# OREGON STATE UNIVERSITY SUSTAINABILITY REPORT

Fiscal Year 2017

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**OSU SUSTAINABILITY OFFICE - MARCH 2018** 



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# **Executive Summary**

Oregon State University's steady movement toward a more sustainable campus continued in Fiscal Year 2017 (FY17). 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 common sustainability assessment system known as the Sustainability Tracking, Assessment and Rating System (STARS). Despite significant growth in student enrollment and building space, Oregon State has six 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

STARS Rating (all versions)	<u>s</u>
Platinum	1
Gold	94
Silver	138
Bronze	28
Reporter	12

Table 1 - Oregon State University's STARS submissions

Table 2 - STARS participant ratings

Figure 3 summarizes and trends OSU's sustainability performance by STARS indicator subcategories for FY17.

OSU's FY17 sustainability performance by STARS subcategories						
Positive trending STARS subcategories, FY16-FY17  • Water	Negative trending STARS subcategories, FY16-FY17  • Buildings • Food & Dining					
<ul> <li>High performing STARS subcategories, FY17</li> <li>Campus Engagement</li> <li>Coordination &amp; Planning</li> <li>Diversity &amp; Affordability</li> <li>Research</li> </ul>	Low performing STARS subcategories, FY17					

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 FY17 include the introduction of the Food in Culture and Social Justice Undergraduate Certificates and Graduate Minors in the OSU curriculum, the progress of the OSU Search Advocate Program, the continuation of the Corvallis-OSU partnership on community livability, among others.

### Introduction

Oregon State University (OSU) inched toward sustainability during Fiscal Year 2017 (FY17). OSU aspires to be in the top 10 colleges and universities in the United States recognized for excellence in sustainability. With performance that puts OSU on the <u>Sierra Club's Cool Schools list</u>, being included in The Princeton Review's Top 50 Green Colleges list and <u>2016 Guide to 361 Green Colleges</u> (out of around 800 surveyed) 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, 2016 and June 30, 2017. 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. Increasingly visibility is an effective recruiting tool for new students. 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 800 higher education institutions, STARS is more comprehensive and standardized than any previous 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 external 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 FY16 are listed



below. Visit the **sustainability recognition page** for information on these and other awards.



The <u>Princeton Review's 2017 Guide to 375 Green Colleges</u>: OSU was recognized for sustainability practices such as food sourcing, transportation, green building, opportunities to focus on the environment and sustainability in curriculum and energy efficiency.

**League of American Bicyclists** Bicycle Friendly University program: OSU was awarded 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 2017 edition of "Cool Schools." This puts OSU 20th in the nation.

**Tree Campus USA:** OSU has been recognized seven 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 leaning opportunities centered on campus and community forestry events.



## FY17 Sustainability Highlights

# Food in Culture and Social Justice Undergraduate Certificates and Graduate Minors – STARS Innovation credit

Through the Food in Culture and Social Justice Program, students can earn undergraduate certificates and graduate minors in this area of study. Courses include: Introduction to Local and Global Food Systems, Food Studies in a Social Justice Perspective, Agricultural and Food Policy Issues, and Sustainability for the Common Good. All students earn at least one credit via volunteer opportunities with food- and agriculture-related organizations. Through the "out of the classroom" Food Projects that all students are required to complete, students work with campus and community partners facilitating activities like leading cooking classes and gardening workshops, conducting program assessments, event planning, and creating resources like maps and guides. The program also includes an Intercultural Learning Community on Food in Culture and Social Justice in Oregon and Ecuador every other year, which incorporates students, community members and professors from both countries.

What differentiates OSU's Food in Culture and Social Justice Program is that it offers undergraduate certificates and graduate minors. Of eight programs recognized in 2016 by Seedstock, Oregon State was the only institution to offer undergraduate certificates and graduate minors.

### OSU Search Advocate Program - STARS Innovation credit

Established in 2008, OSU's Search Advocate program enhances equity, validity, and diversity in university hiring. Search Advocates are OSU faculty, staff, and students who are trained as search and selection process advisors. Their preparation includes a two-part workshop series addressing current research about implicit bias, diversity, the changing legal landscape in hiring, inclusive employment principles, practical strategies for each stage of the search process, and effective ways to be an advocate on a search committee. As a quality assurance measure, advocates who wish to remain eligible beyond the first year must engage in relevant continuing education that is recorded and approved through the Search Advocate program.

