Institution has a discrimination response policy, program and/or team (or the equivalent) to respond to and support those who have experienced or witnessed a bias incident, act of discrimination or hate crime.

Submission Note:

Gender neutral bathroom locations:

<http://www.stanford.edu/group/lgbtcrc/gn-restrooms-map.png>

"---" 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:

STAFF

Staff Groups at Stanford University help employees meet new people and provide opportunities for professional, social and personal support.

For a complete listing of affinity groups, please visit:

<https://diversityandaccess.stanford.edu/diversity/staff-groups>

FACULTY

The intellectual life at Stanford is enhanced by the contributions of a diverse faculty. To build a broad-based academic community, the Office of the Vice Provost for Faculty Development and Diversity supports a number of faculty groups, community events, and programs. The Vice Provost co-convenes the University's Diversity Cabinet along with the Vice Provosts for Graduate Education and Undergraduate Education.

Please visit the following website for more details:

<https://facultydevelopment.stanford.edu/diversity-and-community>

STUDENTS

Stanford understands that holistic student development happens with support and access both inside and outside the realm of academics. The diversity on Stanford's campus can be felt through classes, student organizations, residential life, and eight individual community centers. These different venues not only serve as a general resource for the campus community, but more importantly, serve the critical purpose of empowering students to strive to reach their full potential. The community centers include:

Asian American Activities Center

<http://www.stanford.edu/dept/a3c/cgi-bin/>

Bechtel International Center

<http://www.stanford.edu/dept/icenter/>

Black Community Services Center

<http://studentaffairs.stanford.edu/bcsc>

Office of Accessible Education

<http://studentaffairs.stanford.edu/oea>

El Centro Chicano

<http://elcentro.stanford.edu/>

Native American (American Indian, Alaska Native, and Native Hawaiian Program) Cultural Center

<http://www.stanford.edu/dept/nacc/>

Women's Center

<http://studentaffairs.stanford.edu/wcc>

Lesbian, Gay, Bisexual, Transgendered (LGBT) Community Resource Center

<http://studentaffairs.stanford.edu/lgbtcrc>

In addition to these community centers, a list of the hundreds of student-organized affinity groups and clubs can be found online.

<http://admission.stanford.edu/student/organizations/>

The website URL where more information about the support programs for underrepresented groups is available:

<http://studentaffairs.stanford.edu/diversityworks>

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:

The response/grievance policies are too detailed and role-specific to describe in the available space. Instead, please visit the websites described and listed below.

For details on the reporting procedure/policy, please visit:

<https://diversityandaccess.stanford.edu/reporting-concern>

For grievances related to staff, please visit:

<https://adminguide.stanford.edu/chapter-2/subchapter-1/policy-2-1-11>

For grievances related to students, please visit:

<http://exploreddegrees.stanford.edu/nonacademicregulations/#text>

For grievances related to faculty, please visit:

<http://facultyhandbook.stanford.edu/ch8.html#grievance>

The website URL where more information about the institution's discrimination response policy, program and/or team is available:

<https://diversityandaccess.stanford.edu/reporting-concern>

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

Responsible Party

Moira Hafer

Sustainability Analyst
Office of Sustainability

Criteria

Institution administers and/or participates in a program or programs to help build a diverse faculty throughout higher education.

Such programs could take any of the following forms:

- Teaching fellowships or other programs to support terminal degree students from underrepresented groups in gaining teaching experience. (The terminal degree students may be enrolled at another institution.)
 - Mentoring, financial, and/or other support programs to prepare and encourage undergraduate or other non-terminal degree students from underrepresented groups to pursue further education and careers as faculty members.
 - Mentoring, financial, and/or other support programs for doctoral and post-doctoral students from underrepresented groups.
-

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

Does the institution administer and/or participate in a program or programs to help build a diverse faculty that meet the criteria for this credit?:

Yes

A brief description of the institution's programs that help increase the diversity of higher education faculty:

STANFORD DISTINGUISHED ALUMNI SCHOLARS PROGRAM (DAS)

The 2013 Distinguished Alumni Day (DAS) was held on November 13, 2013. This day-long event hosted 16 Stanford graduates who currently hold academic faculty positions across disciplines and post-secondary institutions. The alums met with undergraduate and graduate students, senior university leadership and members of the cultural and ethnic community at Stanford, including the Black Community Services Center, El Centro Chicano, the Native American Cultural Center, and the Asian American Activities Center, which all hosted receptions for their alums. DAS is a collaboration between the Office of the Vice Provost for Faculty Development and Diversity, Vice Provost for Graduate Education, Vice Provost for Student Affairs and the Stanford Alumni Association.

The Distinguished Alumni Scholars Day was established in 2006 as an institutional response to the scarce presence of diverse racial/ethnic group members within the faculty ranks of our nation's colleges and universities, and within the Ph.D. programs that produce these faculty. The purpose of this now biennial program is to bring Stanford students from cultural groups underrepresented in academia into contact and discussion with distinguished alumni scholars from a broad range of backgrounds, disciplines, and institutional types to inspire new generations of students to consider academia as a career.

For more information, please visit:

<https://facultydevelopment.stanford.edu/main/distinguished-alumni-scholars-day>

OTHER UNIVERSITY PROGRAMS INCLUDE:

- Diversifying Academia, Recruiting Excellence (DARE) Doctoral Fellowships;
- Other programs administered by Vice Provost for Graduate Education;
- Enhancing Diversity in Graduate Education in the Social, Behavioral and Economic Sciences (EDGE-SBE) -

<https://iriss.stanford.edu/EDGE>

;

- Career Development Center (

<http://cdc.stanford.edu>

);

- Medical School (various programs, including programs sponsored by the Senior Associate Dean and the Office of Leadership and Diversity –

<http://med.stanford.edu/diversity>

);

- Programs sponsored by CCSRE;
- Programs administered by Office of Vice Provost for Undergraduate Education, e.g., Mellon Mays Undergraduate Fellowship program;
- Programs sponsored by Office of Vice Provost for Undergraduate Education, including student programming administered by the various race/ethnic/gender-based Student Community Centers.

The website URL where more information about the faculty diversity program(s) is available :

<https://facultydevelopment.stanford.edu/main/distinguished-alumni-scholars-day>

Affordability and Access

Responsible Party

Moira Hafer

Sustainability Analyst
Office of Sustainability

Criteria

Part 1

Institution has policies and programs in place to make it accessible and affordable to low-income students and/or to support non-traditional students. Such policies and programs may include, but are not limited to, the following:

- Policies and programs to minimize the cost of attendance for low-income students
- Programs to equip the institution's faculty and staff to better serve students from low-income backgrounds
- Programs to prepare students from low-income backgrounds for higher education (e.g. U.S. federal TRIO programs)
- Scholarships provided specifically for low-income students
- Programs to guide parents of low-income students through the higher education experience
- Targeted outreach to recruit students from low-income backgrounds
- Scholarships provided specifically for part-time students
- An on-site child care facility, a partnership with a local facility, and/or subsidies or financial support to help meet the child care needs of students

Part 2

Institution is accessible and affordable to low-income students as demonstrated by one or more of the following indicators:

- A. The percentage of entering students that are low-income
 - B. The graduation/success rate for low-income students
 - C. The percentage of student financial need met, on average
 - D. The percentage of students graduating with no interest-bearing student loan debt
-

Submission Note:

Note: Between 15% and 20% of the entering students each year come from low-income backgrounds, so the lower boundary of that range is recorded as the percentage of entering students that are low-income.

