2026 UPDATE

2022B Green Bond Report

Furthering the University of Michigan's commitment to carbon neutrality

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Letter from the interim CFO

Dear University of Michigan Community,

As we share our 2022B Green Bond Report, I want to acknowledge the steady progress we've made together in our campus energy transition. For those who have followed these reports in recent years, you know we continue to take important steps toward our goals for a more sustainable campus—and this year is no different.

Across our campuses, we're seeing tangible results from the efforts of students, faculty, staff, and our valued partners. The transition in how we power and operate our university is underway and is reflected in new renewable energy installations, expanded electrified transportation, and ongoing improvements in building performance. These changes are supported by a range of tools—including our green bonds—which help us invest in projects that matter for our community and our future.

The university continues to make significant progress in its campus-wide carbon neutrality commitments, advancing efforts across UM-Ann Arbor, UM-Dearborn, UM-Flint, and Michigan Medicine. U-M is on track to achieve major greenhouse gas reduction goals ahead of international recommendations, reaffirming its leadership in sustainability. Ongoing initiatives are focused on reducing both direct and indirect emissions as well as fostering a culture of environmental stewardship. Through data-driven decision-making, innovative projects, and broad campus engagement, U-M is laying the groundwork for a more sustainable future.

This year's report highlights progress on several fronts, from the completion of geoexchange systems to new solar installations. Looking ahead, we will continue to pursue innovative applications of geoexchange, electrified heating and cooling, and the integration of sustainability into research and infrastructure projects. These steps, supported by thoughtful investments and broad collaboration, are helping us build a resilient university and strengthen our role as a model for higher education.

Thank you for your ongoing commitment. Together, we are making meaningful progress in our energy transition on campus, and I am optimistic about what we will accomplish in the years ahead.

Robert A. Hewlett III
Interim Executive Vice President and Chief Financial Officer

Carbon neutrality commitments

Advancing the campus energy transition

The university's carbon neutrality commitments guide its energy transition across the UM-Ann Arbor, UM-Dearborn, UM-Flint, and Michigan Medicine campuses. Commitments include:

- Reducing greenhouse gas emissions from purchased electricity (Scope 2) to net zero in 2027.
- Eliminating direct, on-campus greenhouse gas emissions (Scope 1) by 2040.
- Advancing goal-setting for major categories of indirect emissions (Scope 3), building on completed analysis, data development, and campus engagement.
- Achieving a net-zero carbon footprint for the university's endowment by 2050 through sustainable investment strategies.
- Fostering a university-wide culture of sustainability, with service to communities as a core principle.

U-M has reduced combined Scope 1 and Scope 2 emissions by approximately 32 percent since 2010 and, based on FY 2025 operational data, is on pace to reach a 50 percent reduction in 2027—exceeding Intergovernmental Panel on Climate Change (IPCC) guidance to reduce emissions by 45 percent by 2030. Notable efforts include:

- Advancing geo-exchange systems for Leinweber Computer Science and Information Building, Wolverine Village (formerly the Central Campus Residential Development), and Ginsberg Center.
- Implementing maximum building emissions targets for new projects over $10 million, aligning new construction with long-term campus energy transition projects.
- Scaling energy-efficiency investments through the shared revolving energy fund, including $1.1 million deployed in FY 2025 to support lighting and HVAC upgrades across campus.
- Launch of installations that will result in approximately 25 megawatts of solar power across the UM-Ann Arbor, UM-Dearborn, and UM-Flint campuses.
- Deploying 12 electric buses and 78 electric vehicles and installing more than 280 EV charger ports as part of plans to decarbonize U-M's vehicle fleet.

Carbon neutrality commitments

U-M also holds a Gold rating from the Association for the Advancement of Sustainability in Higher Education's Sustainability Tracking, Assessment, and Rating System (STARS), which evaluates performance across academics, engagement, operations, and planning and administration. Nearly 1,300 institutions from 56 countries participate including 178 that hold Gold ratings and 16 that hold Platinum ratings. All participating Big Ten institutions hold Gold or Silver ratings.

