

Carbon Commitment Committee

2021-2022 Annual Report

Executive Summary

Oregon State University's (OSU) net carbon emissions may be reduced by a combination of institutional policy and community commitment to environmentally positive practices. The Carbon Commitment, signed by OSU President Edward J. Ray in 2007, set a goal of carbon neutrality by 2025. Policies and practices instituted since 2007 have reduced emissions, and more such work is needed. The OSU Sustainability Office is vital in crafting and advancing these policies and practices. The *Ad Hoc Committee on the OSU Carbon Commitment* acted as an advisory group on such policies. In 2021, the Faculty Senate voted to convert the group to a standing committee, known as the [Carbon Commitment Committee](#). Individual and community practices are not yet accounted for in OSU's carbon footprint. The Committee aims to nurture a culture of sustainability across the OSU enterprise that results in measurable gains in carbon reduction. Identifying best practices, organizing communities of practice, and measuring the outcomes are the core mission of the Committee. By optimizing institutional, individual, and community action, we may approach the goal of carbon neutrality for OSU.

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I. Background

In 2007 OSU President Ed Ray signed the [Carbon Commitment](#), as developed by the Second Nature consortium, establishing OSU as a charter signatory. The Commitment is intended to reduce net carbon emissions by institutions of higher education in order to mitigate global climate change.

Commitment signatories were required to take at least two of seven tangible actions while developing comprehensive climate plans within two months of signing. At the time, OSU selected the following three actions:

- Constructing all new facilities, including major remodels, to Leadership in Energy and Environmental Design (LEED) Silver equivalent or higher,
- Providing transit passes to all students, staff and faculty on four regional transit systems, and
- Purchasing renewable energy certificates to offset 75% of OSU's electrical consumption.

In 2008 and 2009, the OSU Sustainability Office facilitated a community process to develop the first OSU Climate Plan, a strategic plan for climate neutrality that was based on the OSU

Strategic Plan. Community input and a review of goals set by the State of Oregon and the Oregon University System helped shape OSU's ambitious goal to be carbon neutral by 2025.

From 2008 to 2021, OSU reduced greenhouse gas emissions by 35% despite significant growth in enrollment and building space. Per student and per square foot of building space, this equates to a 55% and 57% reduction in emissions respectively. For additional details on progress-to-date, please visit the

2e, a 15.7% decrease from FY20. Gross emissions per 1000 square feet of building space were 9.3 t CO₂e, a 12.7% decrease from FY20.

[OSU Climate Action website.](#)

OSU is still not on track to achieve carbon neutrality by 2025. OSU's FY21 gross emissions were 98,592.8 metric tonnes (t) carbon dioxide equivalent (CO₂e), a 17.6% decrease from FY20. This decrease was mainly due to:

- Decreased consumption of purchased electricity, largely attributable to primarily remote instruction and operations for all FY21.
- Fewer commuters to campus, largely attributable to remote operations, where approximately 70% of students and employees worked outside of campus.
- Decreased air travel, mainly from the suspension of all non-essential domestic and international OSU-sponsored travel for all FY21.

