CLIMATE ACTION: Greenhouse Gas Reduction

Goal (Set in 2011): Reduce greenhouse gas emissions 25% by 2025.

Status: Achieved 28% reduction.

U-M is on pace to reduce emissions from campus sources and purchased electricity by 50% by 2025, in pursuit of carbon neutrality.



KEY INITIATIVES

ENERGY CONSERVATION

Energy conservation measures, building tune-ups, and other efforts have produced a 22% reduction in energy consumption in General Fund buildings despite a 20% increase in building area since FY06.

RENEWABLE POWER PURCHASING

Purchased 150,000 megawatt hours of renewable energy credits and began developing an expanded power purchase agreement to achieve carbon neutrality for Scope 2 emissions (resulting from purchased electricity) by 2025.

REVOLVING ENERGY FUND

Completed 19 LED energy conservation projects in General Fund, Student Life, Flint and Dearborn buildings. Implementation of an additional 30 projects is underway, as is development of future projects.

CENTRAL POWER PLANT EXPANSION

A new turbine that decreases emissions and improves reliability began operating in January 2022.

NEXT STEPS

Efforts toward U-M's carbon neutrality commitments progressed as the university achieved its 25% greenhouse gas reduction goal for the Ann Arbor campus — three years ahead of schedule despite 35% campus growth. Highlights include:

- Extensive geo-exchange heating and cooling plans, as initial projects in a phased approach toward decarbonizing heating and cooling infrastructure across the university.
- \$300 million in "green bonds" issued for sustainable capital projects.

- Established maximum carbon-based standards for all new construction and major renovation projects over \$10 million.
- Launched an initial progress dashboard.
- Partnered with Delta Air Lines to help spur the availability and widespread adoption of sustainable aviation fuel and reduce lifecycle emissions from university travel.

University of Michigan Health continues its Green Anesthesia Initiative to reduce or eliminate use of anesthetic gases with high global warming potential.





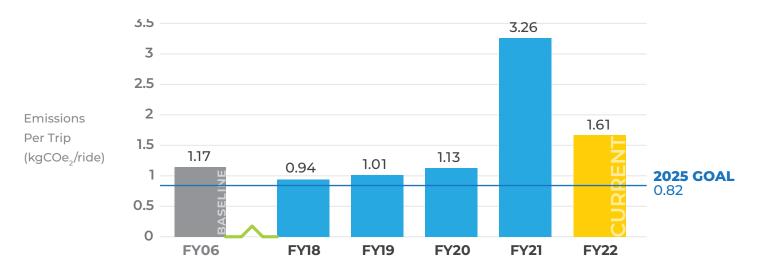
CLIMATE ACTION: Fuel Efficiency

Goal: Decrease carbon intensity of passenger trips on U-M transportation options by 30% by 2025.



FY22

Status: 0% reduction due to pandemic impact.



Goal is measured as vehicle carbon output per passenger trip. Since ridership was down 24% from FY20 due to ongoing pandemic impacts, goal progress was out of reach.

KEY INITIATIVES

Purchased four electric buses for the Ann Arbor campus; to be delivered by June 2023, plus four more to be delivered spring 2024.

Purchased thirty battery electric vehicles for the Ann Arbor campus; to be delivered during FY24.

Updated infrastructure to prepare for the installation of new EV chargers, including 100 chargers for permitted spaces and 40 for fleet vehicles; to be installed by summer 2023.

Opened new transportation center with EV maintenance capacity in December 2022.

NEXT STEPS

Evaluate and plan for the purchase of additional EV buses and the infrastructure to support them.



WASTE REDUCTION

Goal: Reduce the amount of waste sent to landfills 40% by 2025.

FY22

Status: 13% reduction.



Diversion rate: 38%

KEY INITIATIVES

OFFICE OF CAMPUS SUSTAINABILITY

Increased number of buildings with compost service to 155.

Implemented campaign to increase awareness and use of existing compost infrastructure.

Established procedure for ongoing visual bin audits to track waste behavior trends and target location-specific contamination.

