

OREGON STATE UNIVERSITY Sustainability Report

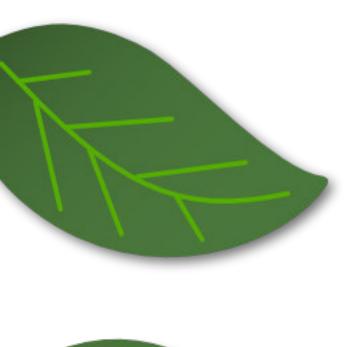
Fiscal Year 2020

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Executive Summary

Oregon State University's progress toward a more sustainable campus continued in Fiscal Year 2020 (FY20). 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 ten 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
2020	Dec. 23, 2020	2.2	74.29

STARS Ratings (all versions)					
Platinum	9				
Gold	161				
Silver	207				
Bronze	64				
Reporter	23				

Table 1 - Oregon State University's STARS submissions

Table 2 - STARS participant ratings

FY20 marked an unusual year with exceptional circumstances due to COVID-19. On March 18, 2020 OSU moved to remote instruction for all of spring term to protect the health and safety of OSU community members and to reduce the risk and spread of COVID-19. On March 20, 2020 OSU employees and staff were directed to stay home and work remotely if they were not staffing or accessing a critical in-person function. These circumstances had a significant impact on OSU's operations.

In August 2019, the STARS assessment tool moved to version 2.2, which included a streamlined set of credits, auto-calculated metrics, and a collaborative review and revision process. Where possible, this report both attempts comparisons and examines the limitations of those comparisons. The table below summarizes and trends OSU's sustainability performance by **STARS subcategories for FY20**.

OSU's FY20 sustainability perfo	rmance by STARS subcategories
Positive trending STARS subcategories, FY19-FY20 Public Engagement Air & Climate Buildings Energy Food & Dining Purchasing Waste Coordination & Planning	Negative trending STARS subcategories, FY19-FY20 Research Campus Engagement Grounds Investment & Finance
 High performing STARS subcategories, FY20 Research Water Coordination & Planning 	Low performing STARS subcategories, FY20

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 FY20 include the grand opening of the A.A. 'Red' Emmerson Advanced Wood Products Laboratory, OSU's 'Community Engagement' designation by the Carnegie Foundation, the expansion of a traditional Native Foods Environmental Education Program by the Swinomish Tribe, among other projects.

Introduction

Oregon State University (OSU) took larger steps toward a more sustainability university community during Fiscal Year 2020 (FY20). 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 #24 in <u>Sierra's Club Cool Schools 2020</u>, and puts OSU in <u>The Princeton Review's Guide to 416 Green Colleges: 2021 Edition</u>, 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, 2019 and June 30, 2020. 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 in this report. Critically, STARS is also the mechanism by which sustainability data 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 FY20 are listed below. Visit the **sustainability recognition page** for information on these and other awards.





The <u>Princeton Review's 2021 Guide to 416 Green Colleges</u>: 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 maintained a Gold designation as a bicycle-friendly campus for students, staff and visitors.





Sierra Club gave OSU the highest green ranking in the state for its 2020 edition of "Cool Schools". This puts OSU 24th in the nation.

Tree Campus USA: OSU has been recognized ten times since 2010 for 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.



FY20 Sustainability Highlights

The Swinomish Tribe and OSU Researchers Awarded over \$1.6 Million to Expand a Traditional Native Foods Environmental Education Program



The Swinomish Tribe and OSU researchers were awarded more than \$1.6 million from the National Science Foundation to expand an environmental education program that focuses on traditional native foods. This program expansion is a five-year project with the goal of tackling the issues that place-based people face when their culture, community, and personal health are closely linked with the state of their local environment. Not only do traditional foods provide sustenance but they play an important part of the cultural traditions that promote the health and well-

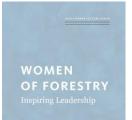
being of tribal members. A big part of gaining sovereignty is food sovereignty for consumption, medicine, and to pass on the knowledge and culture associated with those foods.

For Second Consecutive Year, Oregon State University Honored for Commitment to Diversity

Oregon State University was recognized for a second straight year with an award that honors colleges and universities that weave diversity and inclusion into their campus cultures. Oregon State is the only Oregon university or college to be honored and one of only four institutions in the Pacific Northwest to receive the 2019 Higher Education Excellence in Diversity (HEED) Award from INSIGHT Into Diversity magazine.



Starker Lecture Series: Women of Forestry Inspiring Leadership



The annual <u>Starker Lecture Series</u> at Oregon State University focused on women who act as agents of change within the forestry and forest products sector as well as within their communities.

Events included a film showing of *Taking Root*, a lecture by Dr. Robin Wall Kimmerer, and a Research Panel on how to prepare research studies, forests, buildings, and society for future disturbances.