The most recent 6-year graduation rate for Pell recipients is 91%, so that number is recorded as the graduation/success rate for low-income students.

The websites below support the information provided for this credit:

<http://financialaid.stanford.edu>

<http://parents.stanford.edu>

<http://facts.stanford.edu/academics/undergraduate>

<http://studentaffairs.stanford.edu/oae>

<http://studentaffairs.stanford.edu/registrar/students/vet-benefits>

<https://undergrad.stanford.edu/programs/lelandscholars>

<http://studentaffairs.stanford.edu/haas>

"---" 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:

Stanford's admissions program is need-blind and all undergraduate aid is need-based, with the exception of athletic scholarships. Through the Financial Aid Program, Stanford meets 100% of the demonstrated financial need of all eligible students. Parents whose total annual income is less than \$60,000 and who have assets typical for their income level are not expected to contribute toward educational costs. Parents with income between \$60,000 and \$100,000 are expected to contribute somewhere between \$0 and the cost of room and board, ensuring enough scholarship funds to cover the cost of tuition at a minimum. Students are not expected to borrow to cover their educational costs.

A brief description of any programs to equip the institution's faculty and staff to better serve students from low-income backgrounds:

Early in 2011, Stanford created a new position for a director of diversity and programs for first generation students. In addition to serving as a resource for students, the director's role includes outreach and coordination among other campus resources to meet the needs of first generation and low income students. Student Affairs staff and academic advising staff coordinate regularly with the Financial Aid Office to ensure availability of resources for students from low-income backgrounds.

A brief description of any programs to prepare students from low-income backgrounds for higher education:

A plethora of summer programs are offered on campus to prepare students to attend either Stanford University or the college/university of their choice. Through programs like Stanford Summer Engineering Academy, first offered in 1998 to provide a rigorous introduction to engineering, math, and physical sciences programs for incoming Stanford freshmen and the Stanford College Prep program that partners with the charter East Palo Alto Academy High School to provide resources and support to first-generation and low-income minority students to succeed academically in high school and college, the university is reaching out to both potential Stanford students as well as members of the public in the local area. In summer of 2012 the inaugural Leland Scholars Program was offered to incoming freshmen from under-resourced high schools, at no cost to the students, to ease the transition to Stanford. Lastly, through the Haas Center for Public Service, Stanford students participate in programs that support students in local low-income neighborhoods. Some examples are the East Palo Alto Stanford Academy, Jumpstart, Stanford College Prep, Science in Service, and Ravenswood Reads.

A brief description of the institution's scholarships for low-income students:

For the 2012-2013 academic year, Stanford undergraduates received more than \$179 million in financial assistance, including over \$166 million in scholarships and grants. These funds support the 68% of students at Stanford who receive some form of financial aid. 49% of all students receive need-based scholarships from Stanford. There are two basic criteria to establish eligibility for these funds: students must be admitted to Stanford and demonstrate financial need. Scholarships are used to meet students' full need, giving all admitted students the opportunity to attend Stanford.

A brief description of any programs to guide parents of low-income students through the higher education experience:

A collection of resources for parents can be found with just one click from Stanford's home page. A Parents' Guide is published annually and distributed to all new parents. A parents' helpline phone number and email address are available for all questions, big and small, year round.

A brief description of any targeted outreach to recruit students from low-income backgrounds:

The Office of Undergraduate Admission is committed to outreach to underserved populations. In Fall 2013, admission officers incorporated over 75 visits to Community Based Organizations (CBO's) as part of the regular travel. In addition, the office maintains a database of over 700 CBO's and sends regular communications to each CBO. CBO leaders are encouraged to request assistance to conduct presentations to students throughout the travel season. The admission office is also actively engaged with the College Horizons, Questbridge and Cherokee Nation summer programs where officers mentor young students about preparation for the college admission process. The office also hosts a number of visiting groups on campus by providing information sessions and tours.

A brief description of other admissions policies or programs to make the institution accessible and affordable to low-income students:

As part of the University's commitment to a comprehensive holistic review process, each admission officer takes into account the context of the student's background. This includes, but is not limited to, socioeconomic status, parent/guardian degree attainment, high school graduation and college placement rates, fee waivers, free and reduced lunch programs and CBO participation. The Office of Undergraduate Admission also participates in the QuestBridge Scholarship matching program. This year Stanford has selected 30 students as Quest Bridge finalists.

A brief description of other financial aid policies or programs to make the institution accessible and affordable to

low-income students:

All financial aid for undergraduates offered by the University is awarded by the Financial Aid Office based on financial need. The only exception is Athletic Aid. In addition, through Undergraduate Advising and Research, the Office of the Vice Provost for Undergraduate Education partners with faculty, departments, research centers, and interdisciplinary programs to facilitate and promote research opportunities for undergraduates through a generous grant program.

A brief description of other policies and programs to make the institution accessible and affordable to low-income students not covered above:

In recent years, Stanford students have been increasingly interested in issues surrounding access and affordability. One student group that has focused specifically on first generation and low income students is FLIP, the First Gen and Low Income Partnership. Students from FLIP have organized welcome events for students and parents during orientation, regular study-breaks for students, speakers and resources for students both at Stanford and in their home communities. Stanford students have formed organizations like the Phoenix Scholars to support aspiring students from first generation and low income backgrounds. These are just 2 examples of the types of programs Stanford students have created.

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:

By University policy, all Stanford undergraduates are enrolled full-time. Students attend part-time only with permission and support of the Office of Accessible Education (OAE).

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:

Stanford's WorkLife Office provides a robust program to assist Stanford faculty, staff and students with their family needs, including on-campus child care facilities, child care subsidies, child care and adoption resources and referrals, lactation spaces for new mothers, maternity resources, school age child resources, and even elder care services. Undergraduates can receive assistance for child care expenses through the financial aid program. Additionally, a state of California child care subsidy program is available for students through Palo Alto Community Childcare, 4 C's, or Choices for Children.

A brief description of other policies and programs to support non-traditional students:

Stanford practices Affirmative Action and therefore has a strong commitment to admitting and enrolling a student body that is both highly qualified and diverse. The University recognizes special circumstances and pays close attention to the unique educational contexts and life experiences of students from low-income families and nontraditional backgrounds. Veterans are an increasing population at both the undergraduate and graduate level at Stanford. The Student Services Center opened a Student Veterans Office in May of 2013 to support their needs. The Office of Accessible Education (OAE) at Stanford offers a comprehensive program for students with disabilities at both the undergraduate and graduate levels so that all students have an equal opportunity for personally and academically rewarding experiences. The OAE provides a wide array of accommodations, support services, auxiliary aids and programs to remove barriers to full participation in the life of the University.

Typically, 15% of the entering freshman class are first in their families to go to college.

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::

	Percentage (0-100)
The percentage of entering students that are low-income	15
The graduation/success rate for low-income students	91
The percentage of student financial need met, on average	100
The percentage of students graduating with no interest-bearing student loan debt	77

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:

49

The website URL where information about the institution's affordability and access programs is available:

<http://financialaid.stanford.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.

