Office of Sustainability

MIT SUSTAINABILITY INDEXEMPTION OF A CONTRACT OF A CONTRAC





Looking Back on 2024

The Office of Sustainability (MITOS) works to drive the MIT community toward campus climate goals and support a more sustainable, resilient, and climate-ready MIT.

In 2024, MITOS leveraged existing partnerships and developed new ones in pursuit of these goals, working with partners in every corner of MIT. With the launch of the Climate Project at MIT, MITOS began to identify ways that its current efforts align with the newly established missions along with opportunities to advance and contribute to the vision.

MITOS's sustainability and climate work is guided by MIT's Fast Forward climate action plan and its campus commitments. MITOS serves as the organizational leader for 18 campus commitments outlined in the climate action plan. These commitments are structured around mitigation and resiliency, greenhouse gas emissions accounting, electrical vehicle fleet expansion and infrastructure, and climate leadership. MITOS staff, under the leadership of Director of Sustainability Julie Newman PhD, lend expertise, project management skills, and institutional knowledge to implement these efforts. Several of these campus commitments marked major milestones in 2024 including launching a Decarbonization Working Group to explore how to tie current climate tech research to inform how to decarbonize the campus; securing new, large-scale, renewable energy purchases to advance our net-zero goals; establishing a pilot air travel carbon offset program; and the development of a Climate Resiliency and Adaptation Roadmap for the campus.

MITOS also led many key initiatives on campus and off including supporting broad-reaching climate action for nonprofit partners, working as a member of a new climate justice network through the Boston Green Ribbon Commission, and hosting the annual Sustainability Connect forum, bringing together staff, students, and faculty representing more than 70 departments. Updates from the past year in all priority areas are woven throughout this report.

Progress Toward Our Climate Goals

MIT is committed to accounting for, reducing, and eliminating its Scope 1, 2, and 3 emissions. MIT began reporting Scope 1 and 2 campus greenhouse gas emissions in 2014, and in 2023 added emissions associated with Scope 3 activities (indirect sources of greenhouse gases from an organization's operations) including business travel and food purchases.

In 2023, MIT set a food impact goal to reduce the GHG emissions associated with campus food purchases by 25 percent by 2030, with a focus on residential dining. Meeting global climate goals relies on significant emissions reductions from the food system. The largest foodrelated climate emissions come from animal-based foods, especially red meat. Where possible, shifting menus to include more plant proteins and local seafood can lead to a reduction in greenhouse gases. Incorporating global recipes that highlight these foods can help institutions like MIT lead on climate-friendly menus that embrace cultural diversity.

The charts at right display two years of purchasing data that MIT is using as a baseline for its food-related climate strategy. Charts illustrate the emissions from different food categories across all residential hall retail locations and the Forbes Family Cafe.

The Institute is also committed to accounting for and reducing the carbon emissions associated with MIT business travel, the result of which efforts can be seen in the bottom bar graph.





* FY2023 marks the first year that MIT has calculated emissions from off-campus sites which includes Bates Research and Engineering Center, Haystack Observatory, and Endicott House



FOOD-RELATED PURCHASING BY CATEGORY

BUSINESS TRAVEL TOTAL TRAVEL EMISSIONS BY FY (ALL EXPENSES ARE NORMALIZED TO 2023 DOLLARS)



Our Mission & Methodology

The mission of MITOS is to transform MIT into a powerful model that generates just, equitable, applicable, and scalable solutions for responding to the unprecedented 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.

Since its inception, MITOS has defined its priorities for the MIT campus around "areas of impact" which guide sustainability and climate action across the campus operations and research. These areas of impact are organized by a commitment to a zerocarbon campus, climate resiliency, materials lifecycle, healthy people and communities, and thriving partnerships.

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. The MITOS model is built on a scales of impact foundation that recognizes that we cannot solve for sustainability and climate action within the walls of our campus alone as MIT is completely integrated and reliant upon local, state, national, regional and global systems—from the supply chain to policy to natural resources.

