Wesleyan Sustainability Strategic Plan: Annual Report FY 2023 (Accessible Text-Only Version)

Executive Summary

This annual report, the first since Wesleyan's 2022 adoption of the Sustainability Strategic Plan (SSP), captures the progress made on SSP goals during the 2022-23 academic year.

- Goal 1: Carbon aims to eliminate the University's carbon footprint.
 - Wesleyan reduced its carbon footprint by converting 50% of campus heating pipes to energy-efficient hot water, making public transportation more accessible to students, and offsetting faculty and staff air travel.
- Goal 2: Curriculum focuses on creating opportunities for students to engage with sustainability and environmental justice (EJ) through coursework, internships, workshops, and more.
 - More than half of students engaged in an activity related to sustainability and EJ, such as taking one of 101 sustainability-related courses, completing an internship or research experience, attending a workshop, or leading a sustainability initiative.
- Goal 3: Community emphasizes establishing sustainability as a guiding principle in Wesleyan's decision-making and pursuing EJ through connections between Wesleyan and the broader community.
 - New initiatives, like the WesThrift Free Store and Cultivating Justice, have directed Wesleyan's resources toward promoting EJ in the community.

For a glossary of terms used in this report, see the last page of this report. For the full text of the 2022 SSP and original version of this report, visit <u>bit.ly/wesleyanssp</u>.

For any questions about this report or the SSP, reach out to Sustainability Director Jen Kleindienst at ikleindienst@wesleyan.edu.

Acknowledgments

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2023 Spotlight

WesThrift free store opens

In 2022, Wesleyan students Annie Volker '24 and Debbra Goh '24 opened <u>WesThrift</u>, a free store that offers clothing and dorm essentials to students, faculty, and staff. Items are donated by the Wesleyan community, creating a closed loop that prevents waste. In its first year, WesThrift circulated over 2,400 items—more than 1,000 pounds of clothing! WesThrift is also home to Sew What and the Free Rental Program, student-run initiatives that provide access to free tailoring and household appliances, respectively.

Cultivating Justice breaks ground

Spearheaded by the Jewett Center for Community Partnerships Associate Director Diana Martinez, <u>Cultivating Justice</u> aims to utilize Wesleyan's resources to address needs identified by Middletown community members regarding food security, land access, environmental justice, and support for BILPOC and formerly incarcerated people interested in farming. In 2023, Cultivating Justice held workshops on fishing, gardening, keeping chickens, Black herbalism, and community organizing, provided supplies to BILPOC farmers, and began a community farm.

XtraMile launches shuttle service

Wesleyan partnered with River Valley Transit to launch <u>XtraMile</u>, an on-demand shuttle service that picks riders up and takes them between any of 18 stops around campus and in Middletown. Students download the XtraMile app, input their pickup and destination locations, and ride for free with their student ID. The pilot program saw 5,000 rides in its inaugural year.

Progress Toward Goals: Carbon

Goal: Wesleyan shall achieve carbon neutrality for all greenhouse gas emissions by 2035.

Wesleyan's carbon footprint has decreased **35% from the 2008 baseline** via renewable energy purchases, carbon offsets for air travel, and the energy-saving infrastructure upgrade from steam to hot water heating pipes.

Wesleyan has reduced emissions from electricity to zero through the purchase of 100% renewable energy credits for all electricity usage since 2018. It has also reduced transportation emissions through the purchase of carbon offsets. Emissions related to campus building heating and hot water, however, have remained at about the same level. In 2022, 80.3% of GHG emissions came from building energy usage, while 16.7% came from transportation and 3.1% came from other sources. The steam-to-hot-water heating pipe conversion that is currently underway will drastically reduce the emissions produced from building energy by lowering the amount of energy required to heat campus buildings.

Progress Toward Goals: Curriculum

Goal: By 2030, approximately 80% of the student body will have taken at least one course, workshop, or research experience that incorporates sustainability and environmental justice.

In 2022-23, 1,554 students—51% of undergraduates—engaged in one or more internships, courses, research projects, leadership experiences, workshops, or volunteer activities related to sustainability.