What's ahead

U-M's next phase of sustainability work builds on established commitments and focuses on implementation and coordination across campuses. Priorities include:

- Advancing the Maize Rays solar initiative, including completion of on- and off-campus solar projects supporting net-zero emissions from purchased electricity (Scope 2) in 2027.
- Expanding electrified heating and cooling systems, including additional geoexchange projects aligned with major capital investments.
- Advancing goal-setting for priority categories of indirect emissions (Scope 3), building on completed analysis of business travel, food, construction materials, and purchased goods and services.
- Planning for future energy demand associated with research growth and data-intensive computing, integrating sustainability considerations into long-term infrastructure planning.

Sustainable construction goals

Energy performance standards

The University of Michigan has a longstanding commitment to environmental stewardship, consistently seeking new ways to advance sustainability in facility design and construction. In April 2025, the university adopted American Association of Heating, Refrigeration and Air Conditioning Engineers (ASHRAE) 90.1-2019. In response, rather than applying fixed percentage energy improvement targets across the board, U-M now requires each project to exceed ASHRAE requirements on a project-specific basis until the impact of the updated code is better understood. Mandatory energy conservation measures, comprehensive energy efficiency evaluations, detailed energy modeling, and development of energy impact statements remain required at every stage of project design.

Carbon emission targets

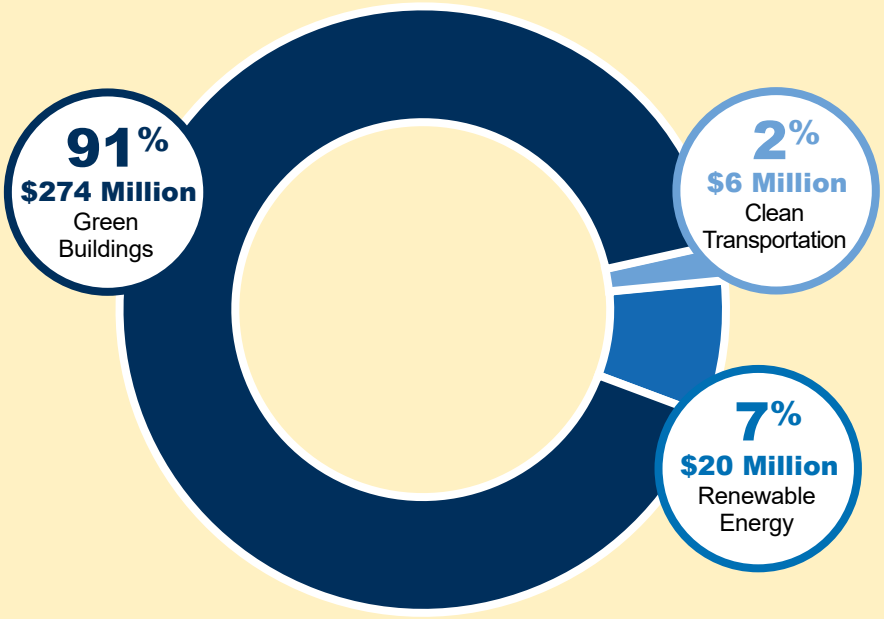
In November 2022, the university formally incorporated in the design guidelines maximum carbon emissions targets across different building types for all new construction projects as well as major renovation projects with a construction budget of $10 million or greater. These targets further enhance our goals and support U-M's commitment to achieving net-zero emissions.

LEED certification

All new buildings and additions with an estimated construction budget greater than $10 million are designed to achieve a minimum of Leadership in Energy and Environmental Design (LEED) Silver certification level.