Borrowables Program Continued to Help Make Events Sustainable, Affordable

<u>The borrowables program</u> is a lending library of sorts, where university community members can borrow items to host events, free of charge, as long as they are returned promptly and in good condition. The program enables university employees to check out items on-line and use them for everything from parties to student presentations to conferences. The <u>collection of borrowables</u> has grown and now includes things like vases, frames, banners and easels.



OSU-Cascades Unveiled Details for its New Academic Building



Edward J. Ray Hall will serve the STEAM disciplines of science, technology, engineering, arts and mathematics. It was made possible thanks to a \$5 million gift from an anonymous donor, a \$1 million gift from Charles McGrath, founder and former president of Grace-Bio Labs, and gifts from other generous donors, who together contributed \$10 million to match state funding. The total cost of the new building is \$49 million. With innovative design and construction features, Edward J. Ray Hall is OSU-Cascades' 'North Star' for sustainability, setting a

standard for future campus buildings and helping OSU move towards the bold, <u>net zero energy</u>, <u>water and waste goals</u> laid out in the campus's long range development plan. An innovative wood construction product, and viable alternative to materials like concrete or steel, cross-laminated timber is noted for its strength, beauty and resilience. Timber materials for Edward J. Ray Hall were sustainably harvested and produced from forests in the Pacific Northwest. The building will be the first in Central Oregon to be fully constructed using mass timber.

Grand Opening of A.A. 'Red' Emmerson Advanced Wood Products Laboratory

The College of Forestry celebrated the grand opening of its A.A. "Red" Emmerson Advanced Wood Products Laboratory, a facility dedicated to furthering research and collaboration in the timber design, engineering, fabrication and construction sectors. The 17,500-square-foot lab is part of the Oregon Forest Science Complex on OSU's Corvallis campus and is the new home of the TallWood Design Institute, an interdisciplinary partnership between the colleges of Forestry and Engineering, and the University of Oregon's College of Design.



Oregon State Scientists Tout Ocean Protection Progress, Give Road Map for More



World governments and other leadership bodies are taking vital steps to protect the ocean but more progress is urgently needed, Oregon State University scientists reported at the Our Ocean Conference. An OSU analysis, led by marine ecologists Kirsten Grorud-Colvert and Jane Lubchenco, shows that more than one-third of the ocean area currently under protected status is the result of the annual, high-profile meeting. The Our Ocean Conference brings together global leaders of

governments, industry, youth and civil society to tackle problems that threaten the health of the ocean. The goal is to commit to action that protects and restores ocean ecosystems and allows them to be used sustainably.

Oregon Sea Grant Awarded \$1.15 Million to OSU Researchers for Five Marine-Related Projects



Oregon Sea Grant, a marine research, public engagement and education program at Oregon State University, <u>awarded \$1.15</u> <u>million to five OSU scientists</u> to study beach grass, groundfish trawling, sea lions and oysters over the next two years.

Oregon Sea Grant receives a share of congressionally appropriated funds every two years that it awards – via a competitive process –

to scientists at Oregon universities who are studying ocean and coastal issues important to the region and the nation. For 2020-22, Oregon Sea Grant is awarding all of that funding to researchers in four colleges at Oregon State. Each project will receive about \$230,000.

College of Forestry Created Weekly Online Lecture Series

The Oregon State University College of Forestry created a new, weekly <u>Stay</u> <u>at Home Lecture Series</u> starting April 9 that featured a variety of presenters talking about everything from recreation in national parks to a secretive seabird. At 3 p.m. every Thursday through May, students, professors and other researchers talked about their work on topics and issues across the forest landscape. Each presentation, which was available via Zoom at no cost, lasted 20 to 30 minutes followed by a question-and-answer session.



OSU Research Program Awarded \$12.7 Million Grant for Superfund Research



An Oregon State University-led research program has been awarded a \$12.7 million grant to serve the Pacific Northwest by studying harmful chemicals found at federally designated hazardous waste sites. The Oregon State University Superfund Research Program received the five-year grant from the National Institute of Environmental Health Sciences. The program has now received more than \$40 million from the NIEHS since 2009.

The program, which includes research partner Pacific Northwest National Laboratory (PNNL), will continue to focus on the effects of polycyclic aromatic hydrocarbons on human health. The pollutants, known as PAHs, are produced when coal, gas, oil and wood are burned.

OSU Extension Outdoor School Provided Resources for Families During Stay At Home Order

The statewide Extension Service Outdoor School program offered <u>resources</u> to engage children in learning about nature while adhering to Oregon's "Stay Home, Save Lives" order. The Extension Outdoor School added a webpage – "Educational Resources for Stay Home, Save Lives" — to its website where parents, guardians and teachers can find links to resources to support outdoor learning experiences while schools are out of session.