A FRAMEWORK FOR ACTION AND GREATER IMPACT

As we ask, 'How are we solving for sustainability and climate change?' we must understand the scale in which we are considering the solution. Our models for innovation and climate solutions must factor in the local context, such as varying regulatory environment, and be designed with an understanding of each scale keeping the interplay across scales at the forefront of our thinking and planning. By operating at the intersection of campus operations and research, the Office is uniquely positioned to strategically guide the Institute in meeting its sustainability and climate action goals.

DR. JULIE NEWMAN Director of Sustainability

YOU \longrightarrow CAMPUS ——

ightarrow state

ightarrow GLOBE

Our Organizational Structure

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. This Office also hosts a postdoctoral associate, who works jointly with the Office and MIT's Climate and Sustainability Consortium. The postdoc position is focused on characterizing decarbonization pathways and net-zero targets and identifying common bottlenecks to achieving net-zero across higher education and industry.

The Office's staffing model is organized around its priority areas which track to MIT's climate action plan, supported by subject matter experts operating in the role of project managers. The data scientist and senior communications specialist roles work as partners to each project manager. Additionally, MITOS is supported by four faculty fellows and several student researchers throughout the academic year and summer term.

To fulfill the Office's mission, 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.



Clockwise from back left: Jordyn Goldson '27, Dylan Cook '27, Sawyer Garrett '26, Rudiba Laiba '25, Megan Lim '24, and Ananda Santos Figueriedo '25

STUDENT SUSTAINABILITY RESEARCHERS COHORT

The crucial work of MITOS staff is supported by the integration of Student Sustainability Researchers who focus on annual priority areas including designing out waste, climate justice, greenhouse gas emission accounting, and more. Each semester, students at the undergraduate and graduate level help to fulfill the mission of the office in these roles. Beginning in June 2024, the Office expanded the program with a cohort model for the student researchers, hiring six students to work in a team in to support the work of MITOS and help map MITOS efforts to that of the newly established Climate Project pillars. The cohort of students also completed seven collaborative hackathons to collaboratively identify solutions to sustainability challenges, enrolled in an Experiential Ethics course, and engaged in community service projects with MIT's Priscilla King Gray Public Service Center.

Decarbonizing Our Campus

MIT is guided by a commitment to campus decarbonization by 2050, with a near-term milestone of net-zero emissions by 2026. This goal calls on the MIT community to explore and support game-changing and evolving technologies to move campuses like MIT away from carbon emissions-based energy systems. Implementation for achieving net-zero emissions is well underway, led by MITOS and supported by numerous other units across campus, and an innovative consortium of other prominent institutions in the Cambridge and Boston area. Through partnerships with local Cambridge/ Boston universities, municipalities, and healthcare organizations, MIT is accelerating and scaling the impacts of investing in new renewable energy capacity beyond our own campus. Feasibility studies for large-scale, campus decarbonization have been initiated and are generating creative engagement across the MIT community and beyond.



GREENHOUSE GAS ACCOUNTING AND MEASUREMENT

Every year, the Office of Sustainability leads data collection, analysis, and reporting of MIT's on-campus greenhouse gas emissions in support of MIT's goals of reducing emissions. In fiscal year 2024, MIT reduced its total building-related on-campus emissions by 3 percent from the previous year. This reduction in emissions is largely attributed to energy efficiency projects targeting multiple campus buildings. Campus renewables energy generation grows

Four new solar panel installations will grow MIT's renewable energy generation by more than 400 percent, a goal outlined in MIT's Fast Forward climate action plan. The installations on multiple major campus buildings— The Stratton Student Center (W20), the Dewey Library building (E53), New Vassar (W46), and the Theater Arts building (W97)—will add more than 500 kilowatts of installed solar capacity to campus. In addition to existing solar installations at MIT, the total output will be 650kw, annually, equivalent to power electricity use of 39 homes each year. The solar installations are an important facet of MIT's approach to eliminating all direct campus emissions by 2050.

DECARBONIZATION WORKING GROUP

The Decarbonization Working Group is co-chaired by Julie Newman and Department of Architecture Professor Christoph Reinhart and composed of appointed MIT faculty, researchers, and students. The working group engages with its members' expertise to meet the charge of exploring and assessing existing and in-development solutions to decarbonize the MIT campus by 2050 and is specifically tasked with informing MIT's efforts to decarbonize the campus's district energy system. The group includes members with deep knowledge of low- and zero-carbon technologies and grid-level strategies. In convening the group, Newman and Reinhart sought out faculty researching these technologies as well as exploring their practical use. This approach is one of MIT's strong suits, and a recurring theme in its climate action plans, of using the MIT campus as a test bed for learning and application.

