

MIT OFFICE OF SUSTAINABILITY

2023

Impact Report

Sustainability
Connect 2023

sustainability
connect 2023

sustainability
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Chemistry

Environment, Health & Safety
Technician Team

Safe and Sustainable
Labs Service Team

Test Bed

Circular Economy Champion

Sustainability Impact Award

Office of
Sustainability



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Sustainability



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In March, Director of Sustainability Julie Newman joined sustainability focused federal government officials and officers, faculty, and vice presidents of research from colleges and universities representing all 50 states at the White House Forum on Campus and Community-Scale Climate Change Solutions.



Highlights

The MIT Office of Sustainability (MITOS) is a catalyzer and connector for a campus community focused on reducing and mitigating MIT’s contributions to climate change.

In this essential role, 2023 was transformative for the Office as it grew its core team, celebrated a decade of work, and looked ahead to the next milestone—all while continuing to expand influence and fostering collaboration across campus. This past year, the Office marked its anniversary at Sustainability Connect, MITOS’s annual event which brings together staff, faculty, students, and researchers driven by the mission of a more sustainable MIT.

Reflecting on the milestone, Director of Sustainability Julie Newman shared insight from the evolution of the Office and invited the community to contribute ideas and hopes for the future of sustainability and climate leadership at MIT.

In 2023, Newman also joined sustainability focused federal government officials and officers, faculty, and vice presidents of research from colleges and universities representing all 50 states at the White House Forum on Campus and Community-Scale Climate Change Solutions to share and debate ideas for scaling sustainability and climate solutions at the campus, community, state, and national level.

On campus, the Office hosted its first Humphrey Fellow, as part of the Special Program for Urban and Regional Studies (SPURS) at MIT, opening another communication channel for the international dialogue and transfer of sustainability

ideation and solutions. Additionally, the MITOS team continued to foster collaboration through ongoing work and leadership in support of *Fast Forward: MIT’s Climate Action Plan for the Decade*, original event programming, speaking engagements, committee leadership and involvement, and many strategic partnerships. Each year, MITOS builds on its work to fulfill its mission and vision for a more sustainable MIT that provides solutions that can be adopted at the individual, campus, state, national, and global levels.



We launched our office asking, ‘How can MIT be a game-changing force for campus sustainability in the 21st century’ and ‘What are we solving for?’ Now we are savvier at asking the follow-up questions: ‘Are our solutions causing additional issues that we were remiss to ask? What is the impact on marginalized communities, unanticipated human health implications, and new forms of extraction?’