The page, which can be translated to Spanish, was updated Fridays with weekly resource sets with nature observations, journal prompts, and online activities. So far, the themes have been birds, trees and flowers. Outdoor School is also linking to the resource sets on its Twitter and Facebook accounts.

Oregon State University Researcher Received Top Global Forestry Award from Swedish King



Richard Waring, professor emeritus in the College of Forestry, is one of three researchers sharing the 2020 international <u>Marcus Wallenberg</u> <u>Prize</u> for developing a revolutionary <u>computer model</u> to predict forest growth in a changing climate.

The annual prize, one of the highest honors in the field of forestry, was announced April 2020 in Falun, Sweden, and is named for the late Marcus Wallenberg Jr., a banker, industrialist and member of Sweden's long-influential Wallenberg family. Waring and co-honorees Joe Landsberg and Nicholas Coops, both of Australia, each received 2 million kronor, about \$200,000, when they were presented with the prize in October by Swedish King Carl Gustav XVI.

Oregon State and Partners to Receive Up to \$300 Million to Lead NOAA Institute on Climate, Ocean Research

Oregon State University, the University of Washington and University of Alaska, Fairbanks <u>will receive up to \$300 million</u> to lead a new institute focused on climate, ocean and coastal challenges that demand collaboration and sharing of scientific resources.

The National Oceanic and Atmospheric Administration chose the three universities to form the Cooperative Institute for Climate, Ocean and Ecosystem Studies, or CICOES. The universities will be eligible for up to \$300 million over five years. The project has potential for renewal for another five years based on successful performance.



OSU Science Pub Celebrated World Oceans Day



Oregon State University celebrated <u>World Oceans Day</u> on June 8 with a special Science Pub featuring marine videos, a panel of expert guests, trivia, music, art and a children's book reading. The free, virtual event focused on Heceta Bank, a biodiversity and fishing hotspot about 35 miles off Cape Perpetua on the Oregon coast. Oregon State scientists have conducted research on the bank for more than 60 years to understand how ocean processes set the stage for Oregon's fisheries and coastal ecosystem.

Warren Washington, Climate Science Pioneer and Oregon State Alum, Spoke at OSU

Pioneering climate scientist Warren Washington, who received his bachelor's and master's degrees from Oregon State University, gave the 2019 OSU College of Science Distinguished Lecture on Friday, Oct. 11. A native of Portland, Oregon, Washington is credited with writing the book on climate modeling. He collaborated on the construction of one of the first computer models of the Earth's climate, and as technology advanced, he expanded the model to incorporate oceans, sea ice and rising levels of carbon dioxide.



OSU Researchers Used \$3.3 Million NSF Grant to Study Impacts of Tiny Plastics on Aquatic Life



Oregon State University researchers started to use a \$3.3 million grant from the National Science Foundation to study tiny plastics and their potential impacts on aquatic life.

Microplastics are large-scale plastics that have broken down to a size that can only be seen under a microscope. Nanoplastics are so small that they can only be seen under an electron microscope. The amount of plastic entering the marine environment continues to increase annually and it is estimated that in 2010 alone, up to 12.7 million metric tons of plastic ended up as marine litter. Little is known about how plastic particles are being ingested and accumulating in aquatic

organisms, said Stacey Harper, an OSU environmental toxicologist who is the lead principal investigator on the grant.

OSU Won the 2020 RecycleMania Oregon Classic

Congrats Beavs - we won the <u>2020 Campus Race to Zero Waste Oregon</u> <u>Classic!</u> The final score was 9.90 to 6.30 pounds recycled per person, allowing OSU to keep the title, the bragging rights and the trophy another year! (The name of the competition was changed from "RecycleMania" to Campus Race to Zero Waste in the summer of 2020.)



Campus Recycling Presented "50 Years of Earth Day & Recycling at OSU: Our Past, Present, and Where to Go Next"

Fifty years ago, communities came together across the country on the first Earth Day to collectively address the many environmental crises the country faced. Here at Oregon State University, students hosted an entire week of events and a public recycling collection event, efforts that led to a campus wide recycling collection program that served as a model and driver for recycling efforts at OSU, in Corvallis, for the state of Oregon, and even across the country.



This virtual event hosted panelists who played lead roles in the first Earth Day and recycling programs at OSU in the 1970s, and current OSU students shared highlights from waste and materials management today, and provided a space to discuss with the audience what should be next. The event provided ample opportunity to not only learn about the fascinating history of and current goings-on of waste management at OSU, but also to ask questions and socialize with other audience members about ideas for what OSU's future should hold.

