



Oregon State University
Sustainability Office

OREGON STATE UNIVERSITY SUSTAINABILITY REPORT

Fiscal Year 2019

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Executive Summary

Oregon State University's steady movement toward a more sustainable campus continued in Fiscal Year 2019 (FY19). OSU continues to garner national attention as a sustainability leader and strives to be in the top 10 colleges and universities in the United States for excellence in sustainability. Since FY10, OSU has relied on a sustainability assessment system known as the Sustainability Tracking, Assessment and Rating System (STARS). Oregon State has eight times achieved a Gold rating from STARS.

Fiscal Year	Submission Date	STARS Version	STARS Score
2010	Jan 31, 2011	1.0	69.74
2012	May 11, 2013	1.2	68.95
2013	Apr. 30, 2014	2.0	70.94
2014	Apr. 30, 2015	2.0	72.78
2015	Mar. 4, 2016	2.0	73.27
2016	Feb. 28, 2017	2.1	72.21
2017	Jan. 31, 2018	2.1	72.23
2018	Dec. 20, 2018	2.1	72.61
2019	Dec. 20, 2019	2.1	74.57

Table 1 - Oregon State University's STARS submissions

STARS Ratings (all versions)	
Platinum	5
Gold	126
Silver	140
Bronze	54
Reporter	11

Table 2 - STARS participant ratings

The table below summarizes and trends OSU's sustainability performance by [STARS subcategories for FY19](#).

OSU's FY19 sustainability performance by STARS subcategories	
Positive trending STARS subcategories, FY18-FY19 <ul style="list-style-type: none"> • Research • Waste • Water • Wellbeing & Work 	Negative trending STARS subcategories, FY18-FY19 <ul style="list-style-type: none"> • Buildings • Purchasing
High performing STARS subcategories, FY19 <ul style="list-style-type: none"> • Research • Campus Engagement • Coordination & Planning • Diversity & Affordability 	Low performing STARS subcategories, FY19 <ul style="list-style-type: none"> • Air & Climate • Buildings • Food & Dining • Energy • Purchasing • Investment & Finance

Table 3 - performance by STARS subcategory

Certain low performing and downward trending areas are due to changes in data availability and other assessment factors, but most indicate actual opportunities for performance improvement. As with many large organizations, some improvements will be more easily attained than others.

In addition to the indicators discussed above, highlights and achievements from FY19 include the launch of the Clean and Sustainable Water Technology Initiative, the launch of the first fundraising effort focused on reducing university carbon emissions, the inaugural year of the statewide Outdoor School program, the launch of The Global Hemp Center, and the creation of GenderMag, a method to fight against gender bias in software, among other projects.

Introduction

Oregon State University (OSU) took larger steps toward a more sustainability university community during Fiscal Year 2019 (FY19). OSU aspires to be in the top 10 colleges and universities in the United States recognized for excellence in sustainability. With performance that ranks OSU #22 in [Sierra's Club Cool Schools 2019](#), and puts OSU in [The Princeton Review's Guide to 413 Green Colleges: 2019 Edition](#), and other awards detailed below, sustainability has become business as usual for Oregon State.

This report highlights accomplishments and provides a summary of indicators for the period between approximately July 1, 2018 and June 30, 2019. OSU's sustainability indicators are based largely on the now widely adopted [Sustainability Tracking, Assessment and Rating System](#) (STARS).

Assessment, Awards and Recognition

Recognition from external entities has been key to the visibility of OSU's sustainability success. Increasing visibility is an effective recruiting tool. In FY10, OSU for the first time participated in STARS, administered by the [Association for the Advancement of Sustainability in Higher Education](#) (AASHE). Used by over 950 higher education institutions, STARS is more comprehensive and standardized than any other rating or ranking system and serves as the platform for the key performance indicators below. Critically, STARS is also the mechanism by which sustainability indicators are shared with entities like Sierra Club and Princeton Review, saving staff time and resources, and standardizing – to the greatest degree practicable – the assessment and visibility process. In addition to the STARS assessment, OSU's awards, ratings and rankings for FY19 are listed below. Visit the [sustainability recognition page](#) for information on these and other awards.



The [Princeton Review's 2019 Guide to 413 Green Colleges](#): OSU was recognized for sustainability practices such as food sourcing, transportation, and green building, as well as opportunities to focus on the environment and sustainability in curriculum and energy efficiency.

League of American Bicyclists [Bicycle Friendly University](#) program: OSU maintains a Gold designation for providing a bicycle-friendly campus for students, staff and visitors.





Sierra Club gave OSU the highest green ranking in the state for its 2019 edition of "[Cool Schools](#)". This puts OSU 22nd in the nation.

Tree Campus USA: OSU has been recognized ten years in a row since 2010 for efforts in effectively managing campus trees, developing connectivity with the community beyond campus borders to foster healthy, urban forests, and engaging students in learning opportunities centered on campus and community forestry events.



FY19 Sustainability Highlights

OSU launched the Clean and Sustainable Water Technology Initiative



Oregon State University's College of Engineering organized the inaugural Clean and Sustainable Water Technology Initiative workshop held August 6-7, 2018.

The [Clean and Sustainable Water Technology Initiative](#) was launched with a \$3.28 million gift from Jon and Stephanie DeVaan. At the core of this venture is a collaborative community of

faculty and students, working together to solve one of the one of the Grand Challenges for Engineering in the 21st century. This effort builds on the university's strengths, to help make Oregon State a national leader in clean and sustainable water technology solutions.

