## UNIVERSITY OF MICHIGAN

# FALL 2024

### LSA YEAR OF SUSTAINABILITY UPDATE

## Stories, Resources, and Action

Authored by the Year of Sustainability Committee & LSA Sustainability Staff

#### December 2, 2024

This report is best viewed digitally to take advantage of links and resources throughout. Please message sustainable-lsa@umich.edu if you have any questions.

View the other LSA 2024 updates.

Learn more about the broader <u>Planet</u> <u>Blue initiative</u>.



LSA is just one component of the broader Planet Blue movement. You can read the most recent University Climate Action Report for more details on key wins over the past calendar year and updates on large projects including on-campus renewables. The launch of <u>Vision 2034</u>, <u>Campus Plan 2050</u>, and climate-related hiring campus wide are additional trends to watch. These provide increased resources and capacity as U-M prepares to update its 2025 Sustainability Goals and continues the journey to Carbon Neutrality.

### U-M Climate Action Report



In addition to the open sessions hosted by the Office of Campus Sustainability over the past few months, individuals in LSA can participate in the new goal setting process in the following ways:

#### New Ann Arbor Campus Goals Being Developed Around:

- Scope 3 Emissions:
  - share your thoughts during <u>Townhalls</u> or via <u>survey</u>.
- Sustainable Grounds:
  - share your thoughts via <u>survey</u>.
- Waste Reduction:
  - share your thoughts via <u>survey</u>.

#### LSA is Preparing to Meet New Goals By:

- Continuing our close partnership with the Office of Campus Sustainability
- Developing additional pollinator-supportive spaces
- Focusing on high-impact scope 3 emissions categories, including procurement
- Embedding these principles in our major projects, such as renovations
- Identifying opportunities where faculty expertise and coursework in LSA could support this work





### **Supporting Sustainability in Operations**

Reducing carbon emissions across the LSA footprint requires action and commitments at all different scales. Here are a few opportunities we've prioritized in 2024, and how individuals, units, and departments can partner with us for broader impact.

#### Introducing the Sustainable Stockroom

Office supplies contribute to emissions through their production, shipping, and disposal. To support U-M's carbon neutrality goals, the "Sustainable Stockroom" launches in the coming weeks, offering easy and free access to certified sustainable versions of commonly purchased office supplies. This optional resource will be available to all LSA units and departments. Your Chief Administrators will be receiving more information as we go live.

Reduce your department's purchasing impact by prioritizing reused items, setting standards specific to your unique events and operations, minimizing individual orders, and donating excess supplies to the <u>Office</u> or <u>Lab Reuse Program</u>.

#### **Seasonal Building Schedules**

LSA successfully piloted a reduction in building hours during the 2024 season days, which allowed us to fund the research interventions on the next page of this report. We are repeating this process in 2025, and are evaluating future opportunities based on LSA's "low occupancy" periods. Thanks for your support and flexibility!

HVAC systems usually operate based on buildings' "<u>unlocked</u>" hours. Limiting evening and weekend activities lowers our largest category of energy use college-wide. Closing windows and <u>reporting</u> <u>temperature issues</u> also support LSA Facilities' efficiency efforts.



### Supporting Sustainability In Research

The College of Literature, Science, and the Arts is home to a groundbreaking research community, including many individuals who are reducing the environmental impact of their unique laboratory operations. Here are a few highlights from 2024.

#### Lab Swap Shop

In addition to diverting over 4,000 pounds of lab supplies from the landfill, the Lab Swap Shop has become a community space hosting events such as an <u>opening</u> <u>day party</u>, <u>Swapapalooza</u>, and a <u>Spooky</u> <u>Swap Shop</u>!

#### **Incentives & Innovations Funded Projects**

#### **Biodiversity Lab in EEB**

This public-facing lab in the Museum of Natural History has substituted plastic homogenization tubes with stainless steel alternatives. This has the potential to eliminate 1,000 single-use tubes annually.

#### **Investigative Lab**

This lab for the visiting public in the U-M Museum of Natural History welcomes over 62,000 guests annually. By acquiring an ultrasonic bath, they can clean and reuse typically single-use materials.

#### **Geomicrobiology Lab**

This lab in the Earth and Environmental Sciences department is truly leading the way for sustainable change in laboratories. With the installation of a glassware washer and a pipet tip washer, this lab will be able to significantly reduce the amount of single-use disposables used.

#### **Chemistry Department**

This department has the <u>second largest</u> <u>installation</u> of waterless condensers in the world, behind Oxford University. This fully implemented project could decrease the department's water footprint by 6%.