OSU Students Made a Splash in Wave-Powered Desalination Technology



A group of five College of Engineering students were selected for a \$10,000 prize and the chance to move forward in a <u>prestigious Waves to Water competition</u> focusing on innovation in wave energy and desalination technology. Ali Trueworthy, Daniel Gaebele, Christian Ransmeier, Chris Dizon, and Paris Myers, worked with the Department of Energy as well as peers from UW, MIT, and Politecnico de Torino. Check out their <u>submission video here!</u>

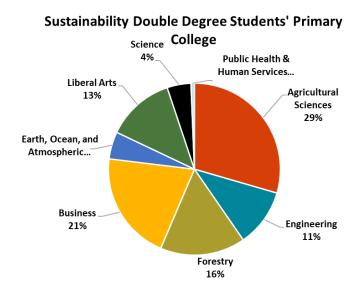
OSU Is Honored for Sustainable Practices

Oregon State University <u>received a gold rating in the Sustainability Tracking</u>, <u>Assessment and Rating System (STARS)</u> for 2020. The university has received a gold rating every year since 2011. The OSU Sustainability Office has received an extra recognition in the <u>2020 Sustainable Campus Index</u> for submitting last year's report with zero accuracy issues. STARS measures and encourages sustainability in all aspects of higher education. Only two other American universities had no data accuracy issues.



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 In academic year 2019-2020, there courses.



were 156 students enrolled in the SDD consisting of Corvallis campus students (54%), Ecampus students (48%) and Cascades Campus students (6%). The majority of SDD students have senior class standing (70%), 17% are juniors, 5% are sophomores, 1% are freshmen and 7% are post-baccalaureate. The inter-disciplinary SDD program includes students from all academic colleges as shown in the chart.

The Sustainability Minor

The <u>sustainability minor</u> 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 academic year 2019-2020, there were 79 students enrolled in the sustainability minor consisting of Corvallis campus students (74%), Ecampus students (31%) and Cascades Campus students (17%). The majority of students have senior class standing (82%), 29% are juniors, and 8% are sophomores, and 3% are post-baccalaureate.

Community Engagement and Leadership Programs Create Culture of Sustainability

<u>Community Dialogues</u> is an initiative offered in partnership with the Office of Institutional Diversity to advance a culture of dialogue and deliberation on campus. It 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 engages 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



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 coordinated by Campus Recycling, 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 FY20, three repair with sustainability-focused demonstrations.

FY20 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 FY20, 3,763 pounds of donations were collected and processed.

There was a significant decrease in donations because many residents moved out much earlier than expected because of the COVID-19 pandemic. While we didn't collect as much as previous years, we can all be proud of the 1.9 tons that were donated this year.



School Supplies Giveaway: OSU Surplus, in partnership with the Human Service Resource Center, hosted the first <u>School Supplies Giveaway</u>. This event was free for all to attend, with no OSU affiliation required, and was hosted by the OSU Waste Watchers club. School supplies including notebooks, binders, pens, and more were given away. Supplies came from OSU Surplus Property's OSUsed Store and included used and new materials.

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, held this past year online. Other activities include:

- Staffing various committees and action teams, including the Coalition Steering Committee and Executive Committee
- OSU staff leading several action teams, leveraging 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 FY20, total student enrollment grew an astonishing 49.18%, from 21,969 to 32,774. Forty one 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 FY20, that number is approximately 10.95 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 (improvements or declines greater than +/- 5%)
- 2. areas of consistently high performance
- 3. areas for potential improvement.

The following table show OSU's STARS category scores for FY20.

CTARC 2.2 colonomi nomo	Points	FY	20	FY19-
STARS 2.2 category name	Possible	Score	%	FY20 % Change
Academics (AC)	58	46.1 79.4%		-2.7%
Engagement (EN)	41	32.7 79.8%		-2.1%
Operations (OP)	70	39.5 56.4%		5.3%
Planning & Administration (PA)	33	23.8 72.0%		-1.1%
Total	202	142.0	70.3%	-0.3%

Table 4 - STARS version 2.2 OSU score summary table

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

- High 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 decreased 0.3% between FY19 and FY20. Much of this change is attributable to an updated STARS version, with FY19 assessed under version 2.1 and FY20 under version 2.2, and some of the decrease is attributable to actual institutional performance.

Like the report for FY19, this report performs analysis at the STARS subcategory level. However, <u>past</u> <u>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 FY19 and FY20

This section details changes between FY19 and FY20 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 influences 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.