Gross emissions per full-time equivalent (FTE) student were 3.8 t CO

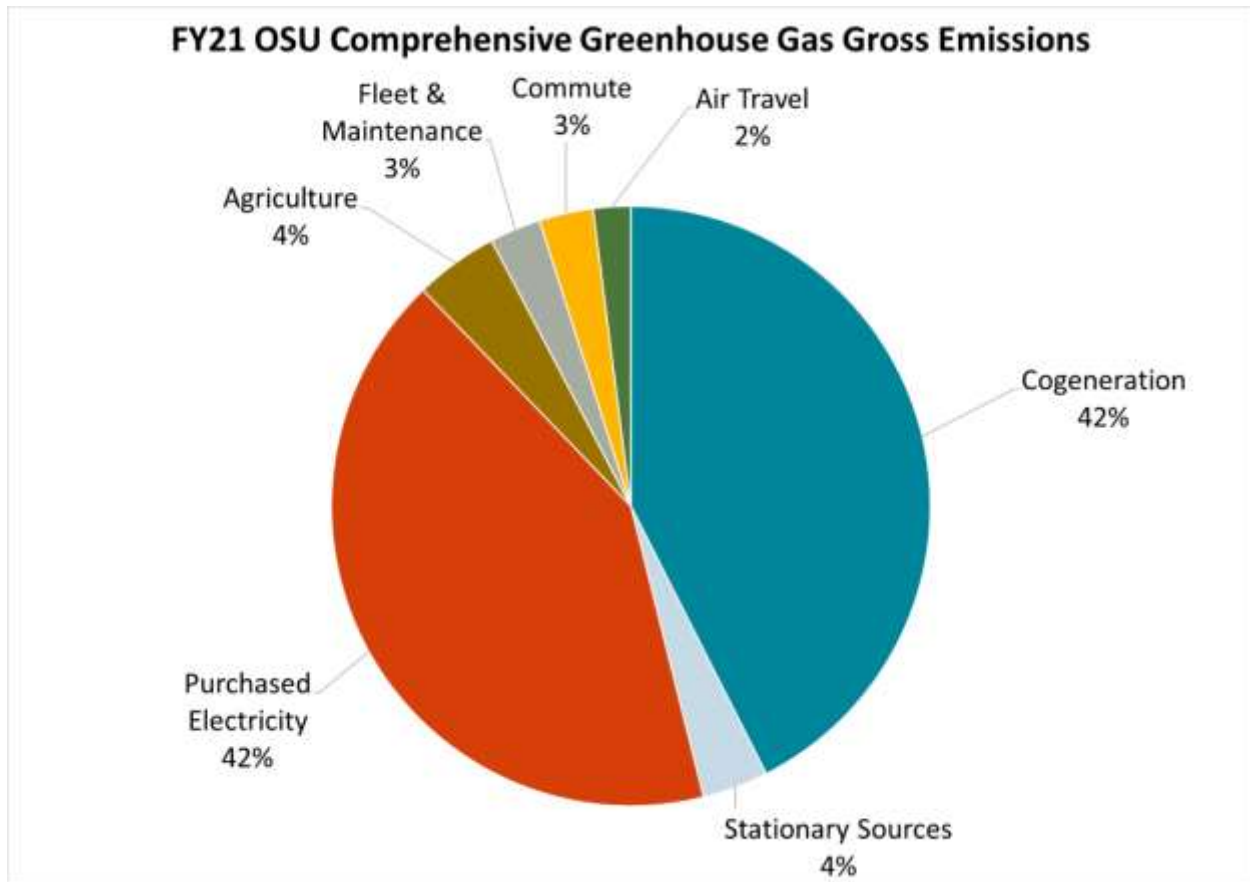


Figure 1. OSU Comprehensive Greenhouse Gas Gross Emissions by Source

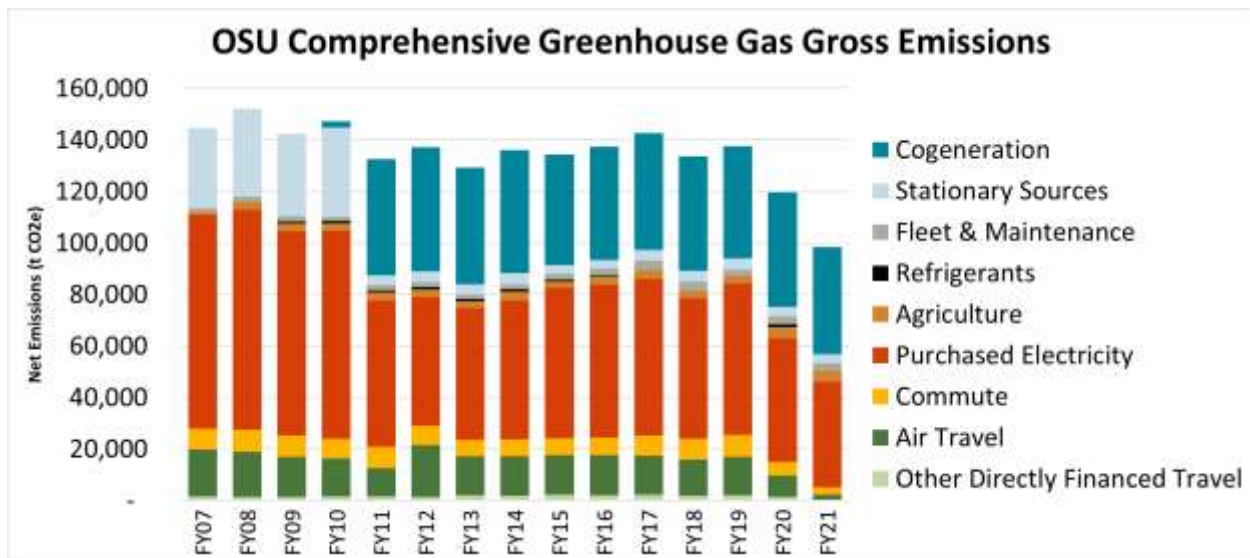


Figure 2. OSU Comprehensive Greenhouse Gas Gross Emissions by Year

The intention of OSU’s leadership and the Faculty Senate is to change the historical trends of greenhouse gas emissions in order to attain a steady reduction of emissions across the enterprise.