As of September 2016, the university had trained more than 800 people, or about 15 percent of the current faculty and staff, to become search advocates.

### Corvallis-OSU partnership on community livability - STARS Innovation credit

The City of Corvallis and OSU formed the Community Relations Advisory Group (CRAG) to develop recommendations on livability. CRAG focuses on community livability issues and opportunities in the nearby campus neighborhoods. CRAG works with city, university, community businesses and non-profit organizations to recommend strategies to improve and sustain livability; establish measures of livability and monitor the progress of work under\taken to implement neighborhood livability policies; and routinely inform the Human Services Committee of progress related to achieving these recommendations, as well as the broad activities of the city and the university related to improved community relations.

OSU also created the office Corvallis Community Relations. The Corvallis Community Relations office enhances neighborhood livability and inspires a shared responsibility for creating a healthy, inclusive OSU-Corvallis community. The office educates students about university policies and local ordinances, strengthens neighborhood relations through effective communication and collaboration with community-university stakeholders, and promotes a sense of belonging and a commitment to civic responsibility and social awareness that fosters student achievement, health and wellness, and overall happiness for everyone living in our neighborhood.

### OSU and City of Corvallis Pledge, "We Are Still In"



A national pledge made its way to the City of Corvallis where the mayor and Oregon State President vowed, "We Are Still In". This pledge supporting national climate action was signed by thousands all over the United States. Oregon State is not new to sustainability and climate change research. "Improving the environment and addressing climate change are longstanding priorities and initiatives of the university", says President Ed

Ray. He continued, "the university is a front-runner in academically understanding and measuring climate change, including research efforts to develop renewable and low-carbon sources of energy, such as wave, wind, nuclear and solar energy systems."

### Pedal Corvallis Comes to OSU Campus

In June 2017, Pedal Corvallis arrived to Corvallis! Pedal Corvallis is a community bikeshare program targeted to help Medicaid members access medical appointments and personal trips; it also is open to all community members age 18 and older. Oregon State University in partnership with Oregon Cascades West Council of Governments (OCWCOG), installed two bikeshare stations on campus.

"Bikesharing gives you the freedom of a bike without needing to buy, store, or maintain one of your own. It will also give you access to a bike



when yours isn't on campus" said Meredith Williams, director of OSU Transportation Services. "This adds another great option for students, employees, and campus visitors wanting to get around Corvallis. Pedal Corvallis will complement existing services such as the free campus shuttle, Zipcar, and the many transit routes that serve OSU."

#### OSU Launched Green Office Certification



The Green Office Certification was created through a partnership between the Sustainability Office, Campus Recycling and Transportation Services. The Green Office Certification is a simple yet effective way for OSU faculty and staff to further their sustainability efforts and get recognition for their work. It is also intended to provide new ideas for easy steps your office can take to reduce your environmental footprint and carbon emissions. The Certification utilizes an online Qualtrics survey to assess

existing office practices in areas like energy, water, waste management, purchasing, transportation and outreach. Upon completion, the survey will be scored. Bronze, silver, gold, and platinum are the four certification levels based on the score.

### Winona LaDuke, "An Agenda for the New President"

In November 2016, internationally renowned writer, activist and visionary Winona LaDuke visited OSU. Ten days after the national elections, LaDuke was welcomed to help understand this moment in history and speak about the some of the many ongoing efforts toward social and environmental justice. LaDuke adressed the interrelated issues of energy, food sovereignty and Native Rights, and offer ideas about what the new President and Congress can do to support the rights of Native Americans, address climate justice, and move the U.S. toward a sustainable, post-carbon economy.



# Wave energy center receives \$40 million to construct world's premier test facility



In November 2016 Oregon State University's Northwest National Marine Renewable Energy Center was awarded up to \$40 million from the U.S. Department of Energy, to create the world's premier wave energy test facility in Newport.

The NNMREC facility, known as the Pacific Marine Energy Center South Energy Test Site, or PMEC-SETS, is planned to be operational by 2020. It will be able

to test wave energy "converters" that harness the energy of ocean waves and turn it into electricity. Companies around the world are already anticipating construction of the new facility to test and perfect their technologies.

In making the award, the agency noted that more than 50 percent of the U.S. population lives within 50 miles of coastlines, offering America the potential to develop a domestic wave energy industry that could help provide reliable power to coastal regions.