OSU faculty members are lead authors of new IPCC report

Two Oregon State University scientists have been appointed as lead authors to the newly formed [Intergovernmental Panel on Climate Change](#) (IPCC) Assessment Report. The IPCC was founded in 1988 by the World Meteorological Organization and the United Nations, and thus far has produced five climate assessments during that 30-year period. Each time a new assessment is made, expert scientists from around the world gather to review and report on progress made.



The fifth assessment, released in 2013 and 2014, was the largest scientific collaboration in history and led to the Paris Climate Agreements. The sixth assessment will address the physical basis of climate change along with efforts to change and the potential to mitigate dangers. The sixth assessment is expected to be finalized in 2022, in time for future international goal-setting.

OSU faculty members Alan Mix, an oceanographer and paleoclimatologist, and David Wrathall, a human geography researcher who studies environmentally forced migration, will join hundreds of colleagues from 90 countries around the world to produce the report. They are both in OSU's College of Earth, Ocean, and Atmospheric Sciences.

OSU's College of Agricultural Sciences, the OSU Extension Service, and OSU150 hosted seminar "Communities, Food, Resilience"



The seminar sparked bold and visionary conversations around food systems and community food resilience. It welcomed over 220 audience members including interested community members, local and regional food networks, elected officials, faculty, students, and more to Portland, and the event was [livestreamed](#) at 14 sites across the state to ignite local conversation.

Keynote speakers included David G. Lewis, Shorlette Ammons, Stephanie Grutzmacher, and Lauren Gwin.

Pedal Corvallis expanded

[Pedal Corvallis](#) is a city-wide bikeshare system with stations on the OSU-Corvallis campus and throughout Corvallis. With an easy-to-use app, users can check out and return a bike at any station in the system. In September 2018, Pedal Corvallis added two new OSU stations, including a Gill Coliseum Station sponsored by ASOSU. With the addition of the two new stations, Pedal Corvallis has 10 stations throughout the city. OSU's Corvallis campus stations are located at Kerr Administration Building, Gill Coliseum, Crop Science building, and Weniger Hall.



Campus Recycling hosted second annual OSU waste audit



Two dozen students from an Oregon State University sustainability assessment class (SUS 304) sorted through garbage from across campus on Oct. 12, 2018 as part of the second annual waste audit. Hosted by Campus Recycling and the Sustainability Double Degree program, the audit took place in the SEC Plaza, and was open to the public.

The students were divided into six teams and sorted and weighed waste from different areas of campus, including residence halls, academic buildings and dining centers. Trash and recycling were sorted, weighed and documented, and all eligible items were then recycled. The audit provided a snapshot of the composition of Oregon State's waste and recycling streams. This audit also raised awareness about how to effectively and correctly recycle on campus.

Ecologist Bill Ripple spoke at Corvallis Science Pub

William Ripple, a distinguished professor in the College of Forestry at Oregon State University who has drawn worldwide attention for his research on wolves and other predators, and for publishing [a scientists' warning to humanity](#), spoke at the Corvallis Science Pub on Monday, Nov. 12, 2018.



In his Science Pub presentation, Ripple discussed how his conservation research and concern about the global environment and climate change led to him publish the paper. He shared his journey from ecological research to science advocacy, providing suggestions for how the planet might avert an impending environmental crisis.

Angélique Kidjo performed at LaSells Stewart Center



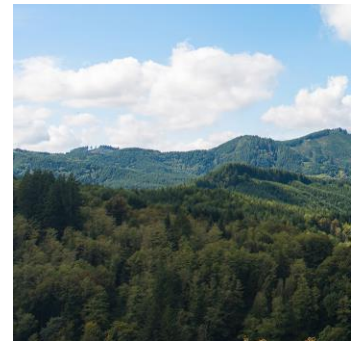
Three-time Grammy Award-winning singer, philanthropist and human rights activist Angélique Kidjo spoke and performed at the LaSells Stewart Center on the Corvallis campus .

In her presentation, “Artist As Activist: A Passion for Freedom and Social Justice,” Kidjo discussed the responsibility of artists to use their platform for social justice, the many ways in which people can give back and the impact individuals can make in the world. The performance was part of SAC Presents, a visual and performing arts events series presented by the School of Arts and Communication at Oregon State University. The event was also part of OSU’s Dr. Martin Luther King, Jr. Celebration, which took place Jan. 19 – 25, 2019.

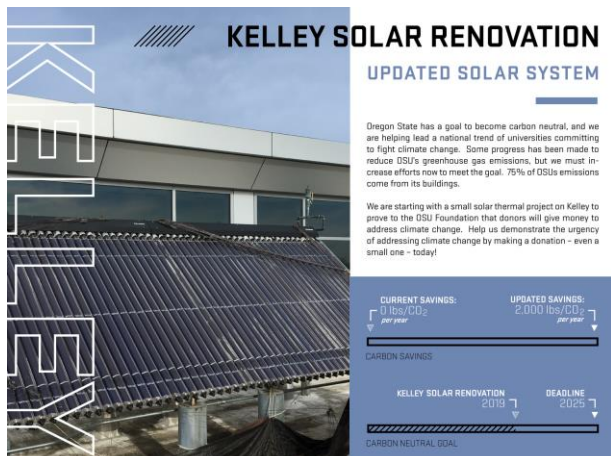
OSU hosted the Starker Lecture Series: Indigenous Forestry

The annual [Starker Lecture Series](#) at Oregon State University focused on tribal forestry with a film, three lectures and a capstone field trip.

Topics included indigenous forest and subsistence practices, the history and future of tribal forestry in Oregon, and how “first foods” such as fish, berries and big game drive forest management. The lecture series is sponsored by the Starker family in memory of T.J. and Bruce Starker, prominent leaders in the development of the Oregon forest products industry. The series is also supported by the OSU College of Forestry and the Oregon Forest Resources Institute.