CTARC 2.2 and and an arrange	Points	F	Y19	F۱	/20	FY19-FY20
STARS 2.2 sub-category name	Possible	Score	%	Score	%	% Change
Curriculum	40	30.0	75.0%	29.7	74.4%	-0.6%
Research	18	17.7	98.2%	16.3	90.7%	-7.5%
Campus Engagement	21	19.3	91.7%	16.8	79.8%	-11.9%
Public Engagement	20	14.3	71.7%	16.0	79.8%	8.1%
Air & Climate	11	5.2	47.1%	5.7	52.2%	5.1%
Buildings	8	1.0	19.4%	3.2	39.5%	20.1%
Energy	10	4.2	42.1%	4.9	49.1%	7.0%
Food & Dining	8	2.7	33.6%	3.5	43.6%	10.0%
Grounds	4	3.1	76.3%	2.1	51.5%	-24.8%
Purchasing	6	3.5	58.8%	4.0	65.8%	7.0%
Transportation	7	4.2	60.6%	4.2	60.0%	-0.6%
Waste	10	5.3	59.2%	6.8	67.8%	8.6%
Water	6	4.5	74.8%	5.2	86.3%	11.5%
Coordination & Planning	9	7.0	87.5%	8.5	94.4%	6.9%
Diversity & Affordability	10	8.4	83.8%	7.9	79.4%	-4.4%
Investment & Finance	7	3.8	54.3%	2.7	38.9%	-15.4%
Wellbeing & Work	7	4.9	70.3%	4.6	65.6%	-4.7%
Total	202	139.0	70.57%	142.0	70.3%	-0.3%

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

Research (FY19-FY20 change: -7.5%)

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. The change in this subcategory mostly results from differences in STARS versions 2.1 and 2.2, specifically in the Support for Sustainability Research credit. Part of this credit asks for published promotion or tenure guidelines or policies that give explicit positive recognition to interdisciplinary, transdisciplinary, and/or multidisciplinary research. While OSU does support interdisciplinary, transdisciplinary, and/or multidisciplinary research, there are not specific published guidelines or policies for doing so.

Campus Engagement (FY19-FY20 change: -11.9%)

The change in this subcategory comes from the change in STARS version 2.2, specifically in the Students Educators Program credit, and the Employee Educators Program credit. In STARS version 2.1, the Students Educators Program credit asked to name ongoing student educator programs that engage students as peers on a regular basis, and institutions earned the maximum points available for this credit by having one or more peer-to-peer educator programs that serve all students enrolled for credit. In STARS version 2.2, an institution earns the maximum points when trained student educators work at least one hour annually for

each student served by a peer-to-peer educators program. Incremental points are awarded based on the number of hours worked per student served. The hours worked annually by trained student sustainability educators per student served by a peer-to-peer program at OSU was 0.38 hours, reducing points achieved in this credit.

Similarly, for the Employee Educators Program credit, in STARS version 2.1, this credit asked to list programs that engage employees as peers on a regular basis, and institutions earned the maximum points available for this credit by having a peer-to-peer educator program that serves (i.e. directly targets) all employees. In STARS version 2.2, an institution earns the maximum points available when trained employee educators work at least one hour annually for each employee served by a peer-to-peer educators program. Incremental points are awarded based on the number of hours worked per employee served. The hours worked annually by trained employee sustainability educators per employee served by a peer-to-peer program at OSU was 0.21 hours.

Public Engagement (FY19-FY20 change: +8.1%)

For the first time in FY20, OSU was able to claim the Trademark Licensing credit, as OSU is a member of the Worker Rights Consortium. An institution earns the maximum points available for this credit for being a member of an independent monitoring and verification organization.

Air & Climate (FY19-FY20 change: +5.1%)

The change in this subcategory resulted from improved institutional performance (lower greenhouse gas emissions) and from changes in STARS version 2.2, specifically in the Emissions Inventory and Disclosure credit, and the Greenhouse Gas Emissions credit. The Greenhouse Gas Emissions credit was simplified by 1) moving disaggregated GHG emissions reporting and points earned for conducting an inventory to the revamped Emissions Inventory and Disclosure credit, 2) having non-additional carbon sequestration removed from scoring, and 3) having REC/GO/I-REC reporting removed to ensure there is no double-counting. Additionally, OSU's actual decrease of Scope 1 and Scope 2 GHG emissions from 106,745 Metric Tons of CO2 Equivalent in FY19 to 102,260 Metric Tons of CO2 Equivalent in FY20 helped increase OSU's score in this subcategory.

Buildings (FY19-FY20 change: +20.1%)

In FY19, OSU did not *reach substantial completion for* any new construction or major renovation projects, making the Building Design and Construction credit not applicable for that year. In FY20, there were 98,451 square feet of newly constructed or renovated building space designed and built in accordance with a multi-attribute green building code, increasing the score in this subcategory.

Additionally, the changes in STARS version 2.2 for the Building Operations and Maintenance credit presented an opportunity to increase the score in this subcategory. In STARS version 2.2, the criteria for buildings operated and maintained in accordance with a sustainable management policy/program broadened, allowing OSU to count more space and increase its score. The criteria changed from counting only third party certified programs under a multi-attribute green building rating system developed/administered by a WorldGBC member Green Building Council (GBC), to also counting multi-attribute/single-attribute frameworks under other standards and policies/programs.