Investments in marine and hydrokinetic energy technology will encourage domestic manufacturing, create jobs, and advance this technology to help achieve the nation's energy goals. Studies have estimated that even if only a small portion of the energy available from waves is recovered, millions of homes could be powered.

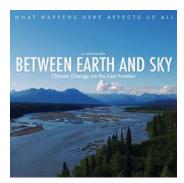
# OSU won the Pac-12's Athlete/Player Engagement honors thanks to its Beaver Athlete Sustainability Team (BAST)

In April 2017, the Pac-12, in partnership with the Green Sports Alliance, announced the winners of its third annual Zero Waste Bowl. The Pac-12 Zero Waste Bowl aimed to determine which school could divert the most waste from the landfill at a selected football (or other men's or women's) home game during the Fall 2016 sports season, as well as which one used the most innovative methods to expand the reach and impact of the competition.

Oregon State won the Athlete/Player Engagement honors thanks to its Beaver Athlete Sustainability Team (BAST), a group led by swimmer Jesikah Cavanaugh and Sam Lewis of women's cross country. BAST came together because they had a passion for sustainability, the climate change fight and saw areas of waste in their community and athletic department. They started with small ideas which evolved into an organized group focused on engagement, education and service to the environment.



### The Harward Endowed Lecture Series sponsored the Showing of the Film "Between Earth and Sky"



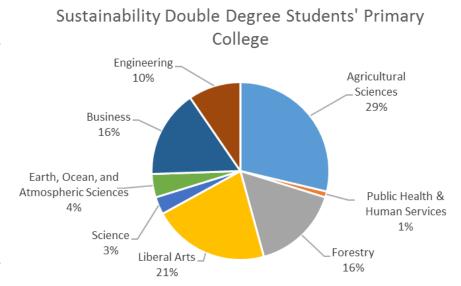
In May 2017, the film "Between Earth and Sky" was shown at OSU in at The LaSells Stewart Center. The film documents the effects of climate change on the soils, ecosystems, wildlife, and communities in Alaska. The event included the Science-Climate-Art Showcase that featured students, artists, and community members working to address and bring attention to climate change issues. Several tables featured hands-on, interactive activities meant for the whole family. Following the film screening, a panel discussion with the film's director and producer was held.

### 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 2016-2017, there were a total of 94 students who were enrolled in the SDD consisting of Corvallis campus students (55%), Ecampus students (39%) and Cascades Campus students (5%). The majority of SDD students have senior class standing (70%), 20% are juniors, 5% are sophomores, 3% are first-year, and 1% are post-baccalaureate. The inter-disciplinary SDD program includes students from primary majors as shown in the chart.



### The Sustainability Minor

The sustainability minor was first offer 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 beyond the 180-credit minimum for graduation.

In the academic year 2016-2017, there were 39 students who were enrolled in the sustainability minor consisting of Corvallis campus students (74%), Ecampus students (10%) and Cascades Campus students (15%). The majority of students have senior class standing (51%), 31% are juniors, and 18% are sophomores.

### SSI programs create culture of sustainability

**Climate Conversations:** SSI created a two-day, campus-wide climate change awareness project that consisted of interactive and informational activities, preceded by class discussions to get students thinking about sustainability issues. Students in classes participating in Climate Conversations received the unique opportunity to gain an understanding of the fascinating connections between climate change and their respective area of study.

### Continued excellence in solid waste programs

<u>Campus Recycling</u> and its partners continued programming that moved OSU toward waste reduction. Specific highlights are below.



**Repair Fairs:** The Waste Watchers, a student volunteer team jointly coordinated by Campus Recycling and the Student Sustainability Initiative, ran their fourth year of an event series called the <u>Repair Fairs</u>. 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 FY17, three events were offered with an estimated 140 people bringing 126 items, 85 percent of which were fixed – that's approximately 131 items repaired for reuse. The events also offered a total of 12 sustainability-focused demonstrations, with an estimated total attendance of 89 people.

# FY17 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 FY16, 35,676 pounds of donations were collected and processed, much of which were given to local nonprofit organizations. These weights completely smashed the original 24,000-pound goal and reached the highest level since weight tracking began in 2010. Donations of housewares, food, toiletries,



school supplies, clothing, linens and shoes were 19 to 33 percent higher this year. The largest increase came from wood, which totaled 7,864 pounds – an over 600 percent increase from the previous year. The large increase in wood donations may be a product of more residents using loft kits and donating the wood instead of taking it home or throwing it away.