NET-ZERO REPORTING

As MIT nears closer to its 2026 milestone of a net-zero campus, reporting on these efforts is a central tenet of the work. The goal of net-zero emissions reflects near term objective to balance an organization's current emissions with an equal volume of reductions achieved elsewhere. As MIT decarbonizes its campus, investments are simultaneously made to enable new renewable energy projects off campus that will reduce emissions regionally and accelerate the decarbonization of electricity grids. In late 2023, the City of Cambridge passed significant amendments to its building energy performance ordinance (BEUDO) that now require most campus buildings to be net-zero emissions by 2035 or 2050, depending on their size. Through on-going, close collaboration with the city staff, MIT is well placed to meet Cambridge's new building energy use reporting and performance obligations.

MIT continues to report its full, on-campus emissions as well as the impact of its renewable energy purchases in both megawatt hours and equivalent greenhouse gas emissions avoided. This allows for a transparent approach to reporting emissions performance. MIT reports each year its total gross campus emissions, as well as the total net campus emissions that include the impacts of the renewable energy purchased.

A NEW MODEL FOR PPAS

To fulfill the greenhouse gas reduction goals outlined in the 2021 climate action plan, MIT is dedicated to a longer-term commitment of achieving complete decarbonization of campus energy systems while addressing a short-term critical need to reduce carbon emissions from the nation's electric grids. MIT is co-leading an effort to enable the development of two new large-scale renewable energy projects in regions with carbon-intensive electrical grids: Big Elm Solar in Bell County, Texas, came online in 2024, and Bowman Wind Project in Bowman County, North Dakota, is expected to be operational in 2026. Together, the projects encompass more than 40,000 acres and will add a combined 408 megawatts of new renewable energy capacity to the power grid.

COLLABORATING FOR SOLUTIONS

To identify the most effective pathways to meet the City's BEUDO ordinance, MITOS is also working with partners on campus in the MIT Center for Real Estate. Chenhan Shao, PhD student aided in these efforts over IAP. Shao built a tool which allows MIT users to explore cost and impact over time of these net zero pathways to understand how and when different approaches and technologies should be deployed. As MIT works to meet its goal and the goals of its host city, it provides lessons for responding to new policy at the municipal level and beyond. "This tool helps deepen understanding of energy policy and implementation and its impact on property owners' behaviors," Shao shared.

Chenhan Shao, PhD student

Building Resilience

Harvard University

Soldiers Field

rvard Way

A climate-resilient MIT is one that continues to fulfill its mission amid disruption from climatedriven hazards such as extreme precipitation and excessive and prolonged heat risks; risks which are becoming more frequent and extreme in a changing climate. To build a climate-resilient MIT, the Office of Sustainability engages with partners across the Institute to collect and analyze data, model potential disruptions, and help guide strategies and interventions that respond to these threats and support the MIT community, its campus, buildings, and infrastructure.

RESILIENCY AND ADAPTATION ROADMAP

3.0

Cambridge

MITOS co-led the development of MIT's forthcoming Climate Resiliency and Adaptation Roadmap, alongside staff from the Offices of Campus Planning and Campus Services and Stewardship. The roadmap, which builds upon years of resiliency planning and research at MIT, will include an assessment of current and future conditions on campus as well as strategies and proposed interventions to support MIT's community and campus in the face of increasing climate impacts. This effort has also been informed by campus-based partnerships with researchers and staff from the departments of Urban Studies and Planning, Architecture, and Electrical Engineering and Computer Science (EECS), in the Urban Risk Lab and the Senseable City Lab, as well as by staff in MIT Emergency Management and Housing and Residential Services. The report relies on ongoing work from the Office in capturing and analyzing data related to potential flooding and extreme heat.