OSU launched first fundraising effort focused on reducing university carbon emissions



The Associated Students of Oregon State University, OSU Sustainability Office and the OSU Foundation launched the university's first fundraising effort focused on reducing university carbon emissions.

The project raised funds to repair a solar hot water system on the roof of Kelley Engineering Center that had been consistently problematic and, in recent years, not functioning at all. The project replaced the collector assembly with more standard technology that allows lower maintenance and continued operations. The project also provided student engagement and research opportunities. This helps reach OSU's objective of using the campus as a living lab, and

providing real world, applied learning for students.

OSU researchers expand access to clean drinking water

A team of Oregon State researchers published a case study on the adoption of the Instove Water Purifier in Mbale, Uganda. The goal was to evaluate the efficacy and adoptability of the current product, so the team can improve the design of the novel water treatment technology. The lead author of the [paper](#) is Grace Burluson, a dual master's student in mechanical engineering and applied anthropology. The case study in Mbale used "rapid ethnographic methods", such as participant observation, focal follow, and time allocation; "engineering performance experiments" included fuel efficiency tests, water bacteria measurements, and data collection of temperature and flow rates.



The Spring Creek Project hosted the Chrysalis Symposium: Courageous Transformation for the Climate Crisis



The Spring Creek Project hosted [The Chrysalis Symposium](#) that included climate change thought leaders, practical workshops, and a reception with community discussions to help make connections for the years ahead. Speakers and workshop leaders included David Buckley Borden, Alec Connon, Mary DeMocker, Kate Gallagher, Tim Jensen, Emily Johnston, Angus Maguire, Jamie Margolin, and Luhui Whitebear.

The Environmental Arts and Humanities Initiative hosted the fifth annual Graduate Student Conference

The Graduate Student Conference featured presentations from a variety of disciplines from MA and PhD students at OSU, University of Oregon, Portland State University, and the Pacific Northwest College of Art, and keynotes from Lissy Goralnik and Rebecca Robinson and Stephen Strom. Robinson and Strom are the author and photographer of *Voices from Bear Ears: Seeking Common Ground on Sacred Land* (2018).



More than 30,000 students participated in inaugural year of statewide Outdoor School



Three-quarters of Oregon's eligible fifth- and sixth-grade students participated in the inaugural year of the statewide [Outdoor School program](#), according to a new Oregon State University Extension Service report.

Outdoor School has a long tradition in Oregon, with some programs dating back 50 years. But not everyone has had access to the program. That changed in November 2016, when Oregon voters passed Measure 99, mandating that all Oregon fifth- or sixth-grade students should have the opportunity to attend a week-long outdoor school program or comparable outdoor education program.

Measure 99 created an Outdoor School Education Fund and directed Oregon State University Extension Service to support, administer, and fund an outdoor school program as set forth in Senate Bill 439, which approved \$24 million for the program's first two years.

OSU leads fight against gender bias in software

Researchers at Oregon State have created a method called [GenderMag](#) that enables IT professionals to identify and eliminate gender biases in the software they create, configure, or purchase, to make the software more equitable.

The GenderMag research team is led by two OSU professors, Margaret Burnett and Anita Sarma, both with the College of Engineering, who have pushed OSU to lead the fight against gender bias in its own IT.



Much of the software available has built-in biases, often against women and minorities. Such biases can impact how easily users can find critical information, perform work tasks, or even navigate web sites.

Oregon State's Information Technology unit, as well as other departments and programs on campus, are piloting the use of GenderMag.

OSU launched Global Hemp Innovation Center



The [Global Hemp Innovation Center](#) at Oregon State University is the nation's largest research center devoted to the study of hemp with more than 40 faculty representing 19 academic disciplines engaged in research, teaching, and extension services. The center serves as a research hub connecting faculty and researchers engaged in plant research, food innovation, pharmacy, public health, public policy, business and engineering.

Oregon State's decision to launch the new hemp center follows Congress' adoption of the 2018 Farm Bill that removed hemp from the list of controlled drug substances and initiated the creation of a framework for hemp to become a fully legalized commodity in the future.

As it launches its seed certification services for hemp, seeds will be for use by farmers registered by the state. Oregon State will be the only university in the nation presently to certify hemp seed. Only state departments of agriculture in Colorado, North Dakota and Tennessee certify hemp seed for use in those states.

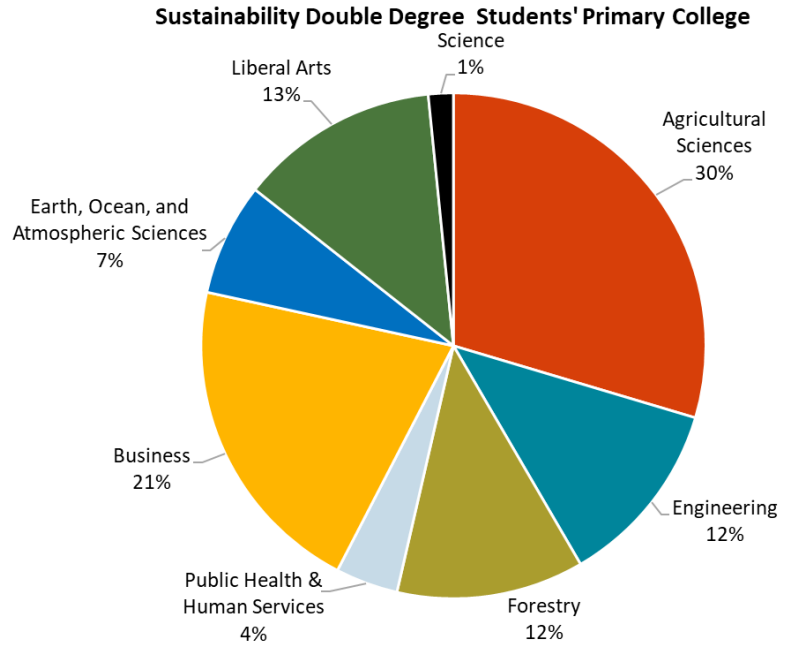
Faculty Senate created an Ad Hoc Committee on the Carbon Commitment