### Continued partnerships with the Corvallis Sustainability Coalition

Oregon State's extensive connections with and support of the <u>Corvallis Sustainability Coalition</u> 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. Specifically, the Energy Action Team and Water Action Team have catalyzed opportunities in this way
- Promoting Coalition events to the campus community through a wide variety of channels.

**Stormwater Filters on Campus.** Seniors in chemical, biological, and environmental engineering at Oregon State University worked with David Eckert of the Corvallis Sustainability Coalition on a project to analyze OSU's StormFilters, which are located around campus for the purpose of removing contaminants from storm water.

## STARS Key Indicators

OSU continues to experience growth in enrollment and an overall increase in building square footage. Between FY10 and FY17, total student enrollment grew an astonishing 42%, from 21,969 to 31,303. Thirty-eight 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 FY17, that number is approximately 9.97 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.

In May 2016, AASHE launched STARS 2.1, an update to STARS 2.0 versions. STARS 2.1 provides a streamlined set of credits, auto-calculated metrics, and a collaborative review and revision process. The following table show OSU's STARS category scores for FY16.

STARS 2.1 catagory name	Points	FY	17	FY16-FY17%
STARS 2.1 category name	Possible	Score	%	Change
Academics (AC)	58	45.51	78.5%	2.2%
Engagement (EN)	41	33.61	82.0%	-1.3%
Operations (OP)	70	35.96	35.96 51.4%	
Planning & Administration (PA)	32	22.06 68.9%		-1.5%
Total	201	137.14	68.22%	-0.5%

Table 4 - STARS version 2.1 summary table

These highest level category scores reveal:

- Superb performance in Engagement and, to a lesser extent, Academics
- Continued strong performance in Planning & Administration
- Weaker performance in Operations.

As shown in the tables above, OSU's overall score decreased 0.5% between FY16 and FY17.

Like the report for FY16, this report performs analysis at the STARS subcategory level. However, <u>past analyses</u> 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 FY16 and FY17

This section details changes between FY16 and FY17 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	FY	<b>1</b> 6	FY	17	FY16-FY17
31AK32.1 Sub-category Haine	Possible	Score	%	Score	%	% Change
Curriculum	40	28.63	71.6%	29.96	74.9%	3.3%
Research	18	15.60	86.7%	15.55	86.4%	-0.3%
Campus Engagement	21	19.25	91.7%	19.25	91.7%	0.0%
Public Engagement	20	14.90	74.5%	14.36	71.8%	-2.7%
Air & Climate	11	4.93	44.8%	4.90	44.5%	-0.3%
Buildings	8	2.91	36.4%	2.22	27.8%	-8.6%
Energy	10	3.95	39.5%	3.78	37.8%	-1.7%
Food & Dining	8	4.00	50.0%	3.16	39.5%	-10.5%
Grounds	4	3.02	75.5%	3.05	76.3%	0.7%
Purchasing	6	3.94	65.7%	3.72	62.0%	-3.7%
Transportation	7	4.43	63.3%	4.37	62.4%	-0.9%
Waste	10	5.74	57.4%	6.10	61.0%	3.6%
Water	6	4.26	71.0%	4.66	77.7%	6.7%
Coordination & Planning	8	6.75	84.4%	6.75	84.4%	0.0%
Diversity & Affordability	10	8.55	85.5%	8.37	83.7%	-1.8%
Investment & Finance	7	2.60	37.1%	2.58	36.9%	-0.3%
Wellbeing & Work	7	4.64	66.3%	4.36	62.3%	-4.0%
Total	201	138.10	68.7%	137.14	68.23%	-0.5%

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

### Buildings (FY16-FY17 change: -8.6%)

The change is this category was caused by the lack of newly constructed space certified under a rating system for design and construction used by an Established Green Building Council (GBC). In 2017, there were 10,500 square feet of total floor area of newly constructed or renovated building space, but none was certified under a GBC system.

The Buildings subcategory continues to be a challenge because OSU has no buildings certified under a green building rating system for <u>existing buildings</u>, like <u>LEED® for Existing Buildings</u>: <u>Operations & Maintenance (O&M)</u> 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

<sup>\*</sup>Performance changes between FY16 and FY17 are due in part to changes in the STARS assessment tool.

