Wesleyan Sustainability Strategic Plan: Annual Report FY 2024 (Accessible Text-Only Version)

Executive Summary

This annual report, the second since Wesleyan's 2022 adoption of the Sustainability Strategic Plan (SSP), captures the progress made on SSP goals during 2023-24.

- Goal 1: Carbon aims to eliminate the University's carbon footprint.
 - Wesleyan reduced its carbon footprint 24% from its 2008 baseline in part by converting 57% of campus heating pipes to energy-efficient hot water (up from 50%), making public transportation more accessible to students, and offsetting 100% of faculty and staff air travel for the second year.
- **Goal 2: Curriculum** focuses on creating opportunities for students to engage with sustainability and environmental justice (EJ) through coursework, internships, workshops, and more.
 - o 55% of students (up from 51%) engaged in an activity related to sustainability and EJ, such as taking one of 103 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.
 - Expanded initiatives, including tabling educational opportunities, a civic engagement workshop series, the expansion of public composting across campus, new reuse opportunities, and increased Wesleyan-Middletown engagement on sustainability topics stretched Wesleyan in new directions.

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 bit.ly/wesleyanssp.

For any questions about this report or the SSP, reach out to Sustainability Director Jen Kleindienst at <u>jkleindienst@wesleyan.edu</u>.

Acknowledgments

The following people and groups contributed greatly to the creation of this Sustainability Strategic Plan Annual Report. Thank you for sharing your time and expertise, Jen Kleindienst, Brynn Heller, Dylan Campos, Angela Han, SAGES Committee, and SSP Committee.

2024 Spotlight

Power of Language Week Incorporates Sustainability

The SSP 3.1 Committee worked to realize the goals of Wesleyan's Sustainability Strategic Plan by publicizing, educating, and advocating for sustainable, equitable, and just practices. The Committee partnered with the Office of International Student Affairs to host an event about environmental terms for the Power of Language Week. Through tabling in Usdan, they engaged students in games, conversation, and gave away eco-friendly products from Reboot Eco.

Environmental Solidarity Network (ESN) Receives Organization of the Year Award

Environmental Solidarity Network (ESN) Receives Organization of the Year Award New student group ESN was off to a busy start! They held monthly town halls, a sustainability fair, and created a listserv with over 400 people. ESN co-hosted an ongoing environmental justice project with Cultivating Justice, activism living room conversations with the Sustainability Coordinators, and a Sustainability Strategic Plan (SSP) educational event with the SSP Ambassadors. In the spring, ESN tabled weekly about the SSP. ESN also organized Garden Fest with student bands, 50 vendors, and over 600 attendees. ESN has continually worked to hold Wesleyan leadership accountable to its sustainability commitments. ESN received the prestigious Organization of the Year Award as a result of its inaugural year efforts.

River Valley Transit Ridership Increases

A major advertising push saw River Valley Transit (RVT) bus ridership increase to over 2,200 student riders in 2023-24. RVT's XtraMile on-demand shuttle service serves 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. XtraMile had nearly 2,300 riders in 2023-24. RVT buses expanded to daily service in May 2024 and XtraMile is expanding its service to 6 days a week in September 2024.

Progress Toward Goals: Carbon

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

Wesleyan's carbon footprint has decreased 24% from the 2008 baseline via carbon offsets for air travel, and phase 6 of an energy-saving infrastructure upgrade to hot water heating pipes. Emissions increased significantly from FY 23 because Wesleyan ended its renewable enrgy purchases for FY 24.

Wesleyan has 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 2024, 82% of GHG emissions came from building energy usage, while 16% came from transportation and 2% 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 2023-24, 1,717 students—55% of undergraduates—engaged in one or more internships, courses, research projects, leadership experiences, workshops, or volunteer activities related to sustainability. This represented an increase of over 160 students participating in these activities.

- 1643 students participated in courses and student forums related to sustainability, an increase of 178 students from FY 2023.
- 438 students did internships, leadership, or volunteer work, up 202 students from FY 2023.
- 182 students attended workshops and discussions, down 513 students from FY 2023.
- 149 students participated in other sustainability co-curricular activities, up 86 from FY 2023.

(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.

Highlights from 2023-24 include new Sustainability Office internship opportunities, tabling educational opportunities, a civic engagement workshop series, the expansion of public composting across campus, a student project creating a campus invasive plant map, expansion of reuse opportunities, and increased Wesleyan-Middletown engagement on sustainability topics.

- Sew What x WesThrift hosts 1st Trashion Show: Sew What and WesThrift coordinators organized a trashion show in April 2024, which featured 8 student models and 15 designers with 100% reused items. Participants had a crash course in sewing and over 100 attendees enjoyed the show and student bands.
- Growing Power conference teaches farming and social change: The 2nd annual Growing Power conference, hosted by Cultivating Justice and the Katal Center, drew 350 people from across CT.
 Workshops included chicken keeping, growing food in small spaces, fishing, composting, beekeeping, and methods of social change.
- Miller Street Community Farm launches: Cultivating Justice broke ground on a community farm at Roosevelt Park in Middletown's North End, with raised beds, beehives, and chickens producing food for the community. Bimonthly education meetings connect people around sustainable food practices.