JULIE NEWMAN

MIT Director of Sustainability

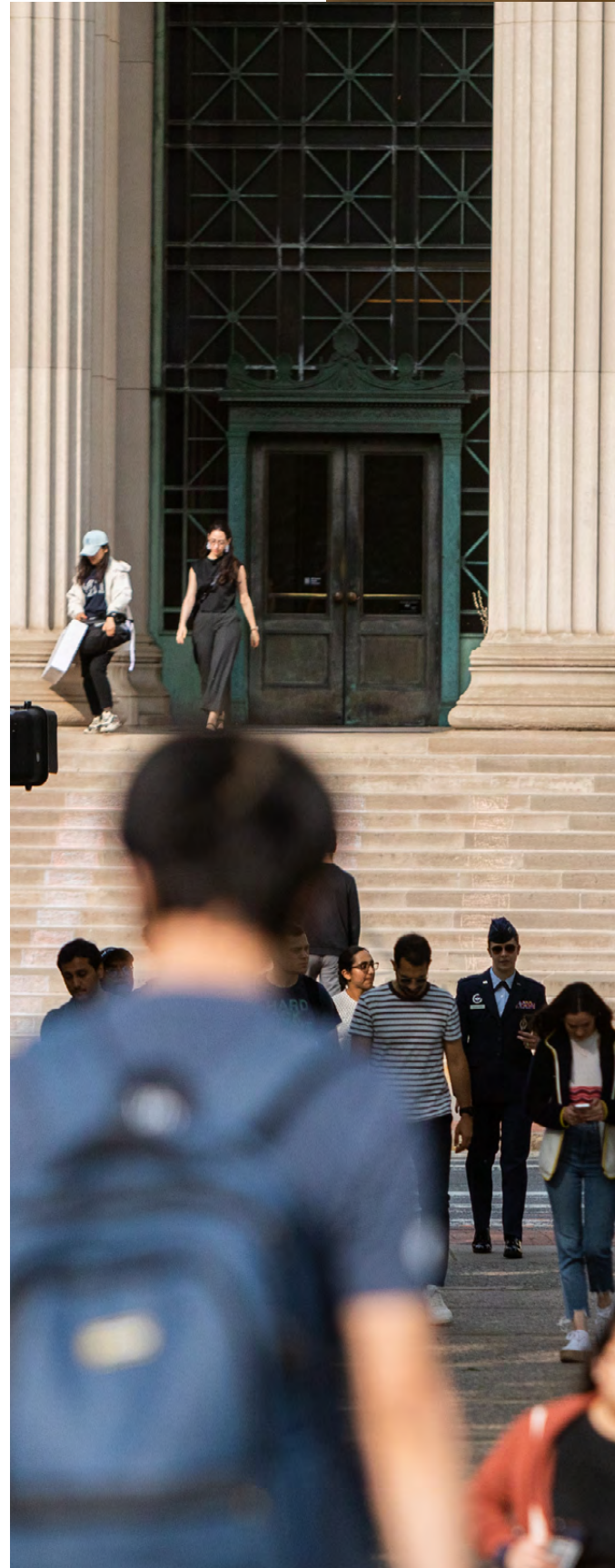


Mission and Methodology

Since its inception, MITOS has organized our priorities on the MIT campus around five areas of impact: zero-carbon campus, climate resiliency, materials lifecycle, healthy people, and thriving networks.

MITOS is also the organizational leader for the campus climate commitments outlined in *Fast Forward: MIT's Climate Action Plan for the Decade*. These commitments—structured around mitigation and resiliency, greenhouse gas emissions portfolio expansion, electrical vehicle infrastructure, and climate leadership—map directly to the Office's areas of impact which catalyzed sustainability and climate projects for the past decade. Director of Sustainability Newman is responsible for overseeing the management and timely implementation of all eighteen *Fast Forward* commitments and MITOS team members serve varying roles in leading and supporting these commitments, including as workstream co-leads, subject matter experts, and facilitators for research, data collection, and communications.

To fulfill its mission, MITOS applies a scientific methodology of inquiry, data analytics, and solution development in partnership with MIT researchers, staff, faculty, and students to engage in the work of addressing global challenges at the local level, using a framework of the role of the individual, campus, city, state, and globe. By operating at the intersection of campus operations and research, the Office is uniquely positioned to strategically guide the Institute in meeting its climate action goals.



The background of the page is a photograph of a university building with large stone columns and a glass entrance. People are walking on the steps leading up to the entrance. The scene is brightly lit, suggesting a sunny day. A white rectangular box is overlaid on the right side of the image, containing text.

OUR MISSION

The mission of the MIT Office of Sustainability (MITOS) is to transform MIT into a powerful model that generates just, equitable, applicable, and scalable solutions for responding to the challenges of a changing planet. To achieve that mission, MITOS advances a collaborative leadership process that calls for listening, engaging, and elevating a diverse set of voices to foster operational excellence, education, research, and innovation on our campus.

Organizational Structure of the Office of Sustainability

MITOS consists of a team of nine full time staff: director, assistant director, two senior project managers, two project managers, senior administrative assistant, data scientist, and senior communications specialist.

The two project manager positions were added in FY2023 to support efforts to reach the *Fast Forward* commitments centered on designing out waste from campus and guiding departments in their own local climate action planning.

This past year MITOS also hosted its first postdoctoral associate, who works jointly with the Office and MIT's Climate and Sustainability Consortium. The joint research is focused on characterizing decarbonization pathways and net-zero targets and identifying common bottlenecks to achieving net-zero across higher education and industry. Future research includes a deeper look at how additionality for renewable energy is framed.

The Office's staffing model is organized around the areas impact supported by subject matter experts operating in the role of project managers. The data scientist and communications specialist roles work as partners to each project manager. Additionally, MITOS is supported by three faculty fellows and several student researchers throughout the

academic year and summer term. To reach its goals MITOS staff also work closely with partners which include MIT campus departments, labs, and centers (DLCs); student groups; the cities of Cambridge and Boston; and higher education peers across the region, nation, and globe.

STUDENT SUSTAINABILITY RESEARCHERS

The crucial work of the MITOS team is supported by the integration of Student Sustainability Researchers who focus on annual priority areas such as designing out waste, climate justice, greenhouse gas emission accounting, and more. These students — undergraduate and graduate level — have contributed a tremendous amount of work to MITOS and MIT. MITOS worked with a cohort of 18 students over the course of FY2023. Organized around the *Fast Forward* commitments, these student researchers worked on projects that varied in scope and focus area, providing broad support to MIT's climate work.