### Food & Dining (FY16-FY17 change: -10.5%)

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.

Although the proportion of OSU food and beverage expenditures that meet sustainability criteria increased, the percentage of total dining services food purchases comprised of conventionally produced animal products increased from an estimated 7.2% in FY16 to 22.6% in FY17, creating the change in this credit.

Data verification is difficult for food purchases using OSU's existing procurement system. A major factor contributing to a lower-than-verifiable scores 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.

### **Water** (FY16-FY17 change: +6.7%)

As with other areas of STARS, it's 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.

Reporting Year	Water Use (gallons)
FY05 (baseline year)	267,228,984
FY14	253,188,276
FY15	281,678,100
FY16	257,363,612
FY17	243,053,624

Table 6 - OSU Corvallis campus water consumption

Points attained for this credit were from implemented practices like:

- using low impact development as a standard practice to reduce rainwater/stormwater runoff volume and improve outgoing water quality for new construction, major renovation, and other projects
- employing rainwater harvesting
- utilizing porous (i.e. permeable) paving
- installing bio swales on campus (vegetated, compost or stone).

OSU uses non-potable water in place of potable sources for toilet and urinals in Kelley Engineering Center and also for boiler makeup water in the Energy Center. Unfortunately, the use of rainwater is not currently measured.

### 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	FY	16	FY	17	FY16-FY17
STANS 212 Sub-category name	Possible	Score	%	Score	%	% Change
Curriculum	40	28.63	71.6%	29.96	74.9%	3.3%
Research	18	15.60	86.7%	15.55	86.4%	-0.3%
Campus Engagement	21	19.25	91.7%	19.25	91.7%	0.0%
Public Engagement	20	14.90	74.5%	14.36	71.8%	-2.7%
Air & Climate	11	4.93	44.8%	4.90	44.5%	-0.3%
Buildings	8	2.91	36.4%	2.22	27.8%	-8.6%
Energy	10	3.95	39.5%	3.78	37.8%	-1.7%
Food & Dining	8	4.00	50.0%	3.16	39.5%	-10.5%
Grounds	4	3.02	75.5%	3.05	76.3%	0.7%
Purchasing	6	3.94	65.7%	3.72	62.0%	-3.7%
Transportation	7	4.43	63.3%	4.37	62.4%	-0.9%
Waste	10	5.74	57.4%	6.10	61.0%	3.6%
Water	6	4.26	71.0%	4.66	77.7%	6.7%
Coordination & Planning	8	6.75	84.4%	6.75	84.4%	0.0%
Diversity & Affordability	10	8.55	85.5%	8.37	83.7%	-1.8%
Investment & Finance	7	2.60	37.1%	2.58	36.9%	-0.3%
Wellbeing & Work	7	4.64	66.3%	4.36	62.3%	-4.0%
Total	201	138.10	68.7%	137.14	68.23%	-0.5%

Table 5 - 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:

- Campus Engagement
- Coordination & Planning

### Research (FY17 score: 86.4%)

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 FY17, OSU demonstrated engagement from 44% of departments that conduct research, while in FY16 that number was approximately 45%. The STARS target for full point allocation is 75% of departments that conduct research. For engagement at the individual faculty level, STARS awards full credit for the number of faculty doing sustainability research when 15% or more of faculty are engaged in sustainability research. For FY17, OSU had 15.3% of faculty engaged.

<sup>\*</sup>Performance changes between FY16 and FY17 are due in part to changes in the STARS assessment tool.

### Campus Engagement (FY17 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 the Student Sustainability Initiative and supported by Campus Recycling and the Sustainability Office, covered all student oriented credits within this subcategory.

### Coordination, Planning and Governance (FY17 score: 84.4%)

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 68% 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 and Affordability (FY17 score: 83.7%)

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.

	FY16	FY17
The percentage of entering students that are low-income	48.0	32.2
The graduation/success rate for low-income students	69.2	64.3
The percentage of student financial need met, on average	66.0	65.2
The percentage of students graduating with no interest-bearing student loan debt	39.0	42.1

Table 8 - 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% or fewer of available points are included in this section.