- 1465 students participated in courses and student forums related to sustainability. A new environmental justice professor, Dr. Christine Caruso, was hired, and new environmental justice classes, including Environmental Justice and Health Equity, Environmental Justice and Sustainability, and Environmental Justice: Community-based Participatory Research, were added to the curriculum.
- 695 students attended workshops and discussions
- 236 students did internships or volunteer work
- 63 students participated in other sustainability co-curricular activities.

(Note: of the numbers above, some students participated in more than one category of activities.)

Progress Toward Goals: Community

Goal: Sustainability is an integral part of Wesleyan's community consciousness, expressed through University practices as well as the individual and collective actions of students, faculty, and staff.

New initiatives include a sustainability and civic engagement orientation for first years, the WesThrift free store and Sew What tailoring program, new Sustainability Office internship opportunities, the relaunch of public composting, the Cultivating Justice initiative, and planting of 100 trees on campus.

New initiatives in 2022-23 include a sustainability and civic engagement orientation for first years, the WesThrift free store and Sew What tailoring program, new Sustainability Office internship opportunities, the relaunch of public composting, the Cultivating Justice initiative, and planting of 100 trees on campus.

Highlights:

- Sew What: Sew What is a free tailoring service at the WesThrift free store that aims to reduce textile waste. In its first year, it fixed over 60 pieces of clothing.
- Free Rental Program: The Free Rental Program at WesThrift was started in Spring 2023 to reduce waste by creating communal resources on campus.
- Eco-to-Go: The Eco-to-Go reusable container program expanded through a partnership with ReUser.
- Sustainable CT: Through a partnership with the Sustainability Office, the City of MIddletown achieved silver certification from Sustainable CT, recognizing the municipality for supporting equity, local economies, and the management of land and natural resources.
- Zero Waste: Wesleyan received a <u>Bronze certificate through Atlas Zero Waste Program</u> in 2022 recognizing Wesleyan's policies, programs, and infrastructure that support zero waste. The report created through this program recommends expanding recycling and reuse systems.
- Wesleyan Climate Pact: Wesleyan Climate Pact partnered with Amazing Grace Food Pantry to make emergency response kits for Middletown residents.

2023 By The Numbers

- **50%** of campus converted from steam to <u>hot water heating</u>, improving efficiency and laying the groundwork for carbon neutrality
- 100% of Wesleyan-funded employee <u>air travel offset</u> through purchase of pollution allowances on regional greenhouse gas market
- 2 all-electric vans added to the Facilities fleet
- 5000 riders on the XtraMile on-demand shuttle in its first year
- 11 new <u>electric vehicle charging stations</u> installed, including new fast chargers
- 100% of directly held publicly traded oil and gas stocks sold
- 101 unique courses in sustainability and environmental justice
- 4 professors teaching courses focused on the intersection of environmental justice and sustainability, food security, health equity, and animal studies
- 43 students' research funded through Bailey College of the Environment
- 2400 items of clothing circulated at new WesThrift free store
- 2 students worked with the City of Middletown to achieve <u>Sustainable CT Silver Certification</u>
- **200** community members and students participated in Cultivating Justice's "Growing Power" conference in February
- 1 Post-Landfill Action Network Bronze Zero Waste Certification
- 100 trees planted on campus, including three trees for every one removed

Goal 1: Carbon Progress

Objective 1.1: Eliminate fossil fuel usage in buildings

• The first 5 phases of campus <u>steam-to-hot-water heating pipe conversion</u> are complete, with 50% of campus converted. Conversion will reduce energy use and set the groundwork for increased renewable energy usage and a phase-out of Wesleyan's natural gas cogeneration plants.

Objective 1.2: Offset emissions from Wesleyan air travel

• Department budgets are charged a fee on all air travel, which is used to purchase <u>carbon allowances</u> from the Regional Greenhouse Gas Initiative (RGGI) via nonprofit Climate Vault. RGGI caps the number of offsets sold so offset purchases verifiably reduce emissions. Additionally, Climate Vault funds carbon dioxide removal technologies. All employee air travel emissions were offset in FY 2023.

Objective 1.3: Electrify Wesleyan's vehicle fleet

• Physical Plant purchased 2 new electric vehicles (EVs) and installed 11 <u>new EV chargers</u> around campus. Initial planning for full conversion of the campus fleet to EVs is complete.