Placed first in zero waste category of national Campus Race to Zero Waste competition.

UNIVERSITY OF MICHIGAN HEALTH

Received Partner for Change and Greening the Operating Room awards from Practice Greenhealth (international organization recognized as a leader in health care sustainability).

Maintained compost expansion success (120 tons composted) and recycled 232 tons of construction and demolition material.

NEXT STEPS

OFFICE OF CAMPUS SUSTAINABILITY

Conduct waste sorts to identify waste reduction opportunities specific to building type.

Expand lab swap day model to increase redistribution of lab supplies on campus.

Lead workstream to evaluate existing waste goal and develop recommendations to update or expand it.

Conduct pilots to test methods of increasing recycling and compost collection.

Continue to expand the number of buildings and staff kitchens with compost service.

UNIVERSITY OF MICHIGAN HEALTH

Begin rollout of new medical plastics recycling and reusable sharps container initiatives in quarter three of FY23.



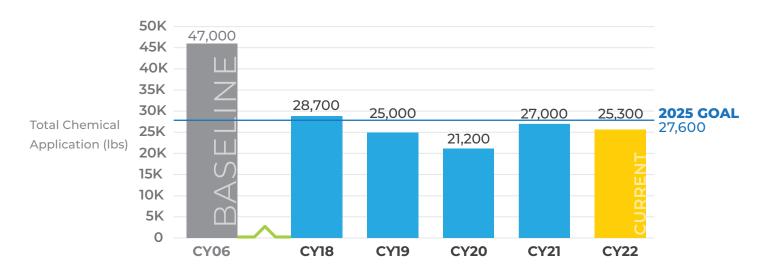
HEALTHY ENVIRONMENTS: Huron River

Goal: Protect the Huron River through stormwater control strategies and reduce chemical applications to campus landscapes by 40% by 2025.



FY22

Status: Achieved 45% reduction.



KEY INITIATIVES

Continued the efforts that have achieved this goal the past four years.

Achieved Bee Campus USA certification, reinforcing U-M's commitment to protecting and expanding pollinator habitat, reducing pesticide use, and incorporating pollinator awareness and studies into campus activities and living-learning opportunities.

NEXT STEPS

A workstream is evaluating this goal and developing recommendations to expand and/or extend it to consider other aspects of sustainable grounds.

Form a staff, faculty, and student pollinator committee to advance pollinator habitat creation and living-learning lab opportunities.

HEALTHY ENVIRONMENTS: Sustainable Food

A Carbon Neutrality Food Work Group is developing a road map for U-M's approach to sustainable food purchases. The 2025 goal measures local food. New goals will focus on carbon emissions. While this work progresses, U-M has discontinued the time-intensive tracking process for the 2025 goal to dedicate more time and resources to establish new targets and accounting methodologies.

Although annual metrics will not be added to this goal for the next few years, U-M's commitment to purchasing sustainable food remains strong. All of the systems in place to attain the current goal will continue for the foreseeable future.



COMMUNITY ENGAGEMENT

Invest in programs to educate our community, track behavior, and report progress toward a campus-wide ethic of sustainability.



FY22

PLANET BLUE AMBASSADORS

PURPOSE

Encourage all faculty, staff, and students to become engaged in sustainability on campus and lead by personal action. Ambassadors form a network to advance U-M's sustainability commitments and move toward a campus-wide ethic of sustainability.

KEY INITIATIVES

Currently there are 8,100 certified Ambassadors across all three U-M campuses.

NEXT STEPS

Communicate to U-M community members across all three campuses about efforts underway and encourage them to get involved in sustainability.

Create new resources to help individuals take sustainable actions regardless of their role on campus or field of study.

STUDENT SUSTAINABILITY COALITION

PURPOSE

Promote a sustainable campus culture by bringing people together to achieve social change. SSC uses the Collective Impact Framework to create a mutually defined common agenda and shared vision that unifies campus-wide student sustainability efforts.