In order to support OSU’s carbon reduction ongoing efforts, the OSU Faculty Senate passed a resolution to create the [Ad Hoc Committee on the OSU Carbon Commitment](#) in 2018. In 2021, the Faculty Senate voted to convert the group to a standing committee, known as the [Carbon Commitment Committee](#).

The Faculty Senate Carbon Commitment Committee is charged with promoting policies and activities that facilitate carbon reduction (see the charge in Part II below). This report addresses the standing Carbon Commitment Committee activity in FY22.

II. Committee Charge and Activities

The Committee, composed of members from each of the Faculty Senate apportionment groups plus some other OSU groups, developed objectives for the overall effort. The primary objective of the Committee is to support the OSU Sustainability Office in advancing carbon emissions reduction work throughout the university enterprise. A key to this support will be enabling Committee members to create action within their home units. This approach is predicated upon the principle that effective carbon reduction at an institutional level requires cultural change in the behaviors of the majority of the people who make up OSU. Reaching an equilibrium between culture and carbon levels requires a combination of institutional policy revision and change in collective behavior.

Given the need for collective action in support of carbon reduction at OSU, the Committee formed work groups to address projects in the following areas: Education & Curriculum, Conservation, Efficiency & Transportation, and Communication & Reporting, as well as a short-term work group, Carbon Pricing.

III. Work Groups

Education & Curriculum Work Group

Description

Ensure that climate literacy opportunities are available to the OSU community.

Objectives

- Development of climate change focused Lightning Talk event for OSU community
- Consideration and ideation of non-credit bearing sustainability certificate or micro credential as an alternative to the double degree or sustainability minor
- Promotion of Baccalaureate Core updates/courses related to climate change

June 2021–2022 Activity

- Evolvement of committee to focus on information sharing and events for community
- Discussion of social media presence for the Committee
- Hosted Lightning Talk event on April 22, 2022, as part of Beyond Earth Week activities
 - Seven speakers, sharing research related to climate change for 2-5 minutes
 - Event was in-person and online
 - Approximately 20 in attendance
 - [Link](#) to a recording of the event
- Will be hosting Lightning Talk again in 2023 with additional promotion
- Consideration of Worldwide Teach-In 2022. Tabled idea until 2023

Conservation, Efficiency and Transportation Work Group

Description

Identify goals, opportunities, and best practices for reducing the carbon footprint of buildings, academic travel, and commuting through policy recommendations and communication with the OSU community.

Objectives

- Refine and develop program to offset carbon emissions from OSU air travel
- Communicate with the OSU community about best practices for travel-related carbon reduction
- Support CET aspects of the Path to Carbon Neutrality

June 2021–2022 Activity

The Conservation, Efficiency and Transportation (CET) Work Group met four times during the Fiscal Year. Various efficiency moves were debated, such as changing the type of leaf blowers used on campus, to giving input to OSU on capital planning impacts on carbon emissions.

Concrete steps included:

- Multiple reviews of, and specific wording changes to, the [OSU Path to Carbon Neutrality](#)

- [Carbon offsets program](#) is now operational, paving the way to greater uptake in the future. The Committee will look for outreach opportunities to the OSU community
- Advocating to OSU leadership to proceed with developing the Path in a timely way
- Feedback to the Sustainability Office for how to best track progress on the nine actions in the Path.
- Input on OSU's [Energy Policy](#) to help building controls technicians navigate requests from faculty, staff and others for heating and cooling changes that could cause greatly increased expenses and carbon emissions.
- One of the members of the workgroup ran a month-long study in his unit comparing the energy use of an older freezer vs. a newer, energy-efficient freezer. We estimated a potential saving of electricity from this exercise, and plan to explore (in 2022-2023) how OSU might facilitate replacing old, energy-intensive fridges, freezers, and cold rooms.
- At the Sustainability Office's request, acting as a sounding board and providing advice and feedback on numerous carbon reduction concepts and other programmatic refinements.