In 2018, the Faculty Senate formed the Ad hoc Committee on the Carbon Commitment (aka C3) as a network to promote carbon reducing actions within faculty and beyond. The Sustainability Office supports and provides focus to this committee and its four working groups: Conservation and Efficiency, Education and Curriculum, Reporting and Communication, and Transportation.



The Sustainability Double Degree

The [Sustainability Double Degree](#) (SDD) is up and running on all three OSU campuses. The SDD exposes students to real-world problems and fosters knowledge, skills and abilities to address these problems in communities and workplaces. In step with the interdisciplinary nature of sustainability, the degree is designed to complement all OSU degree programs and be earned as a second bachelors in addition to a major area of study. Students take a sustainability "core" consisting of five courses: environmental science, sustainable communities, sustainability assessment, and a choice of several economics and sociology courses. In the academic year 2018-2019, there were a total of 125 students enrolled in the SDD consisting of Corvallis campus students (57%), Ecampus students (37%) and Cascades Campus students (6%). The majority of SDD students have senior class standing (75%), 13% are juniors, 8% are sophomores, 1% are first-year, and 3% are post-baccalaureate. The inter-disciplinary SDD program includes students from all academic colleges as shown in the chart.



The Sustainability minor

The [sustainability minor](#) was first offered at OSU in Fall 2015. This minor's interdisciplinary approach teaches students to think critically about complex issues facing society and how to develop possible solutions to mitigate them. It includes core sustainability courses and tailored elective courses to expand students' knowledge and experience of their primary major in the context of sustainability principles and frameworks. Completion of the sustainability minor requires 27 credits within the 180-credit minimum for graduation. In the academic year 2018-2019, there were 67 students who were enrolled in the sustainability minor consisting of Corvallis campus students (73%), Ecampus students (13%) and Cascades Campus students (13%). The majority of students have senior class standing (73%), 21% are juniors, and 5% are sophomores, and 2% are post-baccalaureate.

Community Engagement and Leadership (CEL) programs create culture of sustainability

Community Dialogues Initiative. [Community Dialogues](#) is an initiative offered in partnership with the Office of Institutional Diversity to advance a culture of dialogue and deliberation on campus. Community Dialogues is a once-per-term series which seeks to cultivate connection and deep learning through exploration of critical and contentious issues. Utilizing the National Issues Forum Model it hopes to engage students, faculty, staff, and community members in dialogue which:

- Deepens understanding of critical issues and the tensions within them
- Encourages insight into different perspectives
- Creates connection between participants through their stories and experiences
- Guides exploration of personal ethics, morals, and values
- Inspires socio-political action, both individual and collective



In FY19, Community Dialogues hosted three events on Food Security, Immigration, and Land Use. Community Dialogues had 213 attendees.

Field to Pantry program. The Field to Pantry program won the 2019 Association of College Unions International (ACUI) Outstanding Service Project of the Year. Field to Pantry was developed as a program to engage students in gleaning or produce harvesting while addressing campus food security through donation of gleaned produce. 1,816 pounds of food (squash, tomatoes, peppers, cabbage) were donated, 103 students were engaged, 257 service hours were completed, and 8 campus partners were involved. The goals and intended outcomes of the program are as follows:

- Provide organic, nutritious produce to the campus food pantry to reduce campus food insecurity
- Create a compelling community building experience for students who are passionate about gardening and/or food security to work collaboratively towards a common goal
- Expose students to parts of the research enterprise of the College of Agricultural Sciences and the Corvallis Farm Unit
- Provide an applied learning opportunity for students working in the Moore Family Center for Whole Grains and Nutrition majors
- Facilitate meaningful service-learning projects for Crop and Soil Science and Nutrition courses



Continued excellence in solid waste programs

[Campus Recycling](#) and its partners continued programming that moved OSU toward waste reduction. Specific highlights are below.

Repair Fairs: The Waste Watchers, a student volunteer team coordinated by Campus Recycling, ran their fourth year of an event series called the [Repair Fairs](#). At these events, volunteers from the on- and off-campus community offered free repairs for common items such as appliances, bicycles, clothing and more. In FY19, three events were offered with an estimated 309 people bringing 100 items. The events also offered sustainability-focused demonstrations, with an estimated total attendance of 82 people.

FY19 Residence Hall Move-Out Donation Drive: Campus Recycling, Surplus Property and University Housing and Dining Services again coordinated a [donation drive](#) to give residents the tools to recycle and donate materials they do not want to bring home with them upon moving out. In FY19, 22,533 pounds of donations were collected and processed, a 30% decrease from FY18.

While donations decreased, we can all be proud of the 11 tons that were donated this year. The donations help our local nonprofits and those in our community who are in need, plus it benefits the environment by promoting the reuse of materials!