Credit
Employee Compensation
Assessing Employee Satisfaction
Wellness Program
Workplace Health and Safety

Employee Compensation

Responsible Party

Moira Hafer

Sustainability Analyst
Office of Sustainability

Criteria

Part 1

Institution's employees and/or the employees of its on-site contractors are covered by sustainable compensation standards, guidelines, or policies and/or collective bargaining agreements.

A sustainable compensation (or "living wage") standard, guideline or policy is one that addresses wages and benefits in terms of the ability of employees to meet basic needs. For example, a sustainable compensation policy may index hourly wages to a poverty guideline or to local cost-of-living indicators. A labor market survey, salary survey or similar assessment may be used in conjunction with a basic needs/cost-of-living approach, but is not sufficient on its own to count as a sustainable compensation policy.

Part 2

Institution's employees and/or the employees of its on-site contractors receive sustainable compensation.

To earn points for Part 2 of this credit, an institution must assess employee compensation against one or more of the following:

1. A sustainable compensation standard developed or adopted by a committee with multi-stakeholder representation (i.e. its membership includes faculty, staff, and students and may include Human Resources administrators or other parties). The standard need not be formally adopted by the institution.
2. A sustainable compensation standard that is in use in the institution's locality. The standard may be formal (e.g. a "living wage" ordinance covering public employees) or informal (e.g. a standard adopted by a local, regional or national campaign).
3. An appropriate poverty guideline, threshold or low-income cut-off for a family of four.

For institutions that elect to assess compensation against a poverty guideline, threshold or low-income cut-off, sustainable compensation is defined as wages equivalent to 120 percent of the poverty guideline for a family of four. An institution may offset up to 20 percent of the wage criteria with employer-paid benefits that address basic needs (e.g. healthcare and retirement contributions).

Both parts of this credit are based on the total number of employees working on campus as part of regular and ongoing campus operations, which includes:

- Staff and faculty, i.e. all regular full-time, regular part-time and temporary (or non-regular) employees, including adjunct faculty and graduate student employees (e.g. teaching and research assistants). Institutions may choose to include or omit undergraduate student workers.
- Employees of contractors that work on-site as part of regular and ongoing campus operations. Such contractors may include, but are not limited to, providers of dining/catering, cleaning/janitorial, maintenance, groundskeeping, transportation, and retail services.

Construction and demolition crews and other temporary contracted employees may be excluded.

Submission Note:**Note 001: Sustainable Compensation at Stanford**

Stanford University enacts a sustainable compensation policy for all of the institution's employees and for employees of contractors who work on campus (described in more detail below). Additionally, all of Stanford's faculty and staff receive sustainable compensation, which is reviewed on an annual basis. Contractors who meet Stanford's living wage criteria/applicability must also follow the living wage guidelines and policies. The applicability is described online:

http://www.stanford.edu/group/fms/fingate/suppliers/dobusiness/policy_living_wage.html

However, due to shortcomings in the STARS reporting tool, Stanford is not able to earn points for this credit because the university does not centrally track the number of employees of contractors working on campus. Every school/unit could have contractors working on campus at any given time. Because there is no uniform methodology to quantify employees of contractors in Stanford's various departments, the university has been forced to not pursue this credit. In this situation, the absolute requirements of the STARS reporting tool have precluded Stanford from realizing any recognition for its sustainable compensation guidelines and practices. For more information on sustainable compensation at Stanford, please see below.

Note 002: Details on Stanford's sustainable compensation guidelines and practices

Stanford's staff compensation philosophy notes:

Stanford University is committed to providing a fair and competitive staff compensation program that will attract, retain and motivate high-performing employees at all levels. The university is also committed to providing a competitive total staff compensation package tied to the application of knowledge and skills, the attainment of individual and group results, and the achievement of organizational goals. In addition, we recognize that a sound compensation program must comply with all State and Federal laws and regulations governing pay.

The staff compensation program is designed to advance Stanford's ability to attract and retain top talent and provide maximum flexibility to managers in making compensation decisions that reward performance. No distinction is made whether an employee is part-time or full-time status. Lowest paid employees are evaluated to ensure they are not paid below the living wage's hourly rate. This review is done annually and adjustments are made accordingly if needed.

Stanford University annually assesses its wage and benefits programs for staff and faculty/academic employees using market-based surveys. Stanford's compensation programs are annually assessed against other higher education institutions, general economic conditions, local pay practices and competitive market survey data as applicable. The university leadership reviews and recommends any adjustments that are to be made to the organizational pay structures and to base pay. All faculty salaries are approved by the Dean of the School and the Provost. Salary increases are annually reviewed and are based on performance, applicable compensation policies and budgetary considerations. The two applicable collective bargaining agreements at Stanford are based on negotiations with the respective unions and reflect local competitive pay practices.

Additionally, since September 1, 2007, Stanford University has recognized the importance of paying a living wage to all service workers at Stanford, whether they are directly employed by Stanford or by contractors. This consideration is included in the annual staff pay analysis and is reflected in the terms and conditions applicable to vendors doing business with Stanford. Through these guidelines, Stanford seeks to establish minimum pay, access to healthcare benefits, and compensated time off for service workers. These guidelines are not intended to prevent contractors from providing wages and benefits in excess of the minimums created here.

Based on the recommendations of the 2005 Stanford Presidential Advisory Committee on Workplace Policies, University Compensation developed a new classification and pay system for non-academic temporary and casual jobs. The Temporary and Casual (Non-Academic) Employee Compensation System is modeled on the compensation system used for regular staff employees. The minimum wages are also reviewed annually in keeping with the regular staff employee compensation practices and incorporate the university's living wage analysis that is utilized for contractors. Wages are calculated to provide for a higher rate since no benefits are provided to this classification of employee.

Lastly, Stanford maintains an Undergraduate Wage Scale in accordance with the guidelines set forth in Section 24 of Stanford's Administrative Guide. In keeping with the University's general budget plan, the recommended wage rates have been increased by approximately 2% from 2012-2013 levels. The rate paid for a specific position should be in accordance with the skills and experience needed to perform the job. The minimum suggested wage is \$12.85 per hour for Level 1 undergraduate employees.

For website URLs, please refer to the following:

Staff:

<https://adminguide.stanford.edu/chapter-2/subchapter-1/policy-2-1-5>

Faculty:

<http://facultyhandbook.stanford.edu/ch5.html#appr>

Students:

http://www.stanford.edu/dept/finaid/aid/employ/wage_scale.html

Contractors:

http://www.stanford.edu/group/fms/fingate/suppliers/dobusiness/policy_living_wage.html

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

Assessing Employee Satisfaction

Responsible Party

Moira Hafer

Sustainability Analyst
Office of Sustainability

Criteria

Institution conducts a survey or other evaluation that allows for anonymous feedback to measure employee satisfaction and engagement. The survey or equivalent may be conducted institution-wide or may be done by individual departments or divisions. The evaluation addresses (but is not limited to) the following areas:

- Job satisfaction
- Learning and advancement opportunities
- Work culture and work/life balance

The institution has a mechanism in place to address issues raised by the evaluation.

Submission Note:

The results of the survey in 2010 were posted online for a year, but that webpage is no longer public. Results from workplace awards processes were not posted online since they were a random sampling of employees. The plan for the results from the 2015 university-wide survey is to post them on the UHR website and broadly share the link to the results throughout the community.