44

COOL SPOTS ON CAMPUS

The MIT community is a central focus of MIT's resiliency research and adaptation policies. To respond to the increasing duration and severity of heat on campus, MITOS partnered with the Office of Emergency Management and the City of Cambridge to identify and publicize Cool Spots on campus for the first time in June 2024. These Cool Spots — the MIT Museum, MIT Welcome Center, Koch Institute Public Galleries, and Broad Discovery Center — are indoor, air-conditioned spaces around MIT that are open to the public. During heat waves, MITOS promotes these four locations around campus, encouraging members of the MIT community and greater public to take a break from the heat. Our hope is that others can learn from our efforts and leapfrog us so that collectively, we're accelerating adaptation to a changing climate. Resilience is about scale and partnership. Climate impacts extend beyond individual campuses, so it's critical to consider regional connections and engage with local towns, cities, and states."

BRIAN GOLDBERG MITOS Assistant Director

Material Lifecycles

With a 2030 goal of reducing campus trash by 30 percent from a 2019 baseline, MITOS partners with staff and researchers to analyze the impact of the Institute's purchasing and waste systems and devise solutions to support the reuse, reprocessing, and reduction of purchased goods on campus. Strategies to eliminate campus waste rely on behavioral changes, interventions, research, and strategic waste collection infrastructure.

Choose to Reuse, held monthly on campus

MATERIAL MATTERS CHART



CENTRALIZED BIN SYSTEMS

In 2024, MITOS continued to support the rollout of centralized bin systems across campus buildings. Research has shown that centralized waste stations—as opposed to deskside bins—are better for decreasing waste stream contamination, which aids the Institute by increasing reprocessing and thereby reducing waste. Additionally, the centralized systems allow for the collection of a third waste stream, food waste, by rebalancing the use of the custodial staff who service these bins. With food waste making up 30 to 40 percent of waste collected on MIT's campus, the additional stream enables food waste to be collected from campus and then repurposed into biofuel, supporting MIT's waste reduction goals.

REDUCING RENOVATION WASTE

MITOS convened a new Design Out Waste committee and process improvement group to increase waste reduction actions taken

during small renovation projects across campus. With more than several projects categorized as small renovations in 2023, there is a tremendous opportunity to streamline processes to reduce waste. The group worked to understand opportunities and limitations in the renovation process through guidance from the Massachusetts Department of Environmental Protections, explored case studies of peer universities grappling with similar waste issues, and outlined steps for standardizing waste reduction in these small projects, to be tested in FY2025.

A NEW COMMUNITY TOOL TO REDUCE WASTE STREAM CONTAMINATION

A new searchable waste database was deployed on campus in 2024 to help users understand which item goes in which bin to reduce waste stream contamination and increase reprocessing rates. The MIT Waste Wizard database was populated with items commonly found on MIT's campus and designed to work with existing waste and recycling signage. With the tool, users can search specific items using the Waste Wizard and get answers regarding where an item should go as well as locations of the specialty collection bins needed for certain items.

EXPANDING FOOD WASTE DIVERSION

In addition to expanding food waste collection in academic spaces as part of centralized bin systems, MITOS partnered with the student group Waste Watchers and Housing and Residential Services to begin collecting food waste in undergraduate residence halls. For the program launch, the Waste Watchers formed a sub-group called the Food (waste) Fighters to work with House Managers and hold peer-to-peer education and outreach events.

Healthy People and Communities

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

FURTHERING SUSTAINABLE FOOD SYSTEMS THROUGH SHARED POSITION

MITOS and MIT Dining established a formal working partnership to embed senior sustainability project manager Susy Jones into MIT Dining for 50 percent of her time to oversee the development and implementation of four shared climate and sustainability commitments. At the culmination of the partnership, the shared position had helped set a series of data-based 2030 food impact goals, establish (see visual on page 4) policies and best practices to eliminate food waste and enhance food recovery on campus, join the Menus of Change University Research Collaborative, identify opportunities to establish sustainable operations within MIT's new campus small grocer, and work with partners to deploy the \$250,000 Kendall Foundation New England Food Vision Grant to increase sustainable, local, plant-based food options on campus.

FURTHERING CLIMATE JUSTICE

MIT, with representation from MITOS, established itself as a key partner in the Boston Green Ribbon Commission's new Climate Justice Network, collaborating on an educational webinar in partnership with Boston Medical Center and Northeastern University featuring MIT's climate justice strategy. MITOS staff also joined the Commission's new Heat Risk and Food Justice working groups, contributing to project and action strategy to advance those areas.