Continued partnerships with the Corvallis Sustainability Coalition

Oregon State's extensive connections with and support of the [Corvallis Sustainability Coalition](#) included the OSU Sustainability Office again being the primary sponsor of the annual Sustainability Town Hall and many other activities:

- Staffing various committees and action teams, including the Coalition Steering Committee and Executive Committee
- Leadership of several action teams is coordinated by OSU staff, and leverages university resources through these channels
- Using the campus as a living laboratory for Coalition action team projects.
- Promoting Coalition events to the campus community through a wide variety of channels.

STARS Key Indicators

OSU continues to experience growth in enrollment and an overall increase in building square footage. Between FY10 and FY19, total student enrollment grew an astonishing 45.71%, from 21,969 to 32,012. Thirty seven percent of this increase were “distance education only” students enrolled in Ecampus courses; they were not physically present at the Corvallis campus. University building square footage also increased. For 2010, we reported an estimated 7 million square feet. Using more accurate and comprehensive methods for FY19, that number is approximately 10.91 million square feet. Other changes in assessment methods are discussed in more detail throughout this report.

Short narratives for three report subsections follow:

1. areas of significant performance change (large improvements or declines)
2. areas of consistently high performance
3. areas for potential improvement.

The following table show OSU’s STARS category scores for FY19.

STARS 2.1 category name	Points Possible	FY19		FY18-FY19 % Change
		Score	%	
Academics (AC)	58	47.65	82.2%	2.2%
Engagement (EN)	41	33.59	81.9%	-0.1%
Operations (OP)	66	33.60	51.0%	1.3%
Planning & Administration (PA)	32	24.1	75.3%	3.5%
Total	197	138.94	70.57%	2.0%

Table 4 - STARS version 2.1 summary table

These highest level category scores reveal, relative to STARS expected outcomes:

- Superb performance in Academics and Engagement
- Continued strong performance in Planning & Administration
- Weaker performance in Operations.

As shown in the tables above, OSU’s overall score increased 1.9% between FY18 and FY19.

Like the report for FY18, this report performs analysis at the STARS subcategory level. However, [past analyses](#) are still relevant to OSU’s progress. While this and subsequent reports focus on subcategory trends, readers are encouraged to explore the full set of credit scores in this document’s appendix.

Subcategories of significant change between FY18 and FY19

This section details changes between FY18 and FY19 performance within STARS subcategories. “Significant change” is considered here to be greater than +/- 5% for STARS subcategory scores; those scores are bolded below in Table 5. The narratives following the table discuss possible reasons for subcategory score changes. As evident in the table, the number of points possible within a STARS subcategory heavily impacts that subcategory’s influence on the institutional score. A lower score in Grounds, for example, is more than offset by an improved score in Curriculum.

STARS 2.1 sub-category name	Points Possible	FY18		FY19		FY18-FY19 % Change
		Score	%	Score	%	
Curriculum	40	30.32	75.8%	29.98	75.0%	-0.8%
Research	18	16.08	89.3%	17.67	98.2%	8.8%
Campus Engagement	21	19.25	91.7%	19.25	91.7%	0.0%
Public Engagement	20	14.37	71.9%	14.34	71.7%	-0.1%
Air & Climate	11	4.96	45.1%	5.18	47.1%	2.0%
Buildings	5	2.22	27.8%	0.97	19.4%	-8.4%
Energy	10	4.20	42.0%	4.21	42.1%	0.1%
Food & Dining	8	2.83	35.4%	2.69	33.6%	-1.8%
Grounds	4	3.05	76.3%	3.05	76.3%	0.0%
Purchasing	6	4.04	67.3%	3.53	58.8%	-8.5%
Transportation	7	4.37	62.4%	4.24	60.6%	-1.9%
Waste	9	4.62	46.2%	5.33	59.2%	13.0%
Water	6	3.92	65.3%	4.49	74.8%	9.5%
Coordination & Planning	8	7.00	87.5%	7.00	87.5%	0.0%
Diversity & Affordability	10	8.35	83.5%	8.38	83.8%	0.3%
Investment & Finance	7	3.67	52.4%	3.80	54.3%	1.9%
Wellbeing & Work	7	3.96	56.6%	4.92	70.3%	13.7%
Total	197	137.21	68.61%	138.94	70.57%	2.0%

Table 5 - STARS subcategory comparison – areas of significant change.

Research (FY18-FY19 change: +8.8%)

With OSU’s Carnegie Classification as a high research intensity institution, and as one of only two land, sea, space and sun grant universities in the U.S., high scores in Research are not surprising. For FY19, OSU demonstrated engagement from 70.92% of departments that conduct research, while in FY18 that number was approximately 50.97%. Similarly, the percentage of the institution's faculty and staff researchers engaged in sustainability research in FY19 was 44.32%, compared to 39.06% in FY18.

Buildings (FY18-FY19 change: -8.4%)

In FY19, OSU did not have eligible buildings that were constructed or underwent major renovations under a green building rating system, therefore the decrease in this credit. The Buildings subcategory continues to be a challenge because OSU has no buildings certified under a green building rating system for existing buildings, like [LEED® for Existing Buildings: Operations & Maintenance \(O&M\)](#) and/or 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 and building-level energy metering
- Usage of environmentally preferable materials
- Indoor environmental quality
- Water consumption and building-level water metering

Purchasing (FY18-FY19 change: -8.5%)

Electronics purchasing trended negatively. The percentage of expenditures on electronic products that are EPEAT Gold registered went from 91.9% in FY18 to 0.11% in FY19. Most of OSU’s expenditures on EPEAT registered desktop and laptop computers, displays, thin clients, tablets/slates, televisions, and imaging equipment were EPEAT silver.