STARS 2.1 sub-category name	Points	FY	16	FY	17	FY16-FY17
STARS 2.1 Sub-category hame	Possible	Score	%	Score	%	% Change
Curriculum	40	28.63	71.6%	29.96	74.9%	3.3%
Research	18	15.60	86.7%	15.55	86.4%	-0.3%
Campus Engagement	21	19.25	91.7%	19.25	91.7%	0.0%
Public Engagement	20	14.90	74.5%	14.36	71.8%	-2.7%
Air & Climate	11	4.93	44.8%	4.90	44.5%	-0.3%
Buildings	8	2.91	36.4%	2.22	27.8%	-8.6%
Energy	10	3.95	39.5%	3.78	37.8%	-1.7%
Food & Dining	8	4.00	50.0%	3.16	39.5%	-10.5%
Grounds	4	3.02	75.5%	3.05	76.3%	0.7%
Purchasing	6	3.94	65.7%	3.72	62.0%	-3.7%
Transportation	7	4.43	63.3%	4.37	62.4%	-0.9%
Waste	10	5.74	57.4%	6.10	61.0%	3.6%
Water	6	4.26	71.0%	4.66	77.7%	6.7%
Coordination & Planning	8	6.75	84.4%	6.75	84.4%	0.0%
Diversity & Affordability	10	8.55	85.5%	8.37	83.7%	-1.8%
Investment & Finance	7	2.60	37.1%	2.58	36.9%	-0.3%
Wellbeing & Work	7	4.64	66.3%	4.36	62.3%	-4.0%
Total	201	138.10	68.7%	137.14	68.23%	-0.5%

Table 5 - 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:

- Air & Climate
- Buildings
- Energy
- Food & Dining
- Investment & Finance

<sup>\*</sup>Performance changes between FY16 and FY17 are due in part to changes in the STARS assessment tool.

### Air and Climate (FY17 score: 44.5%)

In the Air and Climate subcategory, ten of the eleven available points fall within the Greenhouse Gas (GHG) Emissions credit. As shown in OSU's annual greenhouse gas inventory reports, gross emissions increased since FY16 due to expansion of the physical campus and student enrollment. However, the emissions per student FTE as well as the emissions per 1000 square feet of building space have remain virtually unchanged. 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 skyrocket.

### **Energy (FY17 score: 37.7%)**

FY17 saw 1,150,761.20 million Btu (MMBtu) of energy consumed while 1,192,941.4 MMBtu were consumed in FY16. This increase in energy consumption was partly due to the 10,500 square feet of total floor area of newly constructed or renovated building space in FY17.

### Investment (FY17 score: 36.9%)

The low score in this credit is due to the estimated amount of holdings in businesses selected for exemplary sustainability performance. For FY17, the OSU Foundation reported \$5.99M of \$5282M invested in such businesses. Other indicators in the Investment subcategory are qualitative and include:

- A publicly available sustainable investment policy
- Using its sustainable investment policy to select and guide investment managers
- Engaging in policy advocacy by participating in investor networks and/or engaging in interorganizational collaborations to share best practices.