Communication and Reporting Work Group

Description

Facilitate, produce, and distribute information and active engagement opportunities for the OSU Community and beyond. This working group is exploring tools to engage the OSU community and market the carbon-reduction message.

Objectives

- Dissemination of Committee's actions through existing newsletters and blogs
- Submissions of feature stories in existing vehicles such as Life@OSU, OSU Today, College and Departmental newsletters, etc.
- Planning of talks/forums on carbon reduction
- Creation of information packets for students and faculty

June 2021–2022 Activity

The main communications outreach effort was the virtual forum on October 26, 2021, to discuss OSU's Path to Carbon Neutrality. OSU leadership, the Carbon Commitment Committee and the Sustainability Office held a one-hour forum to discuss the Path. Speakers included Shelly Signs, Mike Green, Paul Odenthal, Brandon Trelstad, and Keith Jayawickrama. At the time, this was a *draft* plan with nine actions that accelerate decarbonization of university activities. Development of the Path included expert feedback and review, benchmarking with peer institutions, review of existing policies and practices, and analyses of actions most feasible and cost effective for this university. The nine actions are roughly in priority order, although several may be implemented simultaneously. Forum speakers discussed our plans and work before us and answered questions from an audience of over 250. Communications workgroup members were heavily involved in scheduling, publicity, running the zoom session, and providing the recording for future reference.

The workgroup developed plans to publicize the Path to Carbon Neutrality once it was formally adopted (which occurred on June 9, 2022). We also explored presenting

information to incoming students about OSU's carbon neutrality work during orientation (and/or the Beaver Community Fair) in Fall 2022. Brandon Trelstad, Shelly Signs, and Keith Jayawickrama also met with the Department of Forest Ecosystems and Society (FES) to inform the Unit about carbon reduction efforts at OSU.

Carbon Pricing (Short-term Work Group)

Description

The Carbon Pricing Work Group within the Faculty Senate Ad Hoc Committee on the OSU Carbon Commitment was formed to centralize the work of developing a carbon pricing mechanism, in line with the Committee's objectives to support the OSU Sustainability Office in developing recommendations for advancing the objectives of the OSU Carbon Commitment. The group's objectives are to develop an effective carbon pricing mechanism suited to OSU's structure and administration, as well as to collaborate with OSU leadership to start implementing it into more of OSU's decision making, all in an effort to reduce OSU's total carbon emissions and better understand the impacts of our action – or inaction – on the future.

The carbon pricing mechanism is a proxy carbon price, providing an additional lens through which OSU can look at investments and projects without any transfer of money. The proposed price of \$60/ton is indexed to the federal social cost of carbon (SCC), or the dollar amount equivalent to the damages brought on by one ton of carbon emissions. This cost represents the amount of damage to future generations.

June 2021–2022 Activity

- The main activity during this period was that the proxy carbon price was introduced to internal stakeholders at the university to evaluate building plans. It is likely the workgroup will be reactivated when it comes time to re-evaluate the proxy carbon price.

IV. Committee Evolution and Development

Following the All-University Carbon Neutral OSU Forum on January 12, 2021, she was invited by the Faculty Senate leadership to consider evolving to a Standing (rather than Ad Hoc) Committee. The main consideration was that it was seen to be increasingly unlikely that the carbon neutral goal could be achieved in the short time frame of 2025. Following several meetings with Faculty Senate leadership and the Executive Committee, and discussion within the membership, the [Rationale, Objectives, Deliverables, Timeline and Membership](#) were modified into standing rules. The current co-chairs and members were invited to stay on for the upcoming FY and all agreed to do so. The Faculty Senate approved the change at their last full meeting of the academic year on June 10, 2021.

The transition to a Standing Committee proceeded smoothly with great support from the Faculty Senate leadership and office staff.