Waste (FY18-FY19 change: +13.0%)

Key credits in this subcategory trended slightly positive with higher scores for Waste Minimization and Diversion than FY18. In FY19, there was a decrease in total waste generated at OSU, which resulted in a higher score for this subcategory. The table below shows progress in the Waste Minimization and Diversion credit.

	FY05 (base year)	FY18	FY19
Materials recycled	607.00	780.91	825.69
Materials composted	196.00	524.80	475.28
Materials reused, donated or re-sold	121.00	616.84	560.13
Materials disposed in a solid waste landfill or incinerator	3,105.00	2,155.38	2,057.17

Table 6 - Waste Minimization weights. All units are tons.

Water (FY18-FY19 change: +9.5%)

It is valuable to look at a longer trend of the Water subcategory’s largest (and only changing) credit: Water Use. Each year since FY10, OSU has held water consumption lower than the FY05 baseline established by STARS, which awards full points for the Water Use credit when institutions achieve a 30% or greater reduction relative to the baseline. FY19 showed a decrease in consumption since FY18, hence resulting in a higher score for the Water Use subcategory.

Reporting Year	Water Use (gallons)
FY05 (baseline year)	267,228,984
FY15	281,678,100
FY16	257,363,612
FY17	243,053,624
FY18	256,157,836
FY19	251,054,980

Table 7 - OSU Corvallis campus water consumption

Wellbeing & Work (FY18-FY19 change: +13.7%)

The number of workplace injuries and occupational disease cases per 100 FTE employees decreased from 3.34 in FY18 to 1.61 in FY19, resulting in a positive trend for the Wellbeing & Work credit. Institutions earn full points for having no recordable workplace injuries and occupational disease cases in the performance year.

Subcategories of high performance

Categories of “high performance” are those where OSU achieved 80% or more of STARS points. Those subcategories are bolded in the table below.

STARS 2.1 sub-category name	Points Possible	FY18		FY19		FY18-FY19
		Score	%	Score	%	% Change
Curriculum	40	30.32	75.8%	29.98	75.0%	-0.8%
Research	18	16.08	89.3%	17.67	98.2%	8.8%
Campus Engagement	21	19.25	91.7%	19.25	91.7%	0.0%
Public Engagement	20	14.37	71.9%	14.34	71.7%	-0.1%
Air & Climate	11	4.96	45.1%	5.18	47.1%	2.0%
Buildings	5	2.22	27.8%	0.97	19.4%	-8.4%
Energy	10	4.20	42.0%	4.21	42.1%	0.1%
Food & Dining	8	2.83	35.4%	2.69	33.6%	-1.8%
Grounds	4	3.05	76.3%	3.05	76.3%	0.0%
Purchasing	6	4.04	67.3%	3.53	58.8%	-8.5%
Transportation	7	4.37	62.4%	4.24	60.6%	-1.9%
Waste	9	4.62	46.2%	5.33	59.2%	13.0%
Water	6	3.92	65.3%	4.49	74.8%	9.5%
Coordination & Planning	8	7.00	87.5%	7.00	87.5%	0.0%
Diversity & Affordability	10	8.35	83.5%	8.38	83.8%	0.3%
Investment & Finance	7	3.67	52.4%	3.80	54.3%	1.9%
Wellbeing & Work	7	3.96	56.6%	4.92	70.3%	13.7%
Total	197	137.21	68.61%	138.94	70.57%	2.0%

Table 8 - STARS subcategory comparison – areas of significant change.

Because they have been discussed previously in the subcategories of significant change section of this report, the following subcategories will not be included in the discussion here:

- Research

Campus Engagement (FY19 score: 91.7%)

Oregon State continues to be a place of great opportunity for students who want to become engaged with campus sustainability projects, services and programs. OSU’s strong commitment to student engagement around sustainability, led by Community Engagement and Leadership, and supported by Campus Recycling and the Sustainability Office, covered all student-oriented credits within this subcategory.

Coordination & Planning (FY19 score: 87.5%)

As with each STARS assessment, OSU has attained full scores for having sustainability staff and committees. In STARS 2.1, the evaluation of sustainability in planning-related documents became much more robust and resulted in a 87.5% score for the Sustainability Planning credit. Full points cannot be attained until the university develops plans with measureable outcomes that address dining services, purchasing, water, and investment.

Diversity & Affordability (FY19 score: 83.8%)

Oregon State continues to demonstrate strengths in the topics covered by this subcategory. Assessment of diversity initiatives continues to be qualitative and OSU has again scored full points in the diversity related credits of this subcategory. Previous 100% scores have declined slightly due the more rigorous and quantitative Affordability and Access credit, the indicators for which are listed below.

	FY18	FY19
The percentage of entering students that are low-income	34.0	31.53
The graduation/success rate for low-income students	55.9	58.80
The percentage of student financial need met, on average	69.6	70.90
The percentage of students graduating with no interest-bearing student loan debt	42.2	43.50

Table 9 - Indicators that the institution is accessible and affordable to low-income students

Subcategories of potential improvement

This section details areas of potential score improvement and reasons for lower performance in some areas. Generally, subcategories for which the university scored 59.9% or fewer of available points are included in this section.