Objective 1.4: Reduce single-occupancy cars on campus

• The Middletown <u>XtraMile</u> ride-sharing shuttle, launched August 2022 through a partnership between Wesleyan and River Valley Transit, gives Wesleyan students and Middletown residents convenient transportation from wherever they are to locations around Middletown (see "Spotlight").

Objective 1.5: Offset all greenhouse gas emissions by 2035

• Wesleyan does not plan to purchase carbon offsets for non-air travel emissions until 2035 in order to prioritize emissions reduction.

Objective 1.6: Divest from fossil fuels by 2035

• Sold all directly held publicly traded oil and gas stocks.

Goal 1 2023-2024 Key Targets:

- Complete phases 6 and 7 of steam-to-hot water conversion
- Add 2 electric vehicles to Public Safety fleet
- Increase bus and XtraMile usage for students and employees

Goal 2: Curriculum Progress

Objective 2.1: Support sustainability curricular integration

- 43 faculty have joined the <u>Sustainability and Environmental Justice initiative</u>, and 42 departments offer at least one S&EJ course.
- In 2023, the Provost's Office created the role of Faculty Coordinator of Sustainability and Environmental Justice Initiatives, with Professor Elan Abrell first in the newly envisioned role.

Objective 2.2: More annual environmental justice courses

- The Robert F. Schumann Foundation awarded the Bailey College of the Environment a <u>\$2 million grant</u> for 2023-2028 to create opportunities for students to engage with food security, environmental justice, and sustainability.
- This grant opened the opportunity to hire Assistant Professor of the Practice in the Bailey College of the Environment (COE) Christine Caruso, who will teach courses on environmental justice, health equity, and environmental social science research.
- The grant also included funding to create a new role for Food, Sustainability, and Environmental Justice Coordinator Malana Rogers-Bursen.

Objective 2.3: More opportunities for sustainability job development

- About 1,500 students, faculty, staff, and community members attended COE events during the 2022-23 academic year. The COE also funded 43 students doing summer work in 2023, placed interns in four community organizations, and hosted a <u>statewide food justice gathering</u> in April 2023.
- The Center for the Arts hosted the semester-long "Ocean Filibuster: Art and Action Series" which included talks on the relationship between the environment, art, and activism, community crochet and open mic events, and immersive exhibits and performances. 622 participants attended one or more sessions.
- The Gordon Career Center hosted two sustainability-centered career panels and added a <u>sustainability</u> <u>section</u> to their website.

Goal 2 2023-2024 Key Targets:

- Add 5 courses on food security and environmental justice.
- Hire a career advisor who focuses on law, government, and justice, including environmental justice.
- Organize listening sessions and workshops to build student capacity for activism.

Goal 3: Community Progress

Objective 3.1: Publicize, educate, and advocate

- WesThrift Free Store, SewWhat Tailoring Program, the Free Rental Program, and the <u>Cultivating Justice</u> initiative launched in 2022-23 (see "Spotlight").
- In 2022, a new orientation program called "WesJeopardy" was developed to teach incoming students about sustainability and community engagement at Wesleyan.
- Signage was installed in laundry facilities to promote sustainable laundry practices.

Objective 3.2: Partnerships with Middletown

- 3 students supported EJ-related community projects for a year through the <u>Community Impact</u> Residency two-semester course.
- 2 students helped create the City of Middletown's successful application for <u>Sustainable CT Silver</u> Certification.
- 2 students created Emergency Response Kits with Amazing Grace Food Pantry.
- In September 2022, Long Lane Farm and WILD Wes hosted a "Pollinator Storytime and Scavenger Hunt" for families to visit the farm and learn about pollination.
- Revitalize the landscape between the Traverse Square neighborhood and High Rise residences using funding secured by a collaboration between students, staff, and Traverse Square residents.