V. FY 2023 Objectives – Looking Forward

- Advancing the projects already started in 2021-2022
 - Promote and support implementation of "Path to Carbon Neutrality"
 - Internal proxy carbon pricing

- Explore and support new and developing carbon reduction opportunities from the Sustainability Office
- Workgroups will:
 - Educate about carbon reduction activities at OSU, including being available for meetings with colleges, departments, and other units
 - Promote carbon offset program
 - Advocate for climate change information in OSU education

VI. Membership

Shelly Signs, Co-chair '23	Associated Faculty
Keith Jayawickrama, Co-chair '24	College of Forestry
Cinamon Moffett '22	Hatfield Marine Science Center
Randal Smith '22	College of Business
Beth Filar Williams '22	University Libraries
Lety Cavazos '23	Sustainability Office
Ed Dever '23	College of Earth, Ocean, & Atmospheric Sciences
Laurel Kincl '23	College of Public Health & Human Sciences
Jacob Putney '23	Division of Extension & Engagement
Jennifer Alix-Garcia '24	College of Agricultural Sciences
Lindsay Andrews '24	College of Education
Tess Collins '24	College of Veterinary Medicine
Laurie Houston '24	College of Public Health & Human Sciences
Leela Magdaleno '24	Student Affairs
Brandon Trelstad '24	Sustainability Office
Desiree Tullos '24	College of Agricultural Sciences
Jason Weiss '24	College of Engineering
TBA '22	OSU-Cascades
TBA '22	ROTC
TBA '23	College of Pharmacy
TBA '23	College of Science
TBA '24	College of Liberal Arts

Student Members:

- Bailie Shultz (undergrad)
- TBA (grad)

Ex-Officio Member: OSU Foundation – Scott Elmshaeuser

Executive Committee Liaison – Justin Fleming

VII. Faculty Senate Charge

Carbon Commitment Committee

The Faculty Senate passed the Ad Hoc [Committee on the OSU Carbon Commitment Charge](#) at the October 11, 2018, Meeting.

Rationale

Succeeding at the objectives set by the American College and University Presidents' Carbon Commitment, signed by President Ed Ray in 2007, requires action and collaboration by all parts of Oregon State University. The Ad Hoc Committee on the OSU

Carbon Commitment, and new standing Committee, provides faculty leadership to support effective engagement by all faculty and their home units.

Objectives

1. Conduct an annual assessment of the current status at OSU of meeting the goals of the American College and University Presidents' Carbon Commitment (the OSU Carbon Commitment).
2. Seek and gather data, in collaboration with the OSU Sustainability Office, relating to the state of progress towards the goals of the OSU Carbon Commitment.
3. Support the OSU Sustainability Office in advancing towards the objectives of the OSU Carbon Commitment.
4. Develop recommendations for advancing the objectives of the OSU Carbon Commitment at OSU.
5. Inform the OSU community of OSU's carbon neutral status.

Deliverables

1. Present an annual report to the Faculty Senate on the status of the 2025 American College and University Presidents' Carbon Commitment at OSU with recommendations for improvement.
2. Send the annual report to the OSU Board of Trustees, OSU President, OSU Provost, and OSU academic colleges.
3. Communicate findings of the annual assessment to the OSU community at large.

Timeline

- | | |
|---------------|---|
| Nov. 15, 2018 | Convene Ad Hoc Committee on the OSU Carbon Commitment |
| Jul. 1, 2021 | Committee on the OSU Carbon Commitment transitioned from Ad Hoc to a Standing Committee |

Standing Rules

- Implemented: July 1, 2021
Revised From: June 10, 2021 (Date Approved)

The Carbon Commitment Committee advocates for OSU to meet the goals of the Carbon Commitment signed by President Ed Ray in 2007 and promotes lasting changes to policies affecting OSU's carbon footprint. The Committee supports the OSU Sustainability Office in furthering the objectives of the Carbon Commitment; seeks to motivate faculty, staff, and students to contribute to the carbon reduction mission; and helps develop recommendations for achieving carbon neutrality. The Committee's main focus is on measurable, tangible reduction of OSU's carbon emissions at its various locations throughout the State. Achieving the objectives set by the Carbon Commitment requires action and collaboration by all parts of Oregon State University. The Carbon Commitment Committee provides faculty leadership to support effective engagement by all faculty and their home units.

Members

The Committee shall consist of at least one (and up to two) voting member(s) from the following: each Faculty Senate apportionment unit, Division of Extension and Engagement, and the Sustainability Office. Individuals may represent two units where their position fits in both units. Two students, one undergraduate and one graduate, shall also serve as voting members on the Committee. The Committee shall have a minimum of 10 members with the total voting membership not to exceed 25. An ex-officio, non-voting member may be from the OSU Foundation.

Sources

The Presidents' Carbon Leadership Commitments

<https://secondnature.org/signatory-handbook/the-commitments/#carbon-commitment>

<https://secondnature.org/signatory-handbook/climate-leadership-network-map/>