"---" 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:

The last broad employee satisfaction and engagement survey was done in 2010. Random sampling surveying was done in 2013 and will be done in 2014 as part of the university's application to workplace awards processes. Another university-wide employee survey is scheduled to be conducted in 2015; all results from that survey will be shared with the university's highest levels of leadership and individual managers with five or more responses from their employees will receive a report and be expected to conduct action planning to identify actionable items that would improve employee satisfaction or engagement in their areas.

In 2013, however, the university participated in several workplace award processes that included a random sampling of employees for an online satisfaction survey. The awards were: Fortune 100 and the Chronicle of Higher Education. In both cases, results were shared with the President, Provost, and their direct reports. Because those surveys were a random sampling only, managers did not receive reports or conduct action planning. The results, though, have been used in strategic planning by the Vice President for Human Resources when identifying programs, services and institutional priorities for Stanford's workforce.

For university-wide surveying, a vendor is hired to customize and administer the survey. Employee email addresses and organization hierarchy (needed for accurate reporting) is given to the vendor to load into their system. Broad communication is conducted from University Human Resources (UHR) to alert employees to the email they should have received that includes a link to the survey. The key point of contact for UHR is each school or unit's HR manager, who supports the effort with local communication.

Planning is already underway for the 2015 university-wide employee survey, to ensure its success, and starts with a Request for Proposal to qualified vendors, with a Steering Committee evaluating proposals to select the most qualified vendor.

Once the survey period has closed, the vendor generates reports for managers with five or more responses, and for the leaders in each school/unit, and then an aggregate summary of results for university leaders. Debriefings are held with school/unit leaders as well as university leaders. Then, the VP for Human Resources has a separate meeting with university leaders to discuss the results and identify actionable items.

A brief description of the mechanism(s) by which the institution addresses issues raised by the evaluation (including examples from the previous three years):

Depending on the nature of the issue that is raised, various leaders may be involved; for example, the Faculty Affairs office might be involved to address an issue raised by faculty who responded, where University Human Resources would be involved to address an issue for staff.

In the 2010 survey process, one of the lowest rated categories was Feedback and Coaching, which garnered a 53% satisfaction level. As a result of that finding, the President and Provost funded two large scale initiatives:

1. An initiative to develop a comprehensive "Manager Academy" for all managers that would include training to develop skills in providing feedback and coaching for managers and their staff.
2. A pilot program was initiated to form a cohesive performance management approach at Stanford. The goal is to simplify the process and provide tools and the business process that facilitates managers' ability to give meaningful and constructive feedback to staff, as well as to coach them to develop further. In addition, tools for employees to support their communication with their managers are included. This pilot, called Performance Management @ Stanford, now includes close to 3,000 employees and is scheduled to be launched in the remaining schools and units within the next four years, culminating in adoption by all schools and units.

For both of these university-wide initiatives, UHR was responsible to plan, develop, implement, and measure effectiveness after university leaders approved funding. Leaders will be looking at the next set of survey results to identify if improvements have been made in the area of feedback and coaching.

At the local level, managers who receive individual reports are responsible to have discussions with their staff to share the results, and to collectively brainstorm options to make improvements in areas that are weak, and to identify how to maintain or further excel in areas rated highly. Each school or unit is responsible to identify the mechanism by which managers are held accountable for their action planning; typically, this is included in their performance goals for the fiscal year in which the results are shared.

Within the university, the seven schools and 20 academic and administrative units have the discretion to administer local employee satisfaction and engagement surveys as they wish. For example, the Graduate School of Business designed such a survey over 10 years ago, and administers it without fail at the same time each year. The Residential & Dining Enterprises unit administered a survey in fall 2013 and is still working on action planning based on the results. Other schools and units may conduct their own survey processes at any time, with the results used by their Dean, Vice President, Vice Provost, and local managers.

The year the employee satisfaction and engagement evaluation was last administered:

2,013

The website URL where information about the institution's employee satisfaction and engagement assessment is available:

Wellness Program

Responsible Party

Moira Hafer

Sustainability Analyst
Office of Sustainability

Criteria

Institution has a wellness and/or employee assistance program that makes available counseling, referral, and wellbeing services to all members of any of the following groups:

- Students
 - Staff
 - Faculty
-

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

Does the institution make counseling, referral, and wellbeing services available to all members of the following groups?:

	Yes or No
Students	Yes
Staff	Yes
Faculty	Yes

A brief description of the institution's wellness and/or employee assistance program(s):

BeWell @ Stanford serves as the overarching health and wellness resource for Stanford University students, faculty, staff and retirees. By facilitating a culture of wellness at Stanford, BeWell encourage individuals to adopt and maintain healthy lifestyle behaviors and to improve their health, well-being and quality of life.

For details on the faculty and staff program and resources, please visit:

<http://bewell.stanford.edu/ppl/staff>

For details on the student program and resources, please visit:

<http://bewell.stanford.edu/ppl/students>

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

<http://bewell.stanford.edu/>

Responsible Party

Moira Hafer

Sustainability Analyst
Office of Sustainability

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.

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

Investment

This subcategory seeks to recognize institutions that make investment decisions that promote sustainability. Most institutions invest some of their assets in order to generate income. Together, colleges and universities invest hundreds of billions of dollars. Schools with transparent and democratic investment processes promote accountability and engagement by the campus and community. Furthermore, institutions can support sustainability by investing in companies and funds that, in addition to providing a strong rate of return, are committed to social and environmental responsibility. Investing in these industries also supports the development of sustainable products and services. Finally, campuses can engage with the businesses in which they are invested in order to promote sustainable practices.

Throughout this subcategory, the term “sustainable investment” is inclusive of socially responsible, environmentally responsible, ethical, impact, and mission-related investment.

Credit
Committee on Investor Responsibility
Sustainable Investment
Investment Disclosure

Committee on Investor Responsibility

Responsible Party

Moira Hafer

Sustainability Analyst
Office of Sustainability

Criteria

Institution has a formally established and active committee on investor responsibility (CIR) or similar body that makes recommendations to fund decision-makers on socially and environmentally responsible investment opportunities across asset classes, including proxy voting. The body has multi-stakeholder representation, which means its membership includes faculty, staff, and students and may include alumni, trustees, and/or other parties.

Institutions for which investments are handled by the university system and/or a separate foundation of the institution should report on the investment policies and activities of those entities.

A general committee that oversees the institution's investments does not count for this credit unless social and environmental responsibility is an explicit part of its mission and/or agenda.

This credit applies to institutions with endowments of US \$1 million or larger. Institutions with endowments totaling less than US \$1 million may choose to omit this credit.

"---" 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?:

Yes

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:

In 1971, Stanford adopted the Statement on Investment Responsibility (

http://apir.stanford.edu/stanford_statement

). With this statement, Stanford established the Advisory Panel on Investment Responsibility and Licensing (APIRL) to advise Stanford's President and Board of Trustees about the social and environmental impact of Stanford's investment and trademark licensing activities, as well as to provide a forum for the Stanford community to voice its concerns about these issues.

The APIRL's primary activities include:

1. Amending existing and developing new core social issue policy statements and proxy voting guidelines for shareholder resolutions on social and environmental issues.

2. Receiving, reviewing and researching Requests for Review related to environmental and social issues, and making recommendations to Stanford University's President and Board of Trustees on future action.

3. Developing and presenting written reports and providing background information in support of the Panel's action recommendations.