Additionally, MITOS staff co-led the restructuring of the Campus Services and Stewardship DEI committee alongside staff in Campus Construction. MITOS provided a framework to establish working groups around core areas of action and new programs piloted in spring 2024, bringing new voices into the committee and further advancing MITOS's role in supporting the larger Campus Services and Stewardship (CSS) operation and promoting belonging and inclusion.



KENDALL FOUNDATION NEW ENGLAND FOOD VISION GRANT

This past year saw the campus launch a plantbased falafel-like bites made with New Englandgrown yellow peas with the goal of increasing locally grown, sustainable, plant-based protein sources offered on campuses around the region. The field fritters are the result of a collaborative effort between the MIT Office of Sustainability, MIT Dining, and non-profit food business incubator CommonWealth Kitchen, who worked together to introduce a regionally-grown and locally-manufactured field pea fritters to several MIT campus dining locations. The effort is made possible by the New England Food Vision Prize, which inspires local colleges and universities to create replicable, scalable, and innovative solutions that can help New England meet the goal of producing 50 percent of its food by 2060. BON APPETIT www.ecausar.counterin ina Boatwright, RD



2070 1

🍅 .lul

Sustainability & 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 distinctive and dynamic, encompassing oversight of a wide range of campus commitments, utilizing the campus as a test bed, and launching and leading campus-wide committees.

CAMPUS AS A TEST BED MODEL

MITOS plays a crucial role in leveraging the campus as a test bed to advance the understanding of how to achieve, build, manage, and demonstrate a sustainable campus. The campus serves as a test bed for MIT's commitment to climate and sustainability leadership via a collaborative approach between research and operations where feasible and supported by a commitment to robust data collection and analysis. This approach prompts the question, "What are we solving for?" in an iterative manner, ensuring that solutions are not prematurely assigned without fully understanding the desired impact. Additionally, MIT is uniquely positioned to leverage renowned researchers by inviting researchers to work with the Office and to apply their globally conducted research to our campus, enhancing our understanding of both the challenges and opportunities we face.

In 2024, the Office supported test bed efforts that included piloting artificial intelligence in building controls to reduce energy use; heat data collection to inform resiliency planning; testing of plant-based local options in dining halls; and utilization of sustainable materials and signage in spaces across campus. elevation in 24-hour stor climate. Eac 10%. Howev there's 99% The assump based on an

MIT is comm adaptation.







Climate Resilience v1.0.3

70 10y Storm

ario

pitation Flooding 2070 | 10-Year

hap illustrates modeled peak flood on in the event of a future potential 6.9" ur storm on campus under a changed e. Each year, the probability of this event is lowever, over the course of 50 years, 99% chance that this event will happen. Assumptions for this modeled storm are on anticipated climate changes in 2070.

committed to climate resiliency and tion. Learn more here.

Spot elevations in to see spot elevations) id

	MIT Buildings	
	MIT Buildings (under construction)	
]	MIT Catchment Areas	
	Flood Model Extent	(
Depth (gradient stops)		
	0.10 ft & below	
	0.50 ft	
	1.00 ft	
	1.50 ft	
	2.00 ft	

6.00 ft & above



MITOS CLIMATE AND SUSTAINABILITY COMMITTEES

The distributed leadership model designed to ensure that the implementation of the Fast Forward campus commitments empower members of the MIT community across multiple departments to work together to meet the goals outlined in the plan. This model gives the staff—in partnership with 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 2024 MITOS staff 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

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

DECARBONIZATION WORKING GROUP To explore and assess existing and in-development solutions to decarbonize the MIT campus by 2050. The group is specifically charged with informing MIT's efforts to decarbonize the campus's district energy system.

Office of Sustainability

Living Labs

Resource Library

Data & Metrics

17

Measuring and Communicating Sustainability 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 channels allow community members to learn more, access and view data, and develop their own sustainability solutions.