Zero Carbon Campus

MIT is committed to decarbonizing the campus by 2050. As this goal touches on nearly every aspect of campus operations, MITOS is engaged in a number of efforts to reach this goal, including working with the project team that has engaged a primary consultant¹ for outlining pathway options for campus decarbonization.

Additionally, MITOS works with researchers, staff, and faculty on greenhouse gas (GHG) accounting, net-zero renewables, Scope 3 emissions, energy-efficiency programs. A new set of campus impact goals were also set in 2023 to account for and address the emissions related to food, water, and waste.

GREENHOUSE GAS ACCOUNTING AND MEASUREMENT

Progress toward decarbonizing a dynamic campus like MIT highlights the often-non-linear path of reducing emissions. As the campus grows and needs evolve, emissions fluctuations are both expected and managed for. In fiscal year 2023, there was a 2.4 reduction in total on-campus emissions. The reduction was driven by MIT's

updated cogeneration plant (this was its first year operating at full capacity) and several completed building energy efficiency projects. In this same time, MIT's solar power purchase agreement (PPA) in North Carolina enabled the Institute to offset 8 percent of its total on-campus emissions.

Looking forward, FY2023 marks the first year that MIT has taken into account off-campus sites in its overall emissions data. This data from Bates Research and Engineering Center, Haystack Observatory, and Endicott House will help provide MITOS and its partners a more complete picture of MIT's emissions and the scope of work needed to mitigate these emissions.

¹ Affiliate Engineers, Inc

EXPANDING SCOPE 3 DATA COLLECTION AND VISUALIZATION

Fast Forward requires MIT to evaluate and expand its greenhouse gas portfolio accounting to include relevant Scope 3 emission categories (e.g., purchased goods and services, sponsored MIT travel, commuting) by 2023. Five years in the making, MITOS launched the MIT Business Travel Scope 3 Emissions Dashboard as a climate action planning tool that can enable users to understand the scale of MIT's Scope 3 footprint and identify opportunities for reduction. The dashboard includes a visualization comparing Scope 3 emission categories with Scope 1 and 2 emissions, as well as visualizations specific to MIT-sponsored travel or business travel including travel emissions versus expense, travel emissions by year, and travel emissions attributed to school area. This dashboard is the first in a series of anticipated Scope 3 visualizations that will allow users to understand the scale of MIT's Scope 3 footprint and opportunities for reduction.