The APIRL has three subcommittees which research and evaluate issues brought before it: (i) Diversity, Non-Discrimination and Labor Equity; (ii) Environmental Sustainability; and (iii) Human Rights. Ad hoc subcommittees are formed to address other issues, as needed.

Members of the CIR, including affiliations and role (e.g. student, faculty, alumni):

The SCIR has membership that ranges from 4 to 12 Trustees with a broad range of academic as well as professional experience.

The APIRL has 12 members drawn from Stanford's students, faculty, staff and alumni. Students are nominated by ASSU, Faculty members are appointed by the Academic Council, Alumni members are selected in co-ordination with the Alumni Center and Staff members are appointed by the President. In addition, the APIRL engages student interns to help research issues. The Chief Executive Officer of the Stanford Management Company (or his/her designee) acts in an ex-officio capacity as necessary.

Examples of CIR actions during the previous three years:

Divestment from coal extraction companies, adoption of proxy voting guidelines that address pay equity, energy efficiency, human rights, and supply chain.

The website URL where information about the CIR is available:

<http://apir.stanford.edu/>

Responsible Party

Moira Hafer

Sustainability Analyst
Office of Sustainability

Criteria

There are two possible approaches to this credit; institutions may pursue one or both. Institutions for which investments are handled by the university system, a separate foundation of the institution and/or a management company contracted by the institution should report on the combined activities of those entities.

Option 1: Positive Sustainability Investment

Institution invests in one or more of the following:

- **Sustainable industries** (e.g. renewable energy or sustainable forestry). This may include any investment directly in an entire industry sector as well as holdings of companies whose entire business is sustainable (e.g. a manufacturer of wind turbines).
- **Businesses selected for exemplary sustainability performance** (e.g. using criteria specified in a sustainable investment policy). This includes investments made, at least in part, because of a company's social or environmental performance. Existing stock in a company that happens to have socially or environmentally responsible practices should not be included unless the investment decision was based, at least in part, on the company's sustainability performance.
- **Sustainability investment funds** (e.g. a renewable energy or impact investment fund). This may include any fund with a mission of investing in a sustainable sector or industry (or multiple sectors), as well as any fund that is focused on purchasing bonds with sustainable goals.
- **Community development financial institutions** (CDFI) or the equivalent (including funds that invest primarily in CDFIs or the equivalent).
- **Socially responsible mutual funds with positive screens** (or the equivalent). Investment in a socially responsible fund with only negative screens (i.e. one that excludes egregious offenders or certain industries, such as tobacco or weapons manufacturing) does not count for Option 1.
- **Green revolving loan funds** that are funded from the endowment

Option 2: Investor Engagement

Institution has policies and/or practices that meet one or more of the following criteria:

- Has a publicly available sustainable investment policy (e.g. to consider the social and/or environmental impacts of investment decisions in addition to financial considerations)
- Uses its sustainable investment policy to select and guide investment managers
- Has engaged in proxy voting to promote sustainability, either by its CIR or other committee or through the use of guidelines, during the previous three years
- Has filed or co-filed one or more shareholder resolutions that address sustainability or submitted one or more letters about social or environmental responsibility to a company in which it holds investments, during the previous three years

- Has a publicly available investment policy with negative screens, for example to prohibit investment in an industry (e.g. tobacco or weapons manufacturing) or participate in a divestment effort (e.g. targeting fossil fuel production or human rights violations)
- Engages in policy advocacy by participating in investor networks (e.g. Principles for Responsible Investment, Investor Network on Climate Risk, Interfaith Center on Corporate Responsibility) and/or engages in inter-organizational collaborations to share best practices

Submission Note:

Please note that Stanford's sustainable investment policy does include negative screens, such as coal, tobacco, and human rights as described below. However, Stanford does not report publicly the percentage of its endowment that the negative screens apply to, and since it is unable to answer "Yes" without entering this number, Stanford has been forced to answer "Unknown." Please see the accompanying description for examples of the negative screens that Stanford does employ.

The link to Stanford Management Company's annual report:

http://www.smc.stanford.edu/sites/default/files/SMC%202013%20Annual%20Nov%2018_Final.pdf

The link to an article describing Stanford's decision to divest from coal companies on May 6, 2014:

<http://news.stanford.edu/news/2014/may/divest-coal-trustees-050714.html>

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

Total value of the investment pool:

18,700,000,000 US/Canadian \$

Value of holdings in each of the following categories::

	Value of Holdings
Sustainable industries (e.g. renewable energy or sustainable forestry)	0 US/Canadian \$
Businesses selected for exemplary sustainability performance (e.g. using criteria specified in a sustainable investment policy)	0 US/Canadian \$
Sustainability investment funds (e.g. a renewable energy or impact investment fund)	0 US/Canadian \$
Community development financial institutions (CDFIs) or the equivalent	0 US/Canadian \$

<p>Socially responsible mutual funds with positive screens (or the equivalent)</p>	<p>0 US/Canadian \$</p>
<p>Green revolving loan funds that are funded from the endowment</p>	<p>---</p>

A brief description of the companies, funds, and/or institutions referenced above:

The university has allocated \$30 million for major capital improvements to the most energy-intensive buildings on campus through the Whole Building Energy Retrofit Program (WBERP). The first overhaul, of the Stauffer Chemistry Building, was finished in June 2007 and resulted in a 35 percent drop in electricity use, a 43 percent cut in steam use and 62 percent fall in chilled water use. It also reduced carbon dioxide emissions associated with the building by 762 metric tons per year and cut energy costs by 46 percent in the first 12 months. Retrofits on the dozen most energy-intensive buildings are scheduled for completion by 2014. Altogether, the improvements are expected to save \$4.2 million annually and reduce total energy use in these buildings by 28 percent. More information can be found online at:

<https://sustainable.stanford.edu/energy-initiatives>

Does the institution have a publicly available sustainable investment policy?:

Yes

A copy of the sustainable investment policy:

The sustainable investment policy:

The sustainable investment policy can be found at

http://apir.stanford.edu/stanford_statement

Does the institution use its sustainable investment policy to select and guide investment managers?:

Yes

A brief description of how the policy is applied, including recent examples:

The university, operating through the APIRL and the SCIR, has developed and applied certain Investment Responsibility Core Social Issue Policy Statements and Proxy Voting Guidelines which address many current Environmental, Social and Corporate Governance (ESG) issues. Where it has decided upon such a guideline, the University's Statement on Investment Responsibility directs that the University will "normally vote according to existing University Investment Responsibility Proxy Voting Guidelines." For example, [STARS Reporting Tool](#) | [AASHE](#)

Stanford has been active since 1998 in implementing a climate change guideline that states the following, “Stanford votes ‘Yes’ on resolutions that companies analyze levels of greenhouse gas emissions, develop action plans to reduce them, report on significant company actions to remediate, reduce and/or eliminate them, and continually assess and report on material impacts caused by company action and/or inaction with respect to greenhouse gas emissions.”

Stanford has also adopted policies which preclude owning securities in specific companies with operations in apartheid South Africa and Sudan, as well as companies in the tobacco industry. In each case the action was based on fiduciary obligations and clear ethical principles which were widely held across the entire Stanford community.

In May 2014, as a result of the APIRL process, Stanford announced that it would divest of direct holdings in publicly traded companies whose principal business is the mining of coal for use in energy generation; would avoid such direct holdings in the future; and would recommend that its external investment managers similarly divest of such holdings.