SUSTAINABILITY DATAPOOL

Since its launch in 2016, MITOS's Sustainability DataPool has been a collaborative project that provides the MIT community access to campus sustainability data and visualizations. Supported by real-time data, the Sustainability DataPool empowers MIT community members by giving them the data they need to understand current performance and inform innovative sustainability solutions and ideas. In 2024, new dashboards, datasets, and documentations, including the MIT Business Travel - Scope 3 Emissions and Scope 3 Capital Goods were published while existing dashboard visualization Material Matters were updated to integrate existing waste recycling data with those from the new vendor.

DATA PLATFORM

MITOS manages a data platform using Amazon Web Services (AWS), a cloud service, to improve data reporting and efficiency. The platform features pipeline orchestration, data lineage observability, data modeling, auto-generated documentation, and a centralized control panel for all pipelines, with which one can swiftly discover the blocking steps. Outputs of the pipelines in a managed database serve directly to the dashboards in DataPool, ensuring live connections. The platform is integrated with the Data



Hub developed by IS&T, which hosts and provides links to download the processed data in sync with those served to the dashboards. Additionally, the documentation can increase confidence, facilitate validation, and promote knowledge transfer. Since February 2024, eight pipelines have been implemented, including Scope 3 business travel, construction, purchased goods, and waste. To share this journey in adopting a modern data stack, MITOS also presented this work at the MIT IT Partner conference in June 2024.

COMMUNICATIONS OUTREACH

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. MITOS continues to work closely with partners in the Executive Vice President and Treasurer Office (EVPT) and CSS in these efforts. MITOS also serves as convener of the Sustainability Communicators Working Group launched to develop and align unified messaging in support of MIT's climate and sustainability goals.

cimzte climzte zction

Could MIT climatefocused research and data help foster a more resilient campus and Cambridge?



campus <u>clima</u>te

action



CONNECTING THE DOTS: USING MIT'S CAMPUS AS A "TEST BED" FOR SUSTAINABILITY

Brian Goldberg Assistant Director, Office of Sustainability



Miho Mazereeuw Associate Professor of Architecture and Urbanism in the Department of Architecture & head of the Urban Risk Lab

19

Thriving Networks

WORKING GREEN COMMITTEE

For more than 20 years the Working Green Committee, a subcommittee of the Working Group for Support Staff, has been developing and delivering programs that educate MIT administrative and support staff about sustainability with a focus on recycling, reducing, and reusing goods. Rebecca Fowler, senior administrative assistant for MITOS, serves as the co-chair of the committee, whose largest event is the bimonthly Choose to Reuse. In academic year 2023-2024, the committee hosted five Choose to Reuse events on campus, with more than 1,700 community members attending. The event is open to the entire MIT community as an opportunity to donate and receive gently used items such as clothing, housewares, office supplies, and toys. Every event has an average 60 percent reuse rate and over 7,600 items were donated in AY2023-2024 with 4,650 collected for reuse.

In academic year 2023–2024:



Choose to Reuse events were hosted on campus







1,700+ Community members attending







SUSTAINABILITY CONNECT

Sustainability Connect is the yearly forum hosted by the MIT Office of Sustainability that offers an inside look at this transformative and comprehensive work that is the foundation for MIT's climate and sustainability leadership on campus. The event is open to individuals in every role at MIT to learn more about the sustainability and climate work happening on campus and to share their ideas, highlight important work, and find new ways to plug into ongoing efforts. This year, more than 130 community members representing more than 70 departments, labs, and centers joined the forum to learn more about decarbonizing MIT, the Climate Project and MIT, and climate in the media.

DECARBONIZATION FORUMS

With many pathways to decarbonization of the campus by 2050, keeping the MIT community informed of this work can be a challenge. Partnered with CSS, MITOS developed a series of in-person Decarbonization Forums to address that challenge. Leadership from MITOS and CSS led the events and walked attendees through the many ways MIT is grappling with the challenge of decarbonization. The events offered an inside look at MIT's approach to eliminating direct on-campus emissions as well as a forum for community questions and ideas. More than 150 members of the MIT community joined the three events held during the spring 2024 semester.

CITY OF CAMBRIDGE

In 2024, MITOS continued to serve as an MIT representative on several city committees including the Cambridge Compact for a Sustainable Future, the Net-Zero