2024 By The Numbers

- 57% of campus converted from steam to <u>hot water heating</u>, improving efficiency and laying the groundwork for carbon neutrality (FY 2023: 50%)
- 100% of Wesleyan-funded employee <u>air travel offset</u> through purchase of pollution allowances on regional greenhouse gas market (FY 2023: 100%)
- 1 hybrid-electric vehicle added to Wesleyan's fleet (FY 2023: 2 all-electric vehicles added)
- 2287 XtraMile on-demand shuttle riders and 2204 River Valley Transit bus riders (FY 2023: 1457 bus riders)
- 0 directly held publicly traded oil and gas stocks (FY 2023: 0 stocks)
- 103 unique courses in sustainability and environmental justice (FY 2023: 101 courses)
- 31 courses focused on the intersection of environmental justice and sustainability, food security, health equity, and animal studies (FY 2023: 20 courses)
- 40 students' research funded through Bailey College of the Environment (FY 2023: 43 students' research funded)
- 2305 items of clothing circulated at WesThrift free store (FY 2023: 2334 items of clothing)
- 2 students worked with the City of Middletown to achieve Sustainable CT Silver Certification
- **More than 350** community members and students participated in Cultivating Justice's "Growing Power" conference (FY 2023: 200 attendees)
- More than 80 students participated in civic action workshop series (FY 2023: N/A)
- 37 trees planted on campus (FY 2023: 100 trees)

Goal 1: Carbon Progress

Objective 1.1: Eliminate fossil fuel usage in buildings

- Emissions from campus-generated heat, AC, and electricity increased 4.8%. Emissions from purchased electricity increased over 600% from FY 23 because Wesleyan chose not to purchase renewable energy credits, as had been the practice for 100% of purchased energy use from FY 20-FY 23.
- The first 6 phases of campus <u>steam-to-hot-water heating pipe conversion</u> are complete, with 57% of campus converted and a geothermal test well drilled in summer 2024. Conversion reduces energy use and, coupled with the geothermal test well, sets the groundwork for 100% renewable energy-powered buildings.

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. 100% of business was offset in FY 2024.

Objective 1.3: Electrify Wesleyan's vehicle fleet

- Public Safety leased 1 new hybrid-electric vehicle.
- Facilities, Public Safety, Transportation Services, and the Sustainability Office developed a plan for electric vehicle conversion of light-duty vehicles in the campus fleet.

Objective 1.4: Reduce single-occupancy cars on campus

- River Valley Transit's buses and XtraMile on-demand shuttle saw increased usage thanks to extensive outreach. Multiple tabling events, "bus try-it days," and increased availability of schedules and information yielded over 2100 bus rides and nearly 2300 XtraMile rides.
- The President's Office provided a 50% match for the XtraMile program. River Valley Transit secured state microtransit funding for FY 2025 and FY 2026 for XtraMile in part due to Wesleyan's written support of the program.

Note: no new progress on objectives 1.5 and 1.6 in FY 2024. Wesleyan does not plan to purchase carbon offsets for non-air travel emissions until 2035 in order to prioritize emissions reduction. The Investments Office remains on track to divest from fossil fuels by 2035.

Goal 1 2024-2025 Key Targets:

- Complete phase 7 of steam-to-hot water conversion.
- Create a geothermal master plan.
- Establish initiatives for addressing carbon pollution associated with study abroad.
- Phase 2 of electric vehicle transition plan and implementation.

Goal 2: Curriculum Progress

Objective 2.1: Support sustainability curricular integration

- Through funding from the Bailey College of the Environment (COE), the <u>Sustainability and Environmental Justice (S&EJ) initiative</u> awarded 8 faculty course grants; 3 of the grants were for new courses. Since the initiative's inception in 2016, 60 faculty have participated, some multiple times, and 85% of departments offer at least one S&EJ course.
- 3 faculty lunches were held, out of which a planning committee developed to discuss ways to navigate grief and despair in teaching, living, and learning. This workshop concept has received a \$6,000 grant from the Allbritton Center.

Objective 2.2: More annual environmental justice courses

- The Bailey COE offered 6 courses entirely about environmental and food justice and an <u>additional 4 courses</u> with at least 30% of the curriculum focused on these topics.
- The <u>first-ever environmental studies course taught in Spanish</u>: *Venezuela: The Effect of Oil Discovery on People, the Environment, and Democracy* discussed the key factors that have affected the development of Venezuela over time.
- The Robert F. Schumann Institute of the Bailey COE hosted <u>Mobilizing Power: Community Building for Environmental Justice</u> in November 2023. The event brought together advocates from a variety of nonprofits, government agencies, grassroots campaigns, and academic institutions to exchange ideas for making meaningful, long-term progress toward environmental justice.