# **Appendix**

## STARS 2.1 Credit Score Detail Table

	Points	F'	Y16	F	Y17	%
	Possible	Score	%	Score	%	Change
Curriculum	40	28.63	71.6%	29.96	74.9%	3.3%
AC-1: Academic Courses	14	13.76	98.3%	14.00	100.0%	1.7%
AC-2: Learning Outcomes	8	2.87	35.9%	3.96	49.5%	13.6%
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	0.0%	0.00	0.0%	0.0%
AC-7: Incentives for Developing Courses	2	0.00	0.0%	0.00	0.0%	0.0%
AC-8: Campus as a Living Laboratory	4	4.00	100.0%	4.00	100.0%	0.0%
Research	18	15.60	86.7%	15.55	86.4%	-0.3%
AC-9: Research and Scholarship	12	9.60	80.0%	9.55	79.6%	-0.4%
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	96.3%	19.25	91.7%	-4.6%
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	0.0%	
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	14.90	71.0%	14.36	71.8%	0.8%
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	2.40	48.0%	1.86	37.2%	-10.8%
EN-14: Participation in Public Policy	2	2.00	100.0%	2.00	100.0%	0.0%
EN-15: Trademark Licensing	2	0.00	0.0%	0.00	0.0%	0.0%
Air and Climate	11	4.93	44.8%	4.90	44.5%	-0.3%
OP-1: Greenhouse Gas Emissions	10	3.93	39.3%	3.90	39.0%	-0.3%
OP-2: Outdoor Air Quality	1	1.00	100.0%	1.00	100.0%	0.0%
Buildings	8	2.91	36.4%	2.22	27.8%	-8.6%
OP-3: Building Operations and Maintenance	5	0.97	19.4%	0.97	19.4%	0.0%
OP-4: Building Design and Construction	3	1.94	64.7%	1.25	41.7%	-23.0%
Energy	10	3.95	39.5%	3.78	37.8%	-1.7%
OP-5: Building Energy Consumption	6	3.89	64.8%	3.74	62.3%	-2.5%
OP-6: Clean and Renewable Energy	4	0.06	1.5%	0.04	1.0%	-0.5%
Food & Dining	8	4.00	57.1%	3.16	39.5%	-17.6%
OP-7: Food and Beverage Purchasing	6	2.00	33.3%	1.16	19.3%	-14.0%
OP-8: Sustainable Dining	2	2.00	100.0%	2.00	100.0%	0.0%
Grounds	4	3.02	75.5%	3.05	76.3%	0.7%
OP-9: Landscape Management	2	1.02	51.0%	1.05	52.5%	1.5%
OP-10: Biodiversity	2	2.00	100.0%	2.00	100.0%	0.0%
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Purchasing	6	3.94	65.7%	3.72	62.0%	-3.7%
OP-11: Sustainable Procurement	3	1.75	58.3%	1.75	58.3%	0.0%
OP-12: Electronics Purchasing	1	0.99	99.0%	0.77	77.0%	-22.0%
OP-13: Cleaning Products Purchasing	1	0.87	87.0%	0.86	86.0%	-1.0%
OP-14: Office Paper Purchasing	1	0.33	33.0%	0.34	34.0%	1.0%
Transportation	7	4.43	63.3%	4.37	62.4%	-0.9%
OP-15: Campus Fleet	1	0.17	17.0%	0.17	17.0%	0.0%
OP-16: Student Commute Modal Split	2	1.48	74.0%	1.42	71.0%	-3.0%
OP-17: Employee Commute Modal Split	2	0.78	39.0%	0.78	39.0%	0.0%
OP-18: Support for Sustainable Transportation	2	2.00	100.0%	2.00	100.0%	0.0%
Waste	10	5.74	57.4%	6.10	61.0%	3.6%
OP-19: Waste Minimization and Diversion	8	4.18	52.3%	5.10	63.8%	11.5%
OP-20: Construction and Demolition Waste Diversion	1	0.56	56.0%	0.00	0.0%	-56.0%
OP-21: Hazardous Waste Management	1	1.00	100.0%	1.00	100.0%	0.0%
Water	6	4.26	71.0%	4.66	77.7%	6.7%
OP-22: Water Use	4	2.26	56.5%	2.66	66.5%	10.0%
OP-23: Rainwater Management	2	2.00	100.0%	2.00	100.0%	0.0%
Coordination & Planning	8	6.75	84.4%	6.75	84.4%	0.0%
PA-1: Sustainability Coordination	1	1.00	100.0%	1.00	100.0%	0.0%
PA-2: Sustainability Planning	4	2.75	68.8%	2.75	68.8%	0.0%
PA-3: Participatory Governance	3	3.00	100.0%	3.00	100.0%	0.0%
Diversity & Affordability	10	8.55	85.5%	8.37	83.7%	-1.8%
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	3.22	80.5%	3.04	76.0%	-4.5%
Investment & Finance	7	2.60	37.1%	2.58	36.9%	-0.3%
PA-8: Committee on Investor Responsibility	2	0.50	25.0%	0.50	25.0%	0.0%
PA-9: Sustainable Investment	4	1.10	27.5%	1.08	27.0%	-0.5%
PA-10: Investment Disclosure	1	1.00	100.0%	1.00	100.0%	0.0%
Wellbeing & Work	7	4.64	66.3%	4.36	62.3%	-4.0%
PA-11: Employee Compensation	3	2.21	73.7%	1.90	63.3%	-10.3%
PA-12: Assessing Employee Satisfaction	1	0.38	38.0%	0.38	38.0%	0.0%
PA-13: Wellness Program	1	1.00	100.0%	1.00	100.0%	0.0%
PA-14: Workplace Health and Safety	2	1.05	52.5%	1.08	54.0%	1.5%