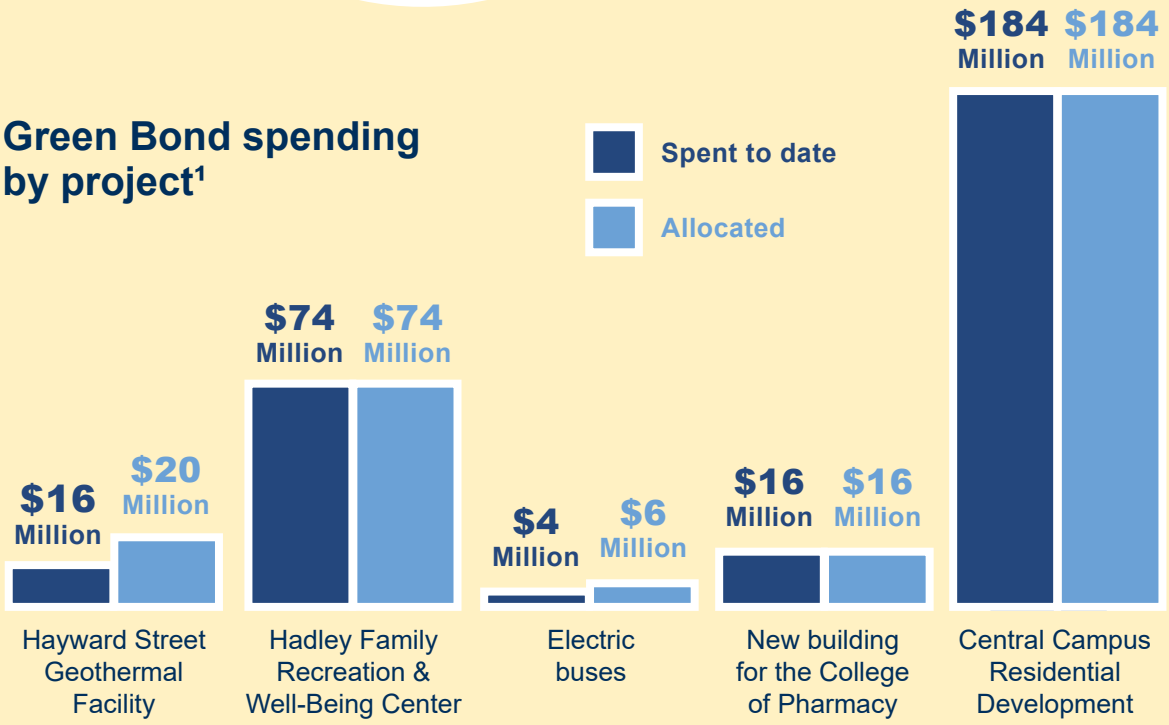
Series 2022B Green Bond spending

In March 2022, U-M successfully issued its 2022 series of bonds to finance planned future construction and renovation projects. As part of this issuance, the university issued its first green bond series (2022B) to directly support its ambitious sustainability goals. Of the $300 million in green bonds issued, U-M plans to allocate $274 million to support green buildings, $20 million to support renewable energy projects, and $6 million to support clean transportation.



Green Bond allocations by category[1]

Green Bond spending by project[1]



[1]Amounts rounded

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How does the green bond issuance support U-M's climate action goals?

The campus improvement projects financed by the Series 2022B Bonds are addressing climate transition risks by mitigating greenhouse gas emissions from buildings and the transportation sector. U-M is supporting the climate transition by constructing green buildings, installing renewable energy infrastructure, and prioritizing clean transportation that directly advances decarbonization goals. The Series 2022B Bonds also finance activities that align with a just transition, characterized by the equitable inclusion and accommodation of all individuals, with a special focus on disadvantaged groups that may be directly or indirectly affected by the structural changes necessary for the transition to a low-carbon economy. The Series 2022B Bonds support the just transition by prioritizing projects that will minimize the environmental impacts of the university's operations and, in turn, minimize negative impacts on human health.

By financing a variety of projects with educational, health, and environmental benefits, the Series 2022B Bonds also support the following United Nations Sustainable Development Goals:

This report covers the period through March 2026. As of March 31, 2026, $294,307,719.98 in green bond proceeds have been expended, with $5,692,280.02 remaining funding to be spent.

Investment earnings on green bond proceeds totaling $20,924,810.87 have been allocated towards expenditures for the Central Campus Residential Development project.

RENEWABLE ENERGY

Hayward Street Geothermal Facility

$20.0 Million	$19.7 Million	$15.9 Million
Total project budget	Amount of green bonds allocated to project	Amount of green bonds spent to date

The university's carbon neutrality goals recommend the utilization of district geothermal systems for heating and cooling buildings to reduce carbon emissions and eventually achieve carbon neutrality.

This project will build a geothermal plant on Hayward Street adjacent to the Leinweber Computer Science and Information Building to supply its heating and cooling. Geothermal systems are renewable because of the earth's constant temperature underground. The Leinweber Building is ideal for this demonstration project because there is sufficient land available for the system and we can learn the dynamics of a geothermal system in our climate. The project will include 100 borings spaced 20 feet apart with underground piping to a depth of 700 feet in an area approximately two-thirds the size of a football field. As we study comprehensive district geothermal systems for North Campus, we envision this relatively small system could be interconnected as future systems are built.