STARS 2.1 sub-category name	Points Possible	FY18		FY19		FY18-FY19
		Score	%	Score	%	% Change
Curriculum	40	30.32	75.8%	29.98	75.0%	-0.8%
Research	18	16.08	89.3%	17.67	98.2%	8.8%
Campus Engagement	21	19.25	91.7%	19.25	91.7%	0.0%
Public Engagement	20	14.37	71.9%	14.34	71.7%	-0.1%
Air & Climate	11	4.96	45.1%	5.18	47.1%	2.0%
Buildings	5	2.22	27.8%	0.97	19.4%	-8.4%
Energy	10	4.20	42.0%	4.21	42.1%	0.1%
Food & Dining	8	2.83	35.4%	2.69	33.6%	-1.8%
Grounds	4	3.05	76.3%	3.05	76.3%	0.0%
Purchasing	6	4.04	67.3%	3.53	58.8%	-8.5%
Transportation	7	4.37	62.4%	4.24	60.6%	-1.9%
Waste	9	4.62	46.2%	5.33	59.2%	13.0%
Water	6	3.92	65.3%	4.49	74.8%	9.5%
Coordination & Planning	8	7.00	87.5%	7.00	87.5%	0.0%
Diversity & Affordability	10	8.35	83.5%	8.38	83.8%	0.3%
Investment & Finance	7	3.67	52.4%	3.80	54.3%	1.9%
Wellbeing & Work	7	3.96	56.6%	4.92	70.3%	13.7%
Total	197	137.21	68.61%	138.94	70.57%	2.0%

Table 10 - STARS subcategory comparison – areas of significant change.

Because they have been discussed previously in the subcategories of significant change section of this report, the following subcategories will not be included in the discussion here:

- Buildings
- Purchasing

Air & Climate (FY19 score: 47.1%)

In the Air and Climate subcategory, ten of the eleven available points fall within the Greenhouse Gas (GHG) Emissions credit, and OSU obtained 4.18 points for FY19. As shown in OSU's [annual greenhouse gas inventory reports](#), gross emissions increased since FY18, mainly due to increased consumption of purchased electricity. President Ray's April 2007 signing of the Carbon Commitment has motivated some action and OSU has been able to capitalize upon other opportunities since 2007. A large portion of OSU's reduction is a result of the Energy Center, OSU's cogeneration facility that produces nearly half of the Corvallis campus' electricity and all steam used for building heat. With cogeneration, or combined heat and power, a majority of steam is created from the "waste" heat that is inherent with the electrical generation process. By capturing this waste heat, efficiencies increase.

Energy (FY19 score: 42.1%)

FY19 saw 1,156,380.6 million Btu (MMBtu) of energy consumed while 1,152,692.7 MMBtu were consumed in FY18. This increase in energy consumption was partly due to increased electricity use, largely attributable to the reconstruction of Peavy Hall. OSU still needs to reduce building energy consumption per gross square foot by 50% of its baseline year consumption to get full credit for this category.

Food & Dining (FY19 score: 33.6%)

Credits for this subcategory fall into two parts: one credit consolidates all food and beverage purchasing practices, while the second credit focuses on sustainable dining policies, commitment programs, and food waste prevention systems. The proportion of OSU food and beverage expenditures that met sustainability criteria for FY19 was 13% which is far from the 75% required to get the maximum points for the Food and Beverage subcategory.

Data verification is difficult for food purchases using OSU's existing procurement system. A major factor contributing to a lower-than-verifiable score in this subcategory is data availability. Institutional-scale food purchasing often presents insurmountable challenges in data and statistical granularity needed to make accurate assessments of food sourcing and sustainability.

Investment & Finance (FY19 score: 54.3%)

Still hovering at this report's upper boundary of low performance, OSU's Investment & Finance subcategory score increased very slightly. The low score is due to the low percentage of the institution's investment pool in positive sustainability investments, 19.45% in FY19; and the lack of representation of faculty and students on OSU's committee on investor responsibility.

Appendix

STARS 2.1 Credit Score Detail Table

	Points Possible	FY18 Score	FY18 %	FY19 Score	FY19 %	% Change
Curriculum	40	30.32	75.8%	29.98	75.0%	-0.8%
AC-1: Academic Courses	14	14.00	100.0%	13.68	97.7%	-2.3%
AC-2: Learning Outcomes	8	4.32	54.0%	4.30	53.8%	-0.3%
AC-3: Undergraduate Program	3	3.00	100.0%	3.00	100.0%	0.0%
AC-4: Graduate Program	3	3.00	100.0%	3.00	100.0%	0.0%
AC-5: Immersive Experience	2	2.00	100.0%	2.00	100.0%	0.0%
AC-6: Sustainability Literacy Assessment	4	0.00	N/A	0.00	N/A	N/A
AC-7: Incentives for Developing Courses	2	0.00	N/A	0.00	N/A	N/A
AC-8: Campus as a Living Laboratory	4	4.00	100.0%	4.00	100.0%	0.0%
Research	18	16.08	89.3%	17.67	98.2%	8.8%
AC-9: Research and Scholarship	12	10.08	84.0%	11.67	97.3%	13.3%
AC-10: Support for Research	4	4.00	100.0%	4.00	100.0%	0.0%
AC-11: Open Access to Research	2	2.00	100.0%	2.00	100.0%	0.0%
Campus Engagement	21	19.25	91.7%	19.25	91.7%	0.0%
EN-1: Student Educators Program	4	4.00	100.0%	4.00	100.0%	0.0%
EN-2: Student Orientation	2	2.00	100.0%	2.00	100.0%	0.0%
EN-3: Student Life	2	2.00	100.0%	2.00	100.0%	0.0%
EN-4: Outreach Materials and Publications	2	2.00	100.0%	2.00	100.0%	0.0%
EN-5: Outreach Campaign	4	4.00	100.0%	4.00	100.0%	0.0%
EN-6: Assessing Sustainability Culture	1	0.00	N/A	0.00	N/A	
EN-7: Employee Educators Program	3	3.00	100.0%	3.00	100.0%	0.0%
EN-8: Employee Orientation	1	1.00	100.0%	1.00	100.0%	0.0%
EN-9: Staff Professional Development	2	1.25	62.5%	1.25	62.5%	0.0%
Public Engagement	20	14.37	71.9%	14.34	71.7%	-0.2%
EN-10: Community Partnerships	3	3.00	100.0%	3.00	100.0%	0.0%
EN-11: Inter-Campus Collaboration	3	2.50	83.3%	2.50	83.3%	0.0%
EN-12: Continuing Education	5	5.00	100.0%	5.00	100.0%	0.0%
EN-13: Community Service	5	1.87	37.4%	1.84	36.8%	-0.6%
EN-14: Participation in Public Policy	2	2.00	100.0%	2.00	100.0%	0.0%
EN-15: Trademark Licensing	2	0.00	N/A	0.00	N/A	N/A
Air & Climate	11	4.96	45.1%	5.18	47.1%	2.0%
OP-1: Greenhouse Gas Emissions	10	3.96	39.6%	4.18	41.8%	2.2%
OP-2: Outdoor Air Quality	1	1.00	100.0%	1.00	100.0%	0.0%
Buildings	8	2.22	27.8%	0.97	19.4%	-8.4%
OP-3: Building Operations and Maintenance	5	0.97	19.4%	0.97	19.4%	0.0%
OP-4: Building Design and Construction	3	1.25	41.7%	0.00	0.0%	-41.7%
Energy	10	4.20	42.0%	4.21	42.1%	0.1%
OP-5: Building Energy Consumption	6	4.15	69.2%	4.14	69.0%	-0.2%
OP-6: Clean and Renewable Energy	4	0.05	1.3%	0.07	1.8%	0.5%