#### Anthropology Department

This department chose "Sustainable Life" as the theme for their four-field annual Symposium this year - bringing together leading researchers in each subfield to speak and collaborate.

#### <u>U-M Sustainable Lab Summit</u> February 4th, 9AM - 5:30PM

This summit aims to bring researchers together to learn best practices, discuss potential solutions, and inspire innovation.

Register or Nominate a Speaker!



### **Academic Spotlight: Black Ecologies**

During the Year of Sustainability, LSA saw the largest-ever offering of courses with the "Sustainability" course tag. <u>AAS</u> <u>498</u>: DAAS in Action, Black Ecologies: Race & Nature, taught by <u>Dr. Bénédicte Boisseron</u>, Chair and Professor, Department of Afroamerican and African Studies (DAAS), is an example of how LSA leaders are engaging students and the broader campus community in innovative ways.



#### **DAAS In Action**

Designed as a capstone course, AAS 498 - Black Ecologies: Race & Nature, had students examine multiple forms of media (art, literature, sounds) to explore the connections of race and nature not only through an environmental justice framework but also through a Black contemplative lens.

### EARTH SONG



A Black Nature Walk The une herder to the University of Michigan Richold Description for in the International Action Artison American poorty and nature. The walk starts on our right, at the Nail, Welcome The exhibit runs frem October 2024 to January 2021 with an insugaral groups two on Welchedung October 2024 to Annuary 2021 The exhibit runs frem October 2024 to January 2021 with an insugaral groups two on Welchedung October 2024 to Annuary 2021 The Annuary Annuary 2021 to Annuary 2021 The Annuary 2021 to Annuary 2021 to Annuary 2021 The Annuary 2021 to Annuary 2021 to Annuary 2021 The Annuary 2021 to Annuary 2021 to Annuary 2021 The Annuary 2021 to Annuary 2021 to Annuary 2021 The Annuary 2021 to Annua



#### Earth Song, A Black Nature Walk

Earth Song, an ode to Langston Hughes, is a nature walk installation at the Nichols Arboretum around the Peony Garden. Students chose 11 poems from Camille Dungy's <u>Black Nature: Four Centuries of African American Poetry</u>, which were then engraved onto wooden plaques. They pulled inspiration from Joshua Bennett's installation of The

Bond of Live Things Everywhere.

You can visit 'Earth Song' on the Laurel Ridge trail until January 2025 or virtually experience the installation through <u>their</u> website.



#### **Black Ecologies Symposium**

To mark halfway of a year-long exploration of Black Ecology within the Department of Afroamerican and African Studies, this symposium brought in leading academics to explore a multitude of topics from music to swamp tales to relationships with the land.



### **Michigan Sustainability Community**

Next Fall, U-M will officially launch the Michigan Sustainability Community (MSC), an expanded version of the <u>Sustainable Living Experience</u>, which is open to all first-year undergraduate students. The MSC is administered through LSA and supported by the Office of the Provost and the Office of the Executive Vice President and Chief Financial Officer in collaboration with Student Life, Housing, LSA, the School for Environment and Sustainability (SEAS), and the Program in the Environment (PitE). Making the former SLE into a full LSA Michigan Learning Community was a key goal of the <u>2022 LSA Carbon Neutrality Taskforce</u>.

#### Campus as a Living Lab

The MSC will continue functioning as a living, learning lab in this new phase. Through coursework and other programs, students work in teams and engage in hands-on projects, such as creating <u>furniture out of fallen campus trees</u> and partnering with groups like LSA Facilities on class projects.



Photo credit: James Ulery.

#### **Community Building**

A cornerstone of each cohort is the community that students create. Students can connect with one another through group activities, volunteering, creating peer-to-peer workshops, and much more. These sustainability leaders do great work across LSA and the broader UM community.



#### **Innovation & Impact**

Did you know that the MSC runs its own <u>mushroom farm</u>, reducing diet-based emissions and providing a steady funding stream for new sustainability ideas? Stay tuned for new projects based at this facility, including a pollinator patch and native flower farm.



Want to engage with us? Join our continuing cohort of LSA Sustainability Champions!

### **Individual Action**

t of LSA Sustainability Champions



LSA is full of individuals with personal and professional commitments to the environment. Here are a few folks whose actions helped to advance LSA's climate goals and sustainability culture.



Anne Curzan is the former Dean of LSA, whose leadership was a major driver for the Year of Sustainability and its joint mission of academics & operations. Thank you, Anne!