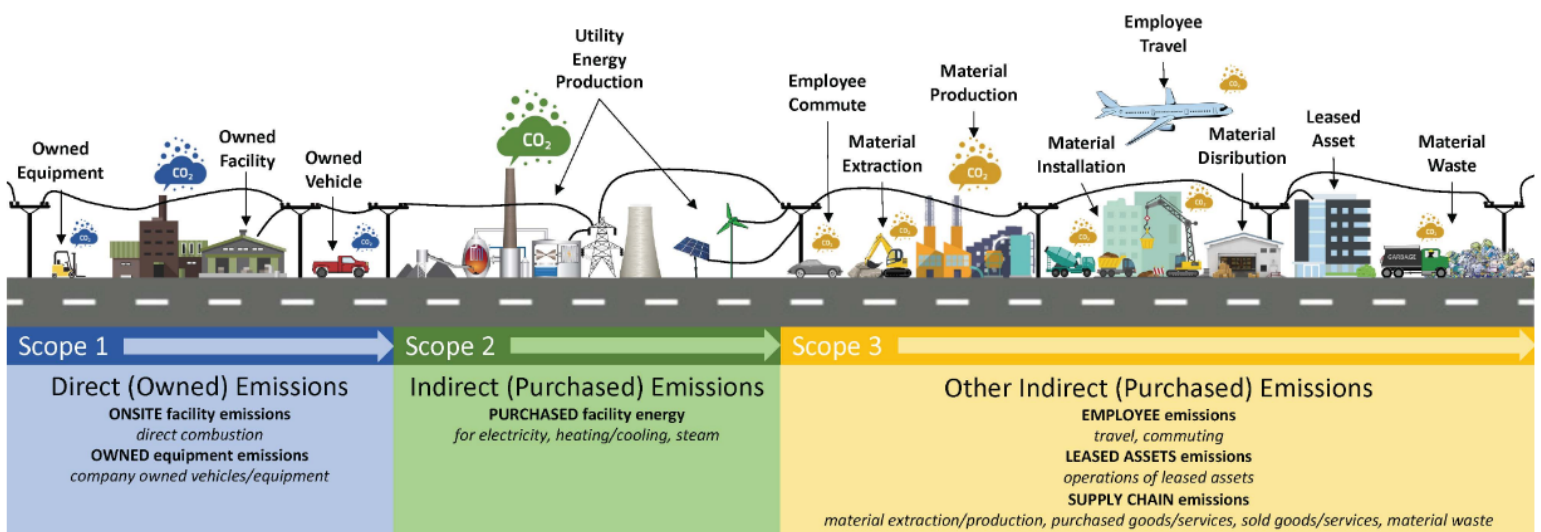
AI BUILDING ENERGY USE

In 2023, researchers along with staff from the Department of Facilities and MITOS began piloting artificial intelligence systems that work with existing building management systems to support dynamic heating and cooling to lower energy use and emissions in campus buildings. Researchers worked to establish a framework to understand and predict optimal temperature setpoints (the temperature at which a thermostat has been set to continuously maintain) at the room level and take into consideration a host of internal factors like occupancy fluctuations or external factors such as forecasted weather or the carbon intensity of the grid allowing the existing systems to heat and cool more efficiently, all without manual intervention. Staff worked to support the pilots and further roll out by providing scheduling assistance and support to ready 50 additional campus buildings for the technology when the pilots are complete, and the systems can be deployed.

Understanding Scope 1, 2 and 3 Emissions

MIT has committed to net-zero Scope 1, 2, and select Scope 3 emissions by 2026

Scope 3 emissions are a key part of MIT's new climate action plan



Graphic by Stacy Smedley, 2021

IMPACT GOALS

A cross-departmental team set the Climate Impact goals and strategies in 2023 for MIT to reduce emissions related to food, waste, and water systems by 2030. The team representing four operational departments on campus including utilities, campus services and maintenance, dining, and MITOS. The 2030 goals are:

● Food ● Waste ● Water



Target overall reduction in the greenhouse gas footprint of food purchases



Target per meal for beef across MIT residential dining menus



Recover all edible food waste in dining hall and retail operations where feasible



Support MIT's food service contractor Bon Appetit in reaching its established Climate Goals



Reduction in trash compared to 2019 baseline trash (municipal solid waste) totals



Reduce percentage of trash and recycling comprised of single use items



Increase percentage of dorms and high food consumption spaces implementing MIT food scrap collection



Reduce percentage of food scraps and recycling in trash in selected locations



Improve accuracy of indicators for semi-annual tracking



Reduction in water use compared to the 2019 baseline by 2030



Update water reduction goal to align with the new metering program and proposed campus decarbonization plans

Climate Resiliency

Climate resiliency has long been a focus of the Office, with MITOS serving as a founding convener of the MIT Climate Resiliency Committee, which is tasked with assessing, planning, and operationalizing a climate resilient and adapted MIT.

Resiliency and adaptation goals outlined in *Fast Forward* further endorsed these efforts, with staff, researchers, and faculty providing guidance and expertise to develop an MIT that fulfills its mission in the face of a changing climate preparing the campus for the impacts of flooding and extreme heat.

RESILIENCY AND ADAPTATION ROADMAP

Fast Forward calls for a “Resiliency and Adaptation Roadmap” by 2025 that provides “a foundational strategy by which to plan for a changing climate to inform future construction, renovation, space use, and the safety of our community in the years ahead.” MITOS initiated a first step towards development of this roadmap by collaborating with the Office of Campus Planning and Department of Facilities to engage a consultant team from Arup Engineering with Reed Hildebrand to provide a Phase 1 Resiliency Roadmap Gap Analysis, with findings delivered in 2023. These findings are informing the development of the Phase 2 Resiliency and Adaptation Roadmap and have revealed/affirmed:

1. Flood risk in today’s climate and a future changing climate threaten MIT buildings and infrastructure in ways that could disrupt and damage core research, education activities and campus operations.
2. MIT’s development and visualization of the campus flood risk model in coordination with the City of Cambridge is enabling MIT to adapt to these flood risks in new construction and major renovation design initiated since 2020.
3. There is a need to prioritize and launch investments in adapting existing campus buildings, landscapes, and infrastructure to current and future climate projected flood risks.
4. New training programs in adapting to a changing climate and new hires with stormwater adaptation and resiliency planning expertise can raise awareness among the Department of Facilities and Environment, Health, and Safety staff for integrating resiliency measures into current job functions.
5. While flood risk threatens infrastructure, extreme and prolonged heat during summer and shoulder seasons directly threatens the health and well-being of our MIT community and the ability of community members to carry out MIT’s mission.
6. Investments in the campus landscape and outdoor spaces can provide cooler spaces of heat relief for the MIT community. Awareness-raising and cool spot programming during high heat events can provide our community with healthy ways to keep cool and maintain well-being during extreme temperatures.