Energy (FY19-FY20 change: +7.0%)

FY20 saw 1,054,861 MMBtu of energy consumed across university properties while 1,156,381 MMBtu were consumed in FY19, an 8.8% reduction. This decrease in energy use, which increased OSU's score in this subcategory, was mostly due to the decision to move all instruction to remote for all of spring term to protect the health and safety of OSU community members and to reduce the risk and spread of COVID-19.

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OSU still needs to reduce building energy consumption per gross square foot by 50% of its baseline year (2005?) consumption to get full credit for this category.

Food & Dining (FY19-FY20 change: +10.0%)

The change in this subcategory centers on changes in STARS version 2.2, specifically in the Food and Beverage Purchasing credit. In STARS version 2.2, an institution earns the maximum points available for this credit when the weighted cost of products that are sustainably/ethically produced and/or plant-based is 100 percent of total food and beverage expenditures. This is a significant change from STARS version 2.1 where an institution earned full points when 75 percent of total food and beverage expenditures are on products that qualify as Third Party Verified or Local & Community- Based, and there was no purchasing of conventional animal products.

Grounds (FY19-FY20 change: -24.8%)

The change in this subcategory results from changes in STARS version 2.2, specifically in the Biodiversity credit. An institution earns maximum points for this credit by identifying endangered and vulnerable species, and areas of biodiversity importance. OSU does not have a formal assessment to identify endangered and vulnerable species.

Purchasing (FY19-FY20 change: +7.0%)

The percentage of expenditures on EPEAT Gold electronic products went from 0.11% in FY19 to 8.12% in FY20, increasing OSU's score in this subcategory. 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 (FY19-FY20 change: +8.6%)

Key credits in this subcategory trended slightly positive with higher scores for Waste Minimization and Diversion than FY19. In FY20, 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)	FY19	FY20
Materials recycled	607.00	825.69	689.36
Materials composted	196.00	475.28	345.15
Materials reused, donated or re-sold	121.00	560.13	499.87
Materials disposed in a solid waste landfill or incinerator	3,105.00	2,057.17	1,835.40
Materials disposed in a solid waste landfill or incinerator per full time equivalent student	0.172	0.077	0.068

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

Water (FY19-FY20 change: +11.5%)

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. FY20 showed a decrease in consumption since FY19, resulting in a higher score for the Water Use subcategory.

Reporting Year	Water Use (gallons)	Water Use per full time equivalent student (gallons)
FY05 (baseline year)	267,228,984	14,865.05
FY16	281,678,100	10,884.39
FY17	243,053,624	9,162.50
FY18	256,157,836	9,535.07
FY19	251,054,980	9,375.10
FY20	202,819,452	7,478.59

Table 7 - OSU Corvallis campus water consumption

Coordination & Planning (FY19-FY20 change: +6.9%)

The change in this subcategory comes from changes in STARS version 2.2, specifically in the new Reporting Assurance credit. In this credit, an institution completes an optional assurance process that provides independent affirmation that the information in its current STARS submission is reported in accordance with credit criteria. To qualify, the process must successfully identify and resolve inconsistencies and errors in the institution's finalized STARS report prior to submitting it to AASHE. The assurance process may include:

1) Internal review by one or more individuals affiliated with the institution, but not directly involved in the data collection process for the credits they review; and/or 2) an external audit by one or more individuals affiliated with other organizations. OSU completed an internal review by staff from Community Engagement and Leadership, obtaining full points for this credit and increasing the score for this subcategory.

Investment & Finance (FY19-FY20 change: -15.4%)

The low and changing score in this subcategory is due to the lack of a formally established and active committee on investor responsibility (CIR) or equivalent body, a publicly available sustainable investment policy, engagement in proxy voting to promote sustainability, and participation in a public divestment effort.

Subcategories of high performance

Categories of "high performance" are those where OSU achieved 80% or more of STARS points in the most recent submission. Those subcategories are bolded in the table below.

CTARC 2.4 auto-order and account	Points	F	Y19	F۱	720	FY19-FY20
STARS 2.1 sub-category name	Possible	Score	%	Score	%	% Change
Curriculum	40	30.0	75.0%	29.7	74.4%	-0.6%
Research	18	17.7	98.2%	16.3	90.7%	-7.5%
Campus Engagement	21	19.3	91.7%	16.8	79.8%	-11.9%
Public Engagement	20	14.3	71.7%	16.0	79.8%	8.1%
Air & Climate	11	5.2	47.1%	5.7	52.2%	5.1%
Buildings	8	1.0	19.4%	3.2	39.5%	20.1%
Energy	10	4.2	42.1%	4.9	49.1%	7.0%
Food & Dining	8	2.7	33.6%	3.5	43.6%	10.0%
Grounds	4	3.1	76.3%	2.1	51.5%	-24.8%
Purchasing	6	3.5	58.8%	4.0	65.8%	7.0%
Transportation	7	4.2	60.6%	4.2	60.0%	-0.6%
Waste	10	5.3	59.2%	6.8	67.8%	8.6%
Water	6	4.5	74.8%	5.2	86.3%	11.5%
Coordination & Planning	9	7.0	87.5%	8.5	94.4%	6.9%
Diversity & Affordability	10	8.4	83.8%	7.9	79.4%	-4.4%
Investment & Finance	7	3.8	54.3%	2.7	38.9%	-15.4%
Wellbeing & Work	7	4.9	70.3%	4.6	65.6%	-4.7%
Total	202	139.0	70.57%	142.0	70.3%	-0.3%