#### **Grace Jeon**

is a PitE and Political Science major chairing LSA-SG Taking Responsibility for the Earth and Environment Subcommittee (TREES).



**Emma Dawson-Glass** is a Ph.D. candidate in Ecology and Evolutionary Biology who is exploring ways to increase pollinator diversity on campus.



**Brian Hunter** is an Event Space Coordinator in LSA where he supports sustainability in front of and behind the scenes and is a great resource for event hosts across the college.



#### SAPPHIRE, Michigan Carbon Capture Club

is a student group that strives to equip students with the knowledge needed to implement sustainable technologies. LSA Undergraduate students, Abigail Lassila, Caitlin Sohrabi, Elena Runion, Milind Pulugura, and Nico Barresi, are working to design and construct a microbial electrochemical carbon capture device to produce hydrogen and remove carbon dioxide from wastewater.

### Towards a Sustainable LSA

While the Year of Sustainability is rounding out its programming, the LSA Sustainability team is here to stay. Here is a noncomprehensive overview of our major 2024 workstreams, building from the original LSA Carbon Neutrality Taskforce's 2022 work. We look forward to collaborating with you on these and emerging topics in 2025 and beyond.

#### **Facilities & Operations**

Early Stages	Ongoing with Significant Progress	Nearly Complete / Complete
<ul> <li>Achieve carbon neutrality in a specific LSA building</li> <li>Inventory travel based emissions</li> </ul>	<ul> <li><u>Optimize building hours</u></li> <li>Furniture reuse program</li> <li>Sustainable procurement</li> <li>LED lighting upgrades</li> </ul>	<ul> <li>Establish team and leadership</li> <li>LSA wide kitchen compost</li> <li>Lab Reuse expanded</li> <li>Position LSA as a key partner in the broader <u>Planet Blue</u> movement</li> <li>Collaborate with student project teams</li> </ul>

#### Academics & Research

Early Stages	Ongoing with Significant Progress	Nearly Complete / Complete
• Evaluate ongoing sustainability faculty leadership needs	<ul> <li>Evaluate additional curricular opportunities</li> <li>Leverage LSA faculty / research expertise for operational interventions</li> <li>Customize resources for specific departments</li> </ul>	<ul> <li>Increase the number of Sustainability tagged courses</li> <li>Highlight <u>unique LSA course</u> offerings</li> <li>Offer <u>Embedding Climate</u> <u>Change in Courses Retreat</u></li> </ul>
Culture & Community		
Early Stages	Ongoing with Significant Progress	Nearly Complete / Complete
• Expand student applied sustainability opportunities outside of traditional coursework	<ul> <li>Collaborate with <u>LSA DEI team</u></li> <li>Collaborate with <u>City of Ann Arbor</u></li> <li>Expand LSA participation in campus-wide sustainability programs</li> </ul>	<ul> <li><u>Champions Program</u></li> <li><u>Ongoing communication</u></li> <li><u>Year of Sustainability</u></li> <li>Align sustainability and <u>LSA</u> <u>mission</u></li> <li>Establish ongoing <u>Incentives &amp;</u> <u>Innovations Fund</u></li> <li>State-wide <u>Community Read</u></li> </ul>

LSA SUSTAINABILITY

### A Recap: DEI x Sustainability Summit

In October, the LSA Sustainability team partnered with the LSA DEI Office and numerous individuals in the U-M community to host the inaugural DEI x Sustainability Summit: For People + Planet. We welcomed more than 200 U-M community members for our keynote address from <u>Shalanda Baker</u>, four <u>lightning talks</u> from LSA faculty and students, a <u>creative zone</u>, and <u>roundtable discussions</u>.

#### Want More?

If you missed the summit, you can <u>watch</u> the keynote and lightning talks or view <u>graphic</u> <u>recordings</u> of the full day (art by <u>Yen Azzaro</u>).



# End the Semester With the Year of Sustainability!



#### Not Too Late: A2 Climate Possibilities Roundtable

6PM - 7:30PM in Room 1040, LSA Building Partnered with Ann Arbor Office of Sustainability and Innovation



<u>**Greening the Cloud: Sustainability in AI and Tech**</u> Noon - 2PM in Room 2165, Undergraduate Science Building Partnered with the Department of Classical Studies



Michigan Winters Roundtable 3:30PM - 5PM on 10th Floor of Weiser Hall Partnered with University of Michigan Biological Station

Not Too Late

from Despair to Possibility

REBECCA SOLNIT & THELMA YOUNG LUTUNATABUA <u>"Not Too Late" Statewide Community Read</u> Open through December 13, 2024

With Immense Gratitude,

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