UNDERSTANDING HEAT RISK ON CAMPUS

As increasingly severe and frequent heat waves resulting from climate change pose a significant risk to people living in urban areas like the MIT campus, MITOS has initiated a research project with the Urban Risk Lab to map heat risk and distribution across campus to inform mitigation strategies and heat relief actions for extreme heat events. Supported by MITOS Student Researchers, this data collection effort will identify areas with high temperatures, aid creation of interactive maps for the MIT community, and open opportunities for future research while serving as a reference for external heat resilience plans and the climate resiliency and adaptation roadmap called for in *Fast Forward*.





MITOS and the Urban Risk Lab initiated a research project to map heat risk and distribution across campus to inform mitigation strategies and heat relief actions for extreme heat events. Heat sensors, like the one seen here, play a role in data collection.



Students begin sorting bags as part of a waste audit.



Material Lifecycles

To reduce and eliminate waste on campus, MITOS partners with staff and researchers to analyze the impact of the Institute’s purchasing and waste systems and devise solutions to support reuse, reprocessing, and reduction of purchased goods on campus. Bolstered by the 2030 impact goal to reduce campus trash by 30 percent from a 2019 baseline, MITOS views this challenge at the material lifecycle level. In this approach, the Office considers the full lifecycle costs and impacts of materials and products as they move through the economy, are procured for use at MIT, and leave the campus via waste management, recycling, compost, and reuse.

DESIGNING OUT WASTE

To better support efforts to design out waste from campus, in FY2023 MITOS created the new position of a design out waste sustainability project manager to work with partners across campus to create systems for reducing material purchasing and as well as increase systems for reuse, recycle, and repair on campus. Education of the campus community on their role reducing waste on campus is also an essential function. Pilot programs—including centralized bin systems and food waste collection—which use the campus as a test bed are designed to identify effective programs and policies to meet MIT’s goal of designing out waste from campus.

One 2023 pilot program was dorm level food waste collection. Most recently piloted in East Campus following a similar program run in Random Hall the year prior, the effort provided valuable insight in the feasibility and needs for this type of programs in a cook for yourself dorm with a uniquely different character on each floor. Findings from the pilot will be used to inform future dorm level food waste collection and education with the aim of reducing food waste across campus.

Healthy People and Communities

MITOS works to activate sustainable campus systems that also promote health, well-being, and environmental justice, in collaboration with students, staff, faculty, and community partners. To fulfill this charge, the Office works to support climate justice, food security, local and diverse purchasing, climate-friendly menus, pollinator gardens, and more.

CLIMATE JUSTICE

Recognizing the intersecting challenges of race, inequality, and climate change, MIT embedded a statement about the “imperative of justice” into its *Fast Forward* climate action plan. Since the plan was released, educational communities at MIT have created new initiatives and classes that directly address the imperative of justice in its environmental programming. MITOS continues to explore how the Institute’s sustainability efforts can also play an impactful role in advancing the imperative of justice, both in its role implementing the climate action plan and its commitment to the department’s diversity, equity, and inclusion efforts.

This year, MITOS worked to more intentionally developing relationships with local community organizations—alongside students, faculty, and researchers—to better understand the connections between campus and community climate action and to build a launchpad for action. MITOS has sought opportunities to partner and exchange knowledge and ideas, from advancing sustainable food systems with CommonWealth Kitchen in Dorchester to exploring workforce development with PowerCorps Boston to forming a climate justice network with the Green Ribbon Commission. In 2023, MITOS also co-convened a “Climate Community Collaborative Symposium” bringing together higher education, civic, and tribal stakeholders, including the City of Cambridge, to catalyze partnerships for climate action locally in ways that are effective, just, and equitable.

SUSTAINABLE FOOD SYSTEMS

To advance sustainable food systems at MIT, MITOS hosted a series of engagement programs in 2023 with internal partners such as MIT Anthropology, SA+P, and the Asian

American Initiative along with community partners including The Daily Table and the New Entry Sustainable Farming Project. The events were designed to build skills, knowledge, and connections around plant-forward cooking, food security, culture, health, and ecosystems. They featured campus talks from researchers and local chefs along with visits to local farms.