Does the institution's sustainable investment policy include negative screens?:

A brief description of the negative screens and how they have been implemented:

Coal - Acting on a recommendation of Stanford's Advisory Panel on Investment Responsibility and Licensing, the Board of Trustees announced on May 6, 2014 that Stanford will not make direct investments in coal extraction companies.

Tobacco – During the 1990s, the APIRL focused on the issue of health risks and illegal sales and marketing of tobacco products to minors. Stanford implemented many proxy voting guidelines and engaged corporations in an effort to end injuries caused by company products. In 1998, Stanford ended investment in core tobacco companies.

Human Rights – For more than four decades, the University has continued to address allegations of human rights abuses and the part corporations played by direct or indirect action or inaction, including Apartheid South Africa and Sudan. APIRL continues to develop, recommend, and apply Stanford core social issue policies and proxy voting guidelines, policies to remedy confirmed allegations of “substantial social injury.”

Approximate percentage of the endowment that the negative screens apply to:

Has the institution engaged in proxy voting, either by its CIR or other committee or through the use of guidelines, to promote sustainability during the previous three years?:

Yes

A copy of the proxy voting guidelines or proxy record:

A brief description of how managers are adhering to proxy voting guidelines:

Stanford's Proxy Voting Guidelines can be found at

<http://www.stanford.edu/group/apir-l/docs/public/Stanford%20University%20Social%20Issue%20Proxy%20Voting%20Policy%20Statements%20and%20Guidelines.pdf>

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:

Stanford University recently announced that it will not make direct investments of endowment funds in publicly traded companies whose principal business is the mining of coal for use in energy generation.

In taking the action, the trustees endorsed the recommendation of the university's Advisory Panel on Investment Responsibility and Licensing (APIRL). This panel, which includes representatives of students, faculty, staff and alumni, conducted an extensive review over the last several months of the social and environmental implications of investment in fossil fuel companies.

The resolution means that Stanford will not directly invest in directly held publicly traded companies for which coal extraction is the primary business, and will divest of any current direct holdings in such companies. Stanford also will recommend to its external investment managers, who invest in wide ranges of securities on behalf of the university, that they avoid investments in these public companies as well.

Does the institution engage in policy advocacy by participating in investor networks and/or engaging in inter-organizational collaborations to share best practices?:

Yes

A brief description of the investor networks and/or collaborations:

Stanford participates in the College and University Consortium on Investor Responsibility and CERES.

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

<http://apir.stanford.edu/home>

Investment Disclosure

Responsible Party

Moira Hafer

Sustainability Analyst
Office of Sustainability

Criteria

Institution makes a snapshot of its investment holdings available to the public, including the amount invested in each fund and/or company and proxy voting records. The snapshot of holdings is updated at least once per year.

Institutions for which investments are handled by the university system, a separate foundation of the institution and/or a management company contracted by the institution should report on the combined activities of those entities.

Submission Note:

Through Stanford University's Annual Reports, the Stanford Management Company (SMC) publishes the University's endowment performance at the asset allocation level measured against identified benchmarks and peers. This report is publicly available on both the University and SMC websites (<http://annualreport.stanford.edu/2013/> and <http://www.smc.stanford.edu/communication>).

"---" 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:

A copy of the investment holdings snapshot:

The website URL where the holdings snapshot is publicly available:

Innovation

Innovation

These credits recognize institutions that are seeking innovative solutions to sustainability challenges and demonstrating sustainability leadership in ways that are not otherwise captured by STARS.

Credit
Innovation 1
Innovation 2
Innovation 3
Innovation 4

Responsible Party

Moira Hafer
Sustainability Analyst
Office of Sustainability

Criteria

1. Innovation credits are reserved for new, extraordinary, unique, ground-breaking, or uncommon outcomes, policies, and practices that greatly exceed the highest criterion of an existing STARS credit or are not covered by an existing STARS credit.
2. In general, innovation credits should have roughly similar impacts or be on the same scale as other STARS credits.
3. Outcomes, policies, and practices that are innovative for the institution's region or institution type are eligible for innovation credits.
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.
8. Practices, policies, and programs that were once considered innovative but are now widely adopted (e.g. being the first institution to enact a policy 20 years ago that is now common) may not be claimed as innovation credits.
9. Multiple activities or practices whose sum is innovative can be considered for an innovation credit as long as those activities or practices are related. For example, three innovative waste reduction programs in research laboratories could be listed together under a single innovation credit for Greening Laboratories. Listing a series of unrelated accomplishments or events under a single innovation credit is not accepted.
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.

Title or keywords related to the innovative policy, practice, program, or outcome:

Stanford Solar Decathlon

A brief description of the innovative policy, practice, program, or outcome :

The U.S. Department of Energy's Solar Decathlon is a biennial competition challenging students from twenty collegiate teams all around the world to design, build, and operate solar-powered net-zero homes. Teams are judged on ten contests ranging from juried contests like Architecture and Engineering to measured contests like Comfort Zone and Energy Balance. Since 2002, the Decathlon has demonstrated to the public and the home-building industry that solar homes can be affordable, attractive, and comfortable to live in, while also providing a once-in-a-lifetime educational opportunity for young designers and engineers entering the workforce to gain hands-on experience in an interdisciplinary learning environment.

In November of 2011, a small group of Stanford students submitted the very first proposal for Stanford University to compete in the 2013 Solar Decathlon. In January of 2012, Team Stanford was selected as one of twenty teams, including four California teams, two Canadian teams, and two European teams, to officially compete. For its sixth iteration, the 2013 Decathlon moved from the National Mall in Washington D.C. to the Orange County Great Park in Irvine, CA. After two years of design, engineering, fundraising, and construction, Team Stanford delivered its competition entry, titled Start.Home, to the Great Park and competed from October 3rd-13th, finishing in fifth place overall. The Start.Home was then reassembled at the Jasper Ridge Biological Preserve, to replace the ranger's residence and eventually transition to housing for long-term visiting researchers and scholars.

A brief description of any positive measurable outcomes associated with the innovation (if not reported above):

The project team raised over \$1.2 million in cash, in-kind, and service contributions and included over 125 undergraduate, graduate, and PhD students over the course of two years, along with participation by over twenty faculty and staff and thirty departments, programs, and university groups. In addition, the project team actively engaged in outreach opportunities and media exposure, leading to a community reach of over 23,400 individuals and over forty unique publications ranging from print and radio to online and nationally televised news coverage. The Start.Home team not only constructed one of the most affordable (1st place award) and marketable (3rd place award) homes in the competition with a unique vision for a Core module that resonated with a national audience, but it also created a legacy of building innovation, interdisciplinary collaboration, and project-based learning that will inspire future Stanford Solar Decathlon entries in years to come.