Objective 2.3: More opportunities for sustainability job development

- The Bailey COE funded 40 students doing summer work in 2024.
- Through the Bailey COE, Hartford-based <u>farmer Travis Stewart led an urban farming workshop</u>. This workshop provided opportunities for students to be exposed to and learn from a Black farmer and community leader and to move toward more respectful partnerships between Wesleyan and the community.
- The Gordon Career Center (GCC) hired a career advisor focused on law, government, and justice, including environmental justice. In 2023-24, the GCC hosted 2 sustainability career panels with 9 student and alumni panelists.
- Student SSP Ambassadors worked with the GCC on an alumni sustainability directory to better connect current Wesleyan students with those now working in sustainability-focused fields.

Goal 2 2024-2025 Key Targets:

- Add 4 courses on food security and environmental justice.
- Hold 2-day workshop in Fall 2024 navigating grief and despair in teaching, living, and learning.
- Continue workshops to build student capacity for activism.
- Expand alumni sustainability directory and make it accessible to current students.

Goal 3: Community Progress

Objective 3.1: Publicize, educate, and advocate

- Tabling during the Power of Language Week created student engagement and creativity while learning about language.
- Prepared for integration of sustainability into international student orientation.
- Environmental Solidarity Network and The Shed hosted the second annual <u>Garden Festival</u>, which included live music, food, and student vendors.
- Students from the <u>Sunrise Movement Wesleyan</u> hub published its first <u>zine</u> to educate students about the SSP.
- Allbritton and the Sustainability Office hosted a series of "living room conversations" to identify opportunities for student activism capacity building. Feedback from these conversations led to a spring 4-workshop series that engaged over 80 students on building institutional memory, navigating institutional resources, communications, process facilitation, and power mapping.

Objective 3.2: Partnerships with Middletown

- Sustainable Middletown Interns collaborated with the City to update the Middletown Government guide and work on a municipal communications plan.
- The Community Matchbox pilot project team held several feedback-gathering meetings with Wesleyan and Middletown community members then created intake forms to allow partners a space to share or request expertise or resources. In the inaugural semester Matchbox successfully fielded 10 requests.
- The Bailey College of the Environment nurtured partnerships with over 40 statewide food and environmental justice organizations. BCOE also launched a workshop series: Tending the Soil: Towards Land Justice in CT and placed 9 interns in food justice organizations.
- The Jewett Center for Community Partnerships hosted Growing Power with Katal Center for Equity, Health, and Justice with over 350 people from 38 municipalities.
- The Cultivating Justice initiative started the Miller Street Community Farm in the North End with 64 feet of raised beds, 2 beehives, and chickens. Cultivating Justice held bi-monthly education and community connection meetings.

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

- Wesleyan diverted nearly 48% of waste from the landfill through initiatives including removal of paper towels from dorm bathrooms, resale of reusable items through the GovDeals platform, introduction of composting to 9 high-traffic locations, and expansion of a recycling center in Usdan basement.
- Compost Interns partnered with Communications on a <u>video</u> to increase composting.
- Wesleyan Dining continued its use of the "Waste Not" platform to analyze kitchen food waste. The ReUser/Eco-to-Go reusable takeout container program maintained a 98% return rate, aided by fines for non-returned containers.
- The Sustainability Office and Facilities updated and streamlined campus sustainability policies for energy conservation, buildings, and grounds.
- For the first time, the Waste Not move-out collection hosted a community garage sale in late May and made work-study-eligible volunteers eligible for payment.

Goal 3 2024-2025 Key Targets:

- Integrate sustainability into International Education Week.
- Efficiently connect Wesleyan and community members via Community Matchbox Phase 2.
- Create an archive of campus sustainability efforts and library of skill-building information.
- Develop a WB Mason preferred product list that emphasizes sustainable products.

Financial Snapshot

Total new spend across all 12 SSP objectives was over \$6.2 million in FY 2023 and nearly \$4.9 million in FY 2024. The greatest spending in both years was on steam to hot water heating system conversion, at \$5.5 million and \$4.6 million, respectively. Notable additional funded projects in FY 2024 included Wesleyan's support of River Valley Transit's XtraMile on-demand shuttle service, increased funding for student interns supporting Middletown's Sustainable CT efforts, and education, outreach, and materials to support Middletown's Save As You Throw waste initiative.

Carbon Spend 2023 vs. 2024

FY 2023: \$5,971,231 FY 2024: \$4,669.888

Curriculum Spend 2023 vs. 2024

FY 2023: \$199,500 FY 2024: \$171,420

Community Spend 2023 vs. 2024

FY 2023: \$65,075 FY 2024: \$55,373

Total Spend 2023 vs. 2024

FY 2023: \$6,235,806 FY 2024: \$4,896,681

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

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