The events intersected with the food impact goals and supported the base of a new pipeline position within MITOS and MIT Dining. The position, which was put into place the end of the fiscal year, will allow for a new partnership, and help understand what the role can the campus play in creating a food system that operates with an eye towards its climate impact as well as how MIT can rebalance menus to feature more climate friendly foods and less waste.

A MINI HIVE POLLINATOR GARDEN PILOT

With hopes of creating a pollinator pathway through campus where bees, birds, moths, and more can sample blooms, a new Mini Hive Pollinator Garden was planted on campus. Inspired by the 2019 construction of The Hive Garden—a collaborative project between the Office of Sustainability, Undergraduate Association Committee on Sustainability (UA Sustain), and MIT Grounds Services—the Mini Hive is a raised bed of pollinator-friendly and native plants. Located at Burton-Conner, and planted in partnership with UA Sustain, the Office of Sustainability, Burton-Conner, the Native American Students Association, and GSC Sustain, the garden is a pilot with hopes to expand to additional locations on campus. The goal of the Mini Hive pilot is to provide a pathway of native pollinator plants at the intersection of sustainability and Traditional Knowledge.



Students on a visit to Hannan Healthy Foods Farm to learn about healthy, sustainable food systems.

Community members gathered and shared ideas at Sustainability Connect 2023.





Sustainability and Climate Action Leadership

The leadership role of MITOS extends beyond its organizational chart as office staff lead committees, co-lead efforts to reach the campus commitments, and leverage the campus as a test bed via faculty and student research partnerships. The MITOS climate and sustainability leadership model is unique and dynamic ranging from oversight of the vast number of campus commitments to leveraging the campus as a test to launching and leading campus wide committees.


CAMPUS AS A TEST BED MODEL

MITOS is a formative partner in leveraging the campus as a test bed to advance understanding of how to achieve, build, manage, and demonstrate a sustainable campus. The Office manages a methodology that brings together faculty, researchers, and students with operational experts to inform current and future practices. This approach is essential to MITOS fulfilling its mission and aligns with *Fast Forward's* call to continue to use the campus as a test bed for change, referencing the similar call to action from MIT's first climate action plan.

In 2023, the Office supported test bed efforts that included piloting artificial intelligence in building controls to reduce energy use; heat and campus porosity data collection to inform resiliency planning; campus-based research to set a series of food, water, and waste impact goals; and testing of sustainable materials in spaces across campus.

COURSE: SOLVING FOR CARBON NEUTRALITY AT MIT

With a focus on designing zero emissions solution scenarios for MIT for the short and long term, Solving for Carbon Neutrality at MIT, led by instructors Director of Sustainability and DUSP lecturer Julie Newman and Professor of Mechanical Engineering Tim Gutowski, engages students in project-based learning leveraging the campus as a test bed for ideas. One of the most unique design elements of this course is the engagement of faculty and staff experts who provide expert insight and feedback. The Spring 2023 cohort of students crafted plans using various technologies and campus climate data to reach zero direct emissions by 2050. The ideas were presented to members of the Vice President for Campus Services and Stewardship (VPCSS) teams and state politicians to inform future mitigation efforts.



MITOS CLIMATE AND SUSTAINABILITY COMMITTEES

The distributed leadership model of *Fast Forward* empowers the community to work together to meet the goals outlined in the plan. This model gives staff, faculty, and researchers collaborative ownership of the campus commitments which align with their operational expertise and/or research. Additionally, Institute committees operate as an effective tool for multi-stakeholder input and engagement in the implementation process. In 2023 MITOS staff members served as leaders on several campus wide committees with the goal to advance the commitments outlined in *Fast Forward*. Below are the committees and their primary objectives.

- **CLIMATE RESILIENCY COMMITTEE** To assess, model, plan and operationalize a climate resilient and adapted MIT, working in support of the *Fast Forward* commitment to establish a resiliency and adaptation roadmap by 2025
- **CARBON FOOTPRINT WORKING GROUP** To advise ideas regarding initial priority commitments in support of 2050 decarbonization goal
- **TRAVEL OFFSET COMMITTEE** To assist and inform the development of a travel offset program to account for Scope 3 emissions associated with business travel, as outline in *Fast Forward*
- **NET-ZERO 2026 COMMITTEE** To debate and inform an offsite, multi-sector portfolio approach to advance MIT's net-zero emissions by 2026 goal
- **SAFE AND SUSTAINABLE LABS TASK FORCE** To evaluate current practices and develop a new Safe and Sustainable Labs Program that integrates and institutionalizes compliance, safety, and sustainability as a best practice
- **SUSTAINABILITY COMMUNICATIONS WORKING GROUP** To develop and align unified messaging in support of MIT's climate and sustainability goals