Please visit the following website for more information:

<http://solardecathlon.stanford.edu/2013/10/1st-place-in-affordability-3rd-place-in-market-appea>

1/

A letter of affirmation from an individual with relevant expertise:

[Jasper Ridge Letter Regarding Solar Decathlong House_1.pdf](#)

Which of the following STARS subcategories does the innovation most closely relate to? (Select all that apply up to a maximum of 5):

	Yes or No
Curriculum	No
Research	Yes
Campus Engagement	Yes
Public Engagement	No
Air & Climate	Yes
Buildings	No
Dining Services	No
Energy	Yes
Grounds	No
Purchasing	No
Transportation	No
Waste	No
Water	No
Coordination, Planning & Governance	No
Diversity & Affordability	Yes
Health, Wellbeing & Work	No
Investment	No

Other topic(s) that the innovation relates to that are not listed above:

The website URL where information about the innovation is available :

<http://solardecathlon.stanford.edu/>

Responsible Party

Moira Hafer

Sustainability Analyst
Office of Sustainability

Criteria

1. Innovation credits are reserved for new, extraordinary, unique, ground-breaking, or uncommon outcomes, policies, and practices that greatly exceed the highest criterion of an existing STARS credit or are not covered by an existing STARS credit.
2. In general, innovation credits should have roughly similar impacts or be on the same scale as other STARS credits.
3. Outcomes, policies, and practices that are innovative for the institution's region or institution type are eligible for innovation credits.
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.
8. Practices, policies, and programs that were once considered innovative but are now widely adopted (e.g. being the first institution to enact a policy 20 years ago that is now common) may not be claimed as innovation credits.
9. Multiple activities or practices whose sum is innovative can be considered for an innovation credit as long as those activities or practices are related. For example, three innovative waste reduction programs in research laboratories could be listed together under a single innovation credit for Greening Laboratories. Listing a series of unrelated accomplishments or events under a single innovation credit is not accepted.
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.

Title or keywords related to the innovative policy, practice, program, or outcome:

Congestion and Parking Relief Incentives (CAPRI)

A brief description of the innovative policy, practice, program, or outcome:

The Capri (Congestion And Parking Relief Incentives) project studies the impact of incentives---monetary rewards, social influence and personalized recommendations---on commute patterns and parking preferences at Stanford University. The goals are to reduce peak hour commuting, shift parking from congested lots to underutilized lots, and improve wellness for Stanford commuters by encouraging walking and biking. The main tools for inducing the behavior changes are monetary incentives paid out as lotteries through games, cloud and mobile user interfaces, and social networking among the commuters in Capri.

A brief description of any positive measurable outcomes associated with the innovation (if not reported above):

Each year Santa Clara County measures vehicle arrivals and departures on campus to see if the university is exceeding the maximum number of peak commute trips allowed under the General Use Permit. The numbers for Stanford had been rising for the past few years, but in Capri's first year the tide was stemmed and the university was one trip below the limit. Capri participants are seen to shift their commutes away from the morning and afternoon peak hours. The result from the first phase of the project was encouraging. The program had 2,993 participants signed up in its first year.

Capri launched two new features provided through a smartphone app called My Beats in May 2013, which is available for iPhone and Android smartphones. The first feature incentivizes commuters for biking or walking to campus to further reduce congestion on campus. The second feature, called Walk'N'Talk, provides incentives for conducting work meetings while walking. This app helps detect commute patterns and behaviors while promoting wellness. Since the launch of My Beats in May 2013, enrollment number for Capri has increased to approximately 4,000 participants.

A letter of affirmation from an individual with relevant expertise:

[Provost Letter Regarding Capri Launch_1.pdf](#)

Which of the following STARS subcategories does the innovation most closely relate to? (Select all that apply up to a maximum of five):

	Yes or No
Curriculum	No
Research	Yes

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

Other topic(s) that the innovation relates to that are not listed above:

The website URL where information about the innovation is available:

<https://stanfordcapri.org/>

Responsible Party

Moira Hafer

Sustainability Analyst
Office of Sustainability

Criteria

1. Innovation credits are reserved for new, extraordinary, unique, ground-breaking, or uncommon outcomes, policies, and practices that greatly exceed the highest criterion of an existing STARS credit or are not covered by an existing STARS credit.
2. In general, innovation credits should have roughly similar impacts or be on the same scale as other STARS credits.
3. Outcomes, policies, and practices that are innovative for the institution's region or institution type are eligible for innovation credits.
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.
8. Practices, policies, and programs that were once considered innovative but are now widely adopted (e.g. being the first institution to enact a policy 20 years ago that is now common) may not be claimed as innovation credits.
9. Multiple activities or practices whose sum is innovative can be considered for an innovation credit as long as those activities or practices are related. For example, three innovative waste reduction programs in research laboratories could be listed together under a single innovation credit for Greening Laboratories. Listing a series of unrelated accomplishments or events under a single innovation credit is not accepted.
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.

Title or keywords related to the innovative policy, practice, program, or outcome:

Food Summit

A brief description of the innovative policy, practice, program, or outcome:

The annual Stanford Food Summit is a gathering of experts on food-related issues and provides a catalyst for generating solutions to some of the nation's and the planet's most challenging and important crises. The first Food Summit, held in the fall of 2010, demonstrated the breadth and depth of interest in Food issues across the seven schools of the university (Medicine, Earth Sciences, Business, Humanities & Sciences, Law, Education, and Engineering). The target audience was primarily academics. The second and third Summits opened up the target audience to include community-based food groups/organizations, and included presentations of pilot collaborative research projects in the areas of Hospital Food, Food Bank Food, Farm to School Food, and Food Policy. The fourth Summit in 2013 provided a forum for focusing on Growing Pathways to Careers in Food Systems. This was in response to substantial input from Stanford students who wanted to learn more about the types of jobs and careers that are emerging in this dynamic area. More than two dozen speakers, many of them Stanford Alumni, discussed their jobs and careers in farming, food production, cooking, food procurement, food entrepreneurship/start-ups, food policy/social justice, and food and health.

For more details, please visit:

<http://foodsummit.stanford.edu/>

A brief description of any positive measurable outcomes associated with the innovation (if not reported above):

Positive and measurable outcomes associated with the various Food Summits at Stanford include the following:

1. Dining Hall Study

As a result of a collaboration between Debra Dunn (who taught Stanford's Sustainable Abundance class), Stanford Dining, and postdoctoral fellow Christopher Gardner (Food Summit founder), a study was conducted in four of the undergraduate dining halls to try to improve the healthfulness of student dining choices. The paper was published in 2013.

2. Food Helix

Because of the collegial and collaborative relationships fostered by the Food Summits, a group of 5 were selected by the Vice Provost for Undergraduate Education (VPUE) to attend Faculty College during the 2012-2013 academic year to develop a Food Helix in response to recommendations from the Study of Undergraduate Education at Stanford (SUES Report). The group has just been granted over \$3,000 by the VPUE to initiate the implementation of the Food Helix.

3. Summer Farm Camp

During an afternoon breakout session of the first Food Summit in 2010, a Community-Academic partnership was started between Full Circle Farm (11-acre organic farm on the grounds of Peterson Middle School in Sunnyvale) and Stanford. Together the groups created a summer camp program that has enrolled over 100 children each of the last two years (the first year they enrolled ~80 kids). Three students have received Haas summer fellowships, seven students have received Human Biology HB-REX summer fellowships, and one student has received a CCSRE summer fellowship to be camp counselors/field researchers at the camps. This coming summer will mark the 4th consecutive year of this Community-Academic partnership. Three summer camp counselors wrote a manuscript covering the

results of the 2011 farm camp. That manuscript is under review by the Journal of Nutrition Education and Communication.