Objective 3.3: Expand sustainable practice in waste, dining, grounds, and purchasing

- Wesleyan diverted nearly 48% of waste from the landfill:.
 - Relaunched <u>public composting</u>, which had been on hiatus since 2020.
 - Specialty recycling programs diverted nearly 41 tons of waste through programs for metal, shredded paper, plastic film, mattresses, cooking oil, gloves, masks, oral and body care packaging, and tennis balls.
 - Construction recycling programs diverted 3,468 tons of building materials.
- Wesleyan partnered with <u>Post-Landfill Action Network (PLAN)</u> to assess current campus waste practices and received a Bronze certification.
- <u>Freecycle</u>, a mailing list where Wesleyan community members can request and distribute used items saw membership increase 14% from 468 to 533 members.
- Wesleyan Dining expanded the <u>ReUser/Eco-to-Go</u> reusable takeout container program, with 92,423 containers checked out at a 98% return rate.
- Wesleyan Grounds purchased new electric equipment, including an electric weed whacker and an electric line stripe machine for athletic fields, and planted 100 trees.
- Long Lane Farm established a restoration committee to address the invasive plants threatening the farm and restore it to its pre-COVID capacity. Tilling and tarping to control invasive mugwort began in spring 2023.
- Wesleyan continued partnerships with Ricoh USA and Thermo Fisher to procure materials for printing and laboratory equipment that are recycled by the companies

Goal 3 2023-2024 Key Targets:

- Launch Community Matchbox to efficiently connect Wesleyan and community members on projects.
- Continue working with PLAN to develop and enact a Zero Waste Plan for Wesleyan.
- Partner with the City of Middletown to support the November 2023 implementation of a new waste collection program that requires separation of food waste for compost.
- Create a campus-wide preferred product list to encourage ordering of sustainable products.

Glossary

- **Bailey College of the Environment (COE):** founded in 2009, the COE encompasses the home of the environmental studies linked major and minor, a think tank, a student research fellowship program, and a hub of community outreach regarding environmental issues.
- carbon dioxide (CO2) allowance: within the RGGI regulatory market (see below), a pollution permit for emitting one ton of carbon dioxide
- **carbon footprint:** the amount of carbon dioxide and other greenhouse gasses emitted by an entity, usually expressed as MTCO2e (metric tons of carbon dioxide equivalent)
- **carbon neutrality:** achieving balance between the amount of carbon emitted and the amount of carbon being absorbed by carbon sinks (forests, oceans, soil, etc.)
- **carbon offset:** an action or activity that compensates for the emission of greenhouse gasses, usually by storing carbon or preventing carbon emissions
- cogeneration (cogen): the use of waste heat from electricity generation for heating
- **compost:** nutrient-rich organic matter, such as food waste, that has gone through the process of decomposition and can be used as fertilizer
- environmental justice (EJ): "the fair treatment and meaningful involvement of all people regardless of race, color, national origin, or income with respect to the development, implementation and enforcement of environmental laws, regulations and policies"
- Regional Greenhouse Gas Initiative (RGGI): "a cooperative effort among twelve states, including CT, to reduce carbon dioxide emissions from power plants. Within RGGI states, regulated [fossil fuel-fired] power plants [over 25 megawatts] must acquire one allowance for every ton of CO2 they emit.... Each participating state originates allowances in proportion to its share of the regional cap."²
- **renewable energy:** "energy derived from natural sources that are replenished at a higher rate than they are consumed," including solar and wind power³
- **steam-to-hot-water conversion at Wesleyan:** The hotter an object, the more heat it radiates away as waste energy. Steam pipes run constantly and are very hot (about 320 °F). Hot water systems, in contrast, adjust the temperature based on how much heat is required and are better insulated than older steam pipes, reducing wasted energy. Wesleyan's old steam system is 55% efficient, while the current hot water system is 75% efficient and will increase to 90+% when the conversion is completed in 2029.
- **sustainability:** ensuring health, wellbeing, and equity for all communities without compromising future generations' quality of life and access to natural resources
- zero waste: conservation of resources via responsible production, consumption, reuse, and recovery

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¹ https://www.epa.gov/environmentaliustice/learn-about-environmental-iustice

² https://www.rggi.org/sites/default/files/Uploads/Fact%20Sheets/RGGI 101 Factsheet.pdf

³ https://www.un.org/en/climatechange/what-is-renewable-energy