CLIMATE ACTION PLANNING FOR DEPARTMENTS, LABS AND CENTERS

Fast Forward calls on “all DLCIs to participate in preparing and implementing their own carbon footprint reduction and sustainability plans.” To support these efforts, MITOS's newest sustainability project manager developed a shared framework and series of templates aligned with existing Institute-wide climate and sustainability commitments to speed the development of custom plans by reducing the time needed to create and publish content. Breaking down actions into categories which include energy, resiliency, travel, food, water, waste, purchased goods and education the templates outline goals, strategies, and actions to drive conversations and change at the department level.

SUSTAINABILITY CONNECT

Sustainability Connect is MITOS's annual community event which brings together staff, students, faculty, and researchers to learn more and contribute to MIT's sustainability efforts and campus climate commitments and goals. Sustainability Connect 2023 marked the first time the event was held in person since 2019, as it was shifted online during the pandemic. More than 100 event attendees represented 67 different departments, labs, and centers across MIT. The event served as a forum on the future of sustainability leadership at MIT, designed to reflect on the work that had brought MIT to its present moment — focused on a net-zero future by 2026 and elimination of direct campus emissions by 2050 — and to plan forward.

STRATEGIC PARTNERESHIPS AND THRIVING NETWORKS

As the Office works to develop sustainability solutions across scales, a series of thriving networks are essential to inform and operationalize these solutions at MIT and bring them to bear in the world. These thriving networks that support this work are made up of partners across the city, state, national, and global scales, highlights of which are shared below.



**CITY OF
CAMBRIDGE**

CITY OF CAMBRIDGE

In 2023, MITOS continued to serve as an MIT representative on the Cambridge Recycling Advisory Committee. MITOS staff have also served on the Cambridge Compact for a Sustainable Future, the City of Cambridge Climate Change Preparedness and Resilience Plan, the Net-Zero Task Force, and the City of Cambridge Climate Resilience Zoning Task Force.

**Boston
Green Ribbon
Commission**

BOSTON GREEN RIBBON COMMISSION HIGHER EDUCATION WORKING GROUPS

MITOS team members serve on three separate working groups as part of the Boston Green Ribbon Commission Higher Education Working Groups. The goal of the working groups is to build upon the significant accomplishments of the Higher Education Working Group of the past decade. Team members share their subject matter expertise in these groups to advance the goals of understanding different perspectives, transferring knowledge to other sectors to accelerate change for the equitable implementation of climate mitigation and resilience.

IVY+
SUSTAINABILITY
CONSORTIUM

IVY PLUS SUSTAINABILITY CONSORTIUM

The Ivy Plus Sustainability Consortium is committed to the ongoing exchange of campus sustainability solutions common to all our campuses. Participants agreed that a unified effort on the part of the leading institutions of higher education to respond to one of the most pressing issues of our time, climate change, is essential. The Ivy Plus sustainability group is faced with the opportunity and responsibility to develop cutting edge model operations, engage top scholars, and educate the future leaders on issues of sustainable development and climate change. The group was initially convened by Director of Sustainability Julie Newman in 2007, while at Yale University and continues to meet on an annual basis at one of the participating institutions.

ISCN
International Sustainable Campus Network

INTERNATIONAL SUSTAINABLE CAMPUS NETWORK

MIT is an active member of the International Sustainable Campus Network (ISCN), working with peers across the globe to devise and open-source solutions for campus sustainability. ISCN is a global forum supporting leading colleges, universities, and corporate campuses in the exchange of information, ideas, and best practices for achieving sustainable campus operations and integrating sustainability in research and teaching. MITOS Director Julie Newman was a founding member of the network and now sits on the Advisory Board which continues to provide input into the direction of the organization.

Researchers discussed findings presented at the Transatlantic Symposium on Sustainable Development in Higher Education in October 2023.





Measuring and Communicating Impact

For the MIT and global community to benefit from the sustainability solutions devised at MIT, access to data and information is essential. In these efforts, the Sustainability DataPool and communications vehicles allow community members to learn more, access, and view data, and develop their own sustainability solutions.