Food & Dining	8	2.83	35.4%	2.69	33.6%	-1.8%
OP-7: Food and Beverage Purchasing	6	0.83	13.8%	0.69	11.5%	-2.3%
OP-8: Sustainable Dining	2	2.00	100.0%	2.00	100.0%	0.0%
Grounds	4	3.05	76.3%	3.05	76.3%	0.0%
OP-9: Landscape Management	2	1.05	52.5%	1.05	52.5%	0.0%
OP-10: Biodiversity	2	2.00	100.0%	2.00	100.0%	0.0%
Purchasing	6	4.04	67.3%	3.53	58.8%	-8.5%
OP-11: Sustainable Procurement	3	1.75	58.3%	1.75	58.3%	0.0%
OP-12: Electronics Purchasing	1	0.92	92.0%	0.35	35.0%	-57.0%
OP-13: Cleaning Products Purchasing	1	0.92	92.0%	0.95	95.0%	3.0%
OP-14: Office Paper Purchasing	1	0.45	45.0%	0.48	48.0%	3.0%
Transportation	7	4.37	62.4%	4.24	60.6%	-1.9%
OP-15: Campus Fleet	1	0.17	17.0%	0.10	10.0%	-7.0%
OP-16: Student Commute Modal Split	2	1.42	71.0%	1.44	72.0%	1.0%
OP-17: Employee Commute Modal Split	2	0.78	39.0%	0.70	35.0%	-4.0%
OP-18: Support for Sustainable Transportation	2	2.00	100.0%	2.00	100.0%	0.0%
Waste	9	4.62	46.2%	5.33	59.2%	13.0%
OP-19: Waste Minimization and Diversion	8	3.62	45.3%	4.33	54.1%	8.9%
OP-20: Construction and Demolition Waste Diversion	0	0.00	N/A	0.00	N/A	N/A
OP-21: Hazardous Waste Management	1	1.00	100.0%	1.00	100.0%	0.0%
Water	6	3.92	65.3%	4.49	74.8%	9.5%
OP-22: Water Use	4	1.92	48.0%	2.49	62.3%	14.3%
OP-23: Rainwater Management	2	2.00	100.0%	2.00	100.0%	0.0%
Coordination & Planning	8	7.00	87.5%	7.00	87.5%	0.0%
PA-1: Sustainability Coordination	1	1.00	100.0%	1.00	100.0%	0.0%
PA-2: Sustainability Planning	4	3.00	75.0%	3.00	75.0%	0.0%
PA-3: Participatory Governance	3	3.00	100.0%	3.00	100.0%	0.0%
Diversity & Affordability	10	8.35	83.5%	8.38	83.8%	0.3%
PA-4: Diversity and Equity Coordination	2	1.33	66.5%	1.33	66.5%	0.0%
PA-5: Assessing Diversity and Equity	1	1.00	100.0%	1.00	100.0%	0.0%
PA-6: Support for Underrepresented Groups	3	3.00	100.0%	3.00	100.0%	0.0%
PA-7: Affordability and Access	4	3.02	75.5%	3.05	76.3%	0.7%
Investment & Finance	7	3.67	52.4%	3.80	54.3%	1.9%
PA-8: Committee on Investor Responsibility	2	0.50	25.0%	0.50	25.0%	0.0%
PA-9: Sustainable Investment	4	2.17	54.3%	2.30	57.5%	3.3%
PA-10: Investment Disclosure	1	1.00	100.0%	1.00	100.0%	0.0%
Wellbeing & Work	7	3.96	56.6%	4.92	70.3%	13.7%
PA-11: Employee Compensation	3	2.17	72.3%	2.22	74.0%	1.7%
PA-12: Assessing Employee Satisfaction	1	0.22	22.0%	0.39	39.0%	17.0%
PA-13: Wellness Program	1	1.00	100.0%	1.00	100.0%	0.0%
PA-14: Workplace Health and Safety	2	0.57	28.5%	1.31	65.5%	37.0%