KEY INITIATIVES

Held inaugural Student Sustainability Leaders Summit to connect student leaders and inspire action by individuals, organizations, and the institution.

Launched and provided backbone support to the Student Carbon Neutrality Network (SCANN) to support student advocacy.

Granted \$50,000 to four sustainability projects through the Planet Blue Student Innovation Fund (PBSIF).

NEXT STEPS

Connect students and SCANN to the new president and administration, ensuring the student voice is represented in future carbon neutrality actions.

Grow student connectedness through social-focused conversations and events.

Expand PBSIF projects to include faculty and staff applications that contribute to innovative on-campus sustainability initiatives.

PLANET BLUE STUDENT LEADERS

PURPOSE

Work with staff to implement sustainability projects, collaborate with student organizations and departments, and engage their peers (on and off campus) in sustainability programming.

KEY INITIATIVES

Engaged peers in year-long behavior change campaigns related to energy, water, waste, and off-campus housing.

Produced a podcast, blog posts, and other forms of creative multimedia storytelling.

During the 2021-22 academic year, PBSLs partnered with eleven campus units to engage 600+ students in hands-on sustainability education. Indirectly, campaigns reached more than 2,500 students.

NEXT STEPS

Grow network of collaborators and participants.

Expand scale and reach of podcast and other creative media.

EARTHFEST

PURPOSE

Celebrate sustainability initiatives across U-M and the surrounding communities, while providing an inclusive platform to educate and engage the campus community on opportunities to support sustainability on campus and in our daily lives.

Expanded out encompassing of sustainability of sustainability of sustainability or organizers incompositions.

KEY INITIATIVES

Expanded outreach to groups encompassing broader aspects of sustainability.

Student Life's Sustainability Cultural Organizers incorporated the arts into Earthfest.

NEXT STEPS

Continue adapting Earthfest to university's sustainability priorities and structure.





COMMUNITY ENGAGEMENT

Invest in programs to educate our community, track behavior, and report progress toward a campus-wide ethic of sustainability.



FY22

U-M SUSTAINABLE FOOD PROGRAM

PURPOSE

Organize and amplify student voices calling for a more just and sustainable food system. Collaborate with food, environmental, and social justice oriented groups. Consists of a paid student leadership team and a network of affiliated student organizations and individual collaborators.

KEY INITIATIVES

Expanded on-campus Farm Stand in collaboration with the Campus Farm—serving over 1,000 unique customers in fall 2021—and engaged 2,000+ people in on-site education.

Annual HarvestFest celebration had 800+ attendees

Awarded six mini-grants to student organizations for projects related to food and social justice.

Hosted annual Rooting For Change summit with 30+ student-led presentations and workshops.

NEXT STEPS

Continue to strengthen and grow the Farm Stand

Build out collaborations with university units and student organizations, with a particular emphasis on DEI and the arts.

SUSTAINABILITY CULTURAL INDICATORS PROGRAM (SCIP)

PURPOSE

SCIP is designed to measure and track the culture of sustainability at U-M. The program launched in 2012 at the Ann Arbor campus and was extended to the Dearborn and Flint campuses in 2021.

KEY INITIATIVES

Added carbon neutrality-related questions to the 2021 SCIP questionnaires. Initial results show that understanding of carbon neutrality of the university community members is limited. However, more than 75% of respondents indicated that U-M is serious about achieving carbon neutrality, and they were committed to modifying their own behaviors to help.

NEXT STEPS

Continue sharing results with campus partners to inform and enhance sustainability initiatives.

Available at:

https://graham.umich.edu/scip

ZERO WASTE STADIUM

PURPOSE

Reduce waste and build a culture of sustainability by making football games zero waste.

KEY INITIATIVES

Diverted 76 tons of waste from the landfill, with a 74% diversion rate.

- Over 54 tons of recycling
- Over 17 tons of compost
- 4 tons of food donated to Food Gatherers

Refined post-game compost sorting process.

NEXT STEPS

Continue zero waste collection process improvements and staff and volunteer training program.