4. Funds Raised by the Food Summits

Each of the first four Summits were funded by combinations of the Provost, the deans of the seven Stanford schools, the Woods Institute, and a few others. The funds raised each year have been in the range of \$50,000/year. As a result of the visibility the Food Summit has brought to this topic and the outstanding scholars involved, various donors have contributed unrestricted gifts totaling \$136,000 that have been used to fund the scholarly work done at Full Circle Farm Summer camp, Second Harvest Food Bank (see below), and other projects.

5. Collaboration with Second Harvest Food Bank

Drs. Randall Stafford and Lisa Goldman Rosas were awarded funds from the unrestricted gifts described above to work with Second Harvest Food Bank in working to optimize their organizational transition to providing more produce to the hungry people that they serve in Santa Clara and San Mateo counties. A summary of this work was presented at the 2012 Food Summit 3.

6. New course created: Healthy and Sustainable Food Systems.

This quarter Professor Christopher Gardner started a new class (Hum Bio 113S) that arose directly from all the work he has done with colleagues for the past few years on topics covered at the Food Summits. The course includes a number of guest speakers who are being primarily drawn from the colleagues that he has met and worked with over the last four years of Summits.

A letter of affirmation from an individual with relevant expertise:

[Food Summit Letter of Affirmation_1.pdf](#)

Which of the following STARS subcategories does the innovation most closely relate to? (Select all that apply up to a maximum of five):

	Yes or No
Curriculum	No
Research	Yes
Campus Engagement	Yes
Public Engagement	Yes
Air & Climate	No
Buildings	No
Dining Services	Yes
Energy	No
Grounds	No

Purchasing	No
Transportation	No
Waste	No
Water	No
Coordination, Planning & Governance	No
Diversity & Affordability	No
Health, Wellbeing & Work	No
Investment	No

Other topic(s) that the innovation relates to that are not listed above:

The website URL where information about the innovation is available:

<http://foodsummit.stanford.edu/>

Responsible Party

Moira Hafer

Sustainability Analyst
Office of Sustainability

Criteria

1. Innovation credits are reserved for new, extraordinary, unique, ground-breaking, or uncommon outcomes, policies, and practices that greatly exceed the highest criterion of an existing STARS credit or are not covered by an existing STARS credit.
2. In general, innovation credits should have roughly similar impacts or be on the same scale as other STARS credits.
3. Outcomes, policies, and practices that are innovative for the institution's region or institution type are eligible for innovation credits.
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.
8. Practices, policies, and programs that were once considered innovative but are now widely adopted (e.g. being the first institution to enact a policy 20 years ago that is now common) may not be claimed as innovation credits.
9. Multiple activities or practices whose sum is innovative can be considered for an innovation credit as long as those activities or practices are related. For example, three innovative waste reduction programs in research laboratories could be listed together under a single innovation credit for Greening Laboratories. Listing a series of unrelated accomplishments or events under a single innovation credit is not accepted.
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.

Title or keywords related to the innovative policy, practice, program, or outcome:

Design for Extreme Affordability

A brief description of the innovative policy, practice, program, or outcome:

Design for Extreme Affordability is a two-quarter course offered at Stanford's d.school jointly by the Graduate School of Business and the School of Mechanical Engineering. This multidisciplinary project-based experience creates an enabling environment in which students learn to design products and services that will change the lives of the world's poorest citizens. Students work directly with course partner organizations on real world problems, the culmination of which is actual implementation of solutions and real change.

Over the past ten years, student teams have worked with 26 partner organizations in 18 countries on solutions in the areas of agriculture, architecture, energy, food processing, irrigation, lighting, medical devices, nutrition, sanitation, stove technology and water catchment and purification. Partners are often the implementers of these innovations, but sometimes student teams form their own organization to carry an idea forward.

The course has two main goals: that every student has a great educational experience and that every partner gets a great outcome. Furthermore, sustainability from a business standpoint is at the core of Extreme's philosophy regarding impact. The course emphasizes the importance of enterprise and entrepreneurship because instructors believe they are the most important factors in a project's long-term success and sustainability.

A brief description of any positive measurable outcomes associated with the innovation (if not reported above):

There are too many positive measurable outcomes to describe all at length in this submission. A few examples are provided below, but the complete list of all projects, outcomes, and current status can be found online (

<http://extreme.stanford.edu/projects/list>

).

(1) Clubfoot is a congenital birth defect that results in the internal rotation of one or both feet. With a new case occurring in every 750 births and over one million untreated cases worldwide, clubfoot is one of the leading causes of disability in the developing world. Left untreated, clubfoot results in physical deformity and social stigma. The miraclefeet brace is a low-cost (<\$20) foot abduction brace designed to treat clubfoot using the non-surgical Ponseti method. With proper compliance, treatment success rates of 95% can be achieved.

(2) A third of the world's population suffers from water scarcity. Without access to affordable water efficient irrigation, small-plot farmers are unable to grow crops during much of the year to support their families. International Development Enterprises Ethiopia (IDE-Ethiopia) challenged the students to make drip irrigation appropriate and accessible and to small-plot farmers. Driptech irrigation systems offer the benefits of traditional commercial drip irrigation with additional features optimized for one acre plots. For instance, these irrigation systems are designed for very low water pressures, with gravity feed from buckets and tanks and are easy to install, maintain, and expand. They cost two to five time less than traditional drip irrigation, and boast visibly higher uniformity of water application than any other low-cost irrigation product.

(3) Pneumonia is the number one killer of children under the age of 5 worldwide, yet receives only a fraction of the attention given to HIV/AIDS, malaria, and tuberculosis. Named "The Forgotten Killer of Children" by the World Health Organization, severe pneumonia

remains difficult to treat in low-resource settings due to the lack of intensive care technologies. Resourceful doctors in the developing world have developed an effective therapy known as Bubble CPAP to deliver respiratory support to children with severe pneumonia. Existing methods, however, are hampered by a reliance on oxygen tanks, which are expensive, dangerous, and notoriously difficult to transport. One group in the Design For Extreme Affordability course realized that a critical therapeutic aspect of CPAP is the air pressure generated by the device, rather than simply the oxygen itself. They created a product called Inspire, which utilizes pumps to pressurize the ambient air, which is then delivered to the patients to keep their lungs open. The device is capable of running off a car battery for many hours at a time and does not require oxygen tanks to deliver therapeutic continuous positive airway pressure. Inspire was selected as a Social E Lab awardee in Summer 2011. Having begun the project in January 2011, the group returned to Bangladesh, India, and Vietnam to user-test the interface of the device in its practice setting later on. This project has been supported, in part, by a global health innovation grant from the NIH, known as C-IDEA. The project is currently a member of the XSEED laboratories and is working towards obtaining CE mark approval of the device.

A letter of affirmation from an individual with relevant expertise:

[Design for Extreme Affordability Letter of Affirmation_1.pdf](#)

Which of the following STARS subcategories does the innovation most closely relate to? (Select all that apply up to a maximum of five):

	Yes or No
Curriculum	Yes
Research	No
Campus Engagement	Yes
Public Engagement	Yes
Air & Climate	No
Buildings	No
Dining Services	No
Energy	Yes
Grounds	No
Purchasing	No
Transportation	No

Waste	No
Water	Yes
Coordination, Planning & Governance	No
Diversity & Affordability	No
Health, Wellbeing & Work	No
Investment	No

Other topic(s) that the innovation relates to that are not listed above:

The website URL where information about the innovation is available:

<http://extreme.stanford.edu/>