SUSTAINABILITY DATAPOOL

MITOS's Sustainability DataPool is a collaborative project that provides the MIT community with access to campus sustainability data and visualizations. Using real time data, the tool empowers MIT community members by providing them the data they need to understand current performance and inform innovative sustainability solutions and ideas. With the launch of *Fast Forward*, the collection and display of this data is essential to inform both the work of MIT and educate and empower the MIT community in devising ideas to help reach the goals of the climate action plan. In 2023, the new Scope 3 Travel Dashboard debuted in the DataPool, allowing users to see a more comprehensive picture of MIT's emissions and explore how emissions compare year over year, by school, and other variables. With the establishment of the 2030 impact goals, the DataPool will again expand in the next fiscal year to track and communicate progress towards these goals and other metrics.

COMMUNICATING IMPACT

Communications and outreach are essential tools for engaging the broader MIT community in the work and mission of MITOS

and MIT's climate action plan. MITOS has been the lead on communicating updates, progress, and explanations on the campus aspects of the climate action plan and sharing features on individuals and teams working to reach the goals of the plan. Digital, print, and video channels are all utilized in this work. In 2023, MITOS teamed with the communications leads for VPCSS and the Office of the Executive Vice President and Treasurer (EVPT) to engage communications firm Sametz for their support in developing messaging strategies and visuals to engage and educate more members of the MIT community on the important role of the campus commitments.

SUSTAINABILITY DIGEST

The MITOS Digest engages and informs a large audience, through its newsletter which is delivered monthly to a broad range of subscribers. With an audience of more than 1,400 subscribers, the MITOS Digest connects the audience with progress updates on *Fast Forward*, news, research, photos, and updates on sustainability projects centered around the MITOS areas of impact to engage individuals and groups in solving global issues at the local level.



MIT Office of Sustainability staff

Looking Ahead

In 2023, the Office of Sustainability built upon a decade of work to advance transformative work across campus while establishing the groundwork for many exciting projects and developments that will enable MIT to reach its campus climate commitments. In the next year, MITOS is focused on transformative work inclusive of:

- **DEVELOPING** a plan to decarbonize the campus by 2050
- **CO-CHAIR** a Decarbonization 2050 Working Group that will tap the technical expertise of our faculty and provide input into the campus planning process.
- **WORK WITH** a consortium to procure additional renewable energy power purchase agreements to help reach net zero by 2026 goal.
- **THE LAUNCH OF** a new shared/ pipeline position between MITOS and Dining to provide the platform for a MITOS staff member to implement the climate impact goals, reduce food waste, and advance the Kendall Food Vision Prize of 2019.
- **IMPLEMENT** an impactful and broad reaching climate communications plan.
- **CONTINUE** work in leading the eighteen campus workstreams of the *Fast Forward* plan.

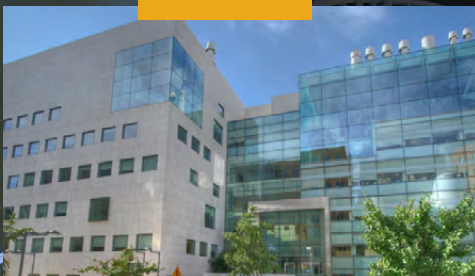
Sustainability MIT News Features



[Celebrating a decade of a more sustainable MIT, with a focus on the future](#) [↗](#)

MARCH 10, 2023

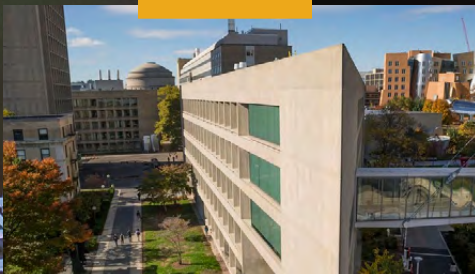
The MIT Office of Sustainability gathers students, staff, faculty, and researchers for annual Sustainability Connect.



[Tackling the MIT campus's top energy consumers, building by building](#) [↗](#)

MAY 25, 2023

A full-building energy efficiency project aims to reduce total campus emissions by 2 percent.



[AI pilot programs look to reduce energy use and emissions on MIT campus](#) [↗](#)

SEPTEMBER 8, 2023

A cross-departmental team is leading efforts to utilize machine learning for increased efficiency in heating and cooling MIT's buildings.



[MIT campus goals in food, water, waste support decarbonization efforts](#) [↗](#)

DECEMBER 12, 2023

A cross-departmental team is leading efforts to utilize machine learning for increased efficiency in heating and cooling MIT's buildings.



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