Table 8 - STARS subcategory comparison – areas of high performance.

Because they have been discussed previously in the subcategories of significant change section of this report, none of the subcategories in this section will be included in the discussion here.

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.

CTARC 2.2 auch antonomi nomo	Points	F	Y19	F۱	FY19-FY20	
STARS 2.2 sub-category name	Possible	Score	%	Score	%	% Change
Curriculum	40	30.0	75.0%	29.7	74.4%	-0.6%
Research	18	17.7	98.2%	16.3	90.7%	-7.5%
Campus Engagement	21	19.3	91.7%	16.8	79.8%	-11.9%
Public Engagement	20	14.3	71.7%	16.0	79.8%	8.1%
Air & Climate	11	5.2	47.1%	5.7	52.2%	5.1%
Buildings	8	1.0	19.4%	3.2	39.5%	20.1%
Energy	10	4.2	42.1%	4.9	49.1%	7.0%
Food & Dining	8	2.7	33.6%	3.5	43.6%	10.0%
Grounds	4	3.1	76.3%	2.1	51.5%	-24.8%
Purchasing	6	3.5	58.8%	4.0	65.8%	7.0%
Transportation	7	4.2	60.6%	4.2	60.0%	-0.6%
Waste	10	5.3	59.2%	6.8	67.8%	8.6%
Water	6	4.5	74.8%	5.2	86.3%	11.5%
Coordination & Planning	9	7.0	87.5%	8.5	94.4%	6.9%
Diversity & Affordability	10	8.4	83.8%	7.9	79.4%	-4.4%
Investment & Finance	7	3.8	54.3%	2.7	38.9%	-15.4%
Wellbeing & Work	7	4.9	70.3%	4.6	65.6%	-4.7%
Total	202	139.0	70.57%	142.0	70.3%	-0.3%

Table 10 - STARS subcategory comparison - areas of potential improvement.

Because they have been discussed previously in the subcategories of significant change section of this report, none of the subcategories in this section will be included in the discussion here.

Appendix

STARS 2.2 Credit Score Detail Table

	Points	FY19		FY	′20	%
	Possible	Score	%	Score	%	Change
Curriculum	40	29.98	75.0%	29.74	74.4%	-0.6%
AC-1: Academic Courses	14	13.68	97.7%	13.68	97.7%	0.0%
AC-2: Learning Outcomes	8	4.30	53.8%	4.06	50.8%	-3.0%
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	17.67	98.2%	16.32	90.7%	-7.5%
AC-9: Research and Scholarship	12	11.67	97.3%	11.32	94.3%	-2.9%
AC-10: Support for Research	4	4.00	100.0%	3.00	75.0%	-25.0%
AC-11: Open Access to Research	2	2.00	100.0%	2.00	100.0%	0.0%
Compus Engagoment	-24	40.05	04 70/	40.70	70.00/	44.00/
Campus Engagement	21	19.25	91.7%	16.76	79.8%	-11.9%
EN-1: Student Educators Program	4	4.00	100.0%	2.75	68.8%	-31.3%
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	0.0%	0.00	0.0%	0.0%
EN-7: Employee Educators Program	3	3.00	100.0%	1.76	58.7%	-41.3%
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	14.34	71.7%	15.95	79.8%	8.1%
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%	2.00	66.7%	-16.7%
EN-12: Continuing Education	5	5.00	100.0%	5.00	100.0%	0.0%
EN-13: Community Service	5	1.84	36.8%	1.95	39.0%	2.2%
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%	2.00	100.0%	100.0%
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Air & Climate	11	5.18	47.1%	5.74	52.2%	5.1%
OP-1: Emissions Inventory and Disclosure	3	1.00	100.0%	1.42	47.3%	-52.7%
OP-2: Greenhouse Gas Emissions	8	4.18	41.8%	4.32	54.0%	12.2%
Buildings	8	0.97	19.4%	3.16	39.5%	20.1%
OP-3: Building Design and Construction	3	0.00	0.0%	1.25	41.7%	41.7%
OP-4: Building Operations and Maintenance	5	0.00	19.4%	1.25	38.2%	18.8%
The state of the s		0.97	13.4/0	1.81	JU.Z /0	10.0 /0
Energy	10	4.21	42.1%	4.91	49.1%	7.0%
OP-5: Building Energy Efficiency	6	4.14	69.0%	4.81	80.2%	11.2%
OP-6: Clean and Renewable Energy	4	0.07	1.8%	0.10	2.5%	0.8%