The geothermal system and the Leinweber Building will be all-electric and the first large-scale university building, on North Campus, that will not rely on natural gas for heating. Currently, the university is sourcing 200 million kilowatt hours per year from renewable energy. We anticipate the remaining purchased electricity on the Ann Arbor Campus will be from renewable energy sources prior to the completion of the Leinweber Building resulting in a carbon-neutral operation. The system will be located underground allowing the existing parking lot to be replaced in the same location. This project has achieved substantial completion in October 2024 and is pursuing LEED Gold Certification.

Hayward Street Geothermal Facility

Project rendering

Leinweber Computer Science and Information Building progress

GREEN BUILDING

Hadley Family Recreation and Well-Being Center

$165.0 Million	$74.3 Million	$74.3 Million
Total project budget	Amount of green bonds allocated to project	Amount of green bonds spent to date

The Hadley Family Recreation and Well-Being Center will contain 200,000 gross square feet and will include modern gymnasiums, a track for jogging and walking, spaces for weight and cardiovascular training, group exercise rooms, aquatics, climbing areas, courts for squash and racquetball, locker rooms, support, and administration spaces.

The project will allow greater access and opportunity for students and employees to improve their health and well-being.

The building's design and systems include several energy-efficient features that will target an estimated 20 percent energy savings compared with an energy code-compliant building, as defined in ASHRAE 90.1-2013. In addition, approximately 100 photovoltaic panels will provide on-site renewable energy. This project is pursuing LEED Platinum certification.

Hadley Family Recreation and Well-Being Center

Project rendering

Project progress

Time-lapse video

CLEAN TRANSPORTATION

Electric buses

$15.2 Million	$6.0 Million	$4.1 Million
Total project budget	Amount of green bonds allocated to project	Amount of green bonds spent to date

In accordance with U-M's carbon neutrality goals, the university's Logistics, Transportation and Parking (LTP) division is moving towards a more sustainable bus fleet.

So far, LTP has purchased twelve battery-electric buses. Four additional battery-electric buses have been ordered and will arrive in the summer of 2026. Supplemental funding from green bonds will assist the university with its transition to a more sustainable fleet.

Electric buses

Project rendering

Project progress

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GREEN BUILDING

New building for the College of Pharmacy

$141.0 Million	$16.0 Million	$16.0 Million
Total project budget	Amount of green bonds allocated to project	Amount of green bonds spent to date

The College of Pharmacy Building was constructed in 1960, with a major addition built in 1992. The building's narrow structural bays and shallow floor-to-floor heights do not allow for the reconfiguration needed for modern research and teaching laboratory spaces or modern classrooms.

In addition, the building is not large enough to meet the college's space needs. As a result, the college's teaching, research, and office spaces are distributed across seven campus locations. The construction of a new teaching and research facility (the New Building for the College of Pharmacy) will address its need to modernize and increase its physical space for academic, research, and student support functions. A new 142,000-gross-square-foot building located on the corner of Glen Avenue and East Huron Street will house active learning-style classrooms, laboratories, associated support spaces, faculty and administrative offices, and student-focused areas. The project is designed to achieve LEED Gold certification.

New building for the College of Pharmacy

Project rendering

Project progress

Time-lapse video

GREEN BUILDING

Wolverine Village Phase I

(Formerly known as Central Campus Residential Development)

$631.0 Million	$184.0 Million	$184.0 Million
Total project budget	Amount of green bonds allocated to project	Amount of green bonds spent to date

U-M will construct a new Central Campus housing and dining facility that will include 2,300 beds and 900 dining seats.

This new facility, on the current Elbel Field site, between Hoover Avenue and Hill Street, will enable the university to respond to the increasing demand among students for affordable, on-campus housing on, or near, Central Campus and better meet the needs of our growing student body. It will also help ensure continued excellence in the overall undergraduate experience. The facility will continue to advance the university's efforts to achieve carbon neutrality by utilizing geothermal exchange systems for heating and cooling the new dining hall, incorporating all-electric equipment for cooking, and designing the entire facility to earn LEED Platinum certification.

Wolverine Village Phase I

Project rendering

Project progress

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finance.umich.edu/treasury/debt.

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