Food & Dining	8	2.69	33.6%	3.49	43.6%	10.0%
OP-7: Food and Beverage Purchasing	6	0.69	11.5%	1.49	24.8%	13.3%
OP-8: Sustainable Dining	2	2.00	100.0%	2.00	100.0%	0.0%
Grounds	4	3.05	76.3%	2.06	51.5%	-24.8%
OP-9: Landscape Management	2	1.05	52.5%	1.06	53.0%	0.5%
OP-10: Biodiversity	2	2.00	100.0%	1.00	50.0%	-50.0%
Purchasing	6	3.53	58.8%	3.95	65.8%	7.0%
OP-11: Sustainable Procurement	3	1.75	58.3%	2	66.7%	8.3%
OP-12: Electronics Purchasing	1	0.35	35.0%	0.69	69.0%	34.0%
OP-13: Cleaning and Janitorial Purchasing	1	0.95	95.0%	0.96	96.0%	1.0%
OP-14: Office Paper Purchasing	1	0.48	48.0%	0.30	30.0%	-18.0%
Transportation	7	4.24	60.6%	4.20	60.0%	-0.6%
OP-15: Campus Fleet	1	0.10	10.0%	0.00	0.0%	-10.0%
OP-16: Commute Modal Split	5	2.14	53.5%	3.60	72.0%	18.5%
OP-17: Support for Sustainable Transportation	1	2.00	100.0%	0.60	60.0%	-40.0%
Waste	40	F 22	FO 20/	C 70	C7 00/	0.00/
OP-18: Waste Minimization and Diversion	10	5.33	59.2%	6.78	67.8%	8.6%
OP-19: Construction and Demolition Waste Diversion	8	4.33 0.00	54.1% 0.0%	4.90 0.88	61.3% 88.0%	7.1% 0.0%
OP-20: Hazardous Waste Management	1	1.00	100.0%	1.00	100.0%	0.0%
Or -20. Hazardous waste Management	'	1.00	100.0 /6	1.00	100.0 /6	0.0 %
Water	6	4.49	74.8%	5.18	86.3%	11.5%
OP-21: Water Use	4	2.49	62.3%	3.18	79.5%	17.3%
OP-22: Rainwater Management	2	2.00	100.0%	2.00	100.0%	0.0%
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Coordination & Planning	9	7.00	87.5%	8.50	94.4%	6.9%
PA-1: Sustainability Coordination	1	1.00	100.0%	1.00	100.0%	0.0%
PA-2: Sustainability Planning	4	3.00	75.0%	3.50	87.5%	12.5%
PA-3: Participatory Governance	3	3.00	100.0%	3.00	100.0%	0.0%
PA-4: Reporting Assurance	1	N/A	0.0%	1.00	100.0%	100.0%
Diversity & Affordability	40	0.00	00.00/	7.04	70.40/	4.40/
PA-5: Diversity and Equity Coordination	10 2	8.38	83.8% 66.5%	7.94	79.4% 66.5%	-4.4%
PA-6: Assessing Diversity and Equity	1	1.33 1.00	100.0%	1.33 1.00	100.0%	0.0% 0.0%
PA-7: Support for Underrepresented Groups	3	3.00	100.0%	3.00	100.0%	0.0%
PA-8: Affordability and Access	4	3.05	76.3%	2.61	65.3%	-11.0%
177 o. 74101dability dilid 7100000	_	3.03	70.570	2.01	05.570	-11.070
Investment & Finance	7	3.80	54.3%	2.72	38.9%	-15.4%
PA-9: Committee on Investor Responsibility	2	0.50	25.0%	0.00	0.0%	-25.0%
PA-10: Sustainable Investment	4	2.30	57.5%	1.72	43.0%	-14.5%
PA-11: Investment Disclosure	1	1.00	100.0%	1.00	100.0%	0.0%
Wellbeing & Work	7	4.92	70.3%	4.59	65.6%	-4.7%
PA-12: Employee Compensation	3	2.22	74.0%	2.01	67.0%	-7.0%
PA-13: Assessing Employee Satisfaction	1	0.39	39.0%	0.39	39.0%	0.0%
PA-14: Wellness Program	1	1.00	100.0%	1.00	100.0%	0.0%
PA-15: Workplace Health and Safety	2	1.31	65.5%	1.19	59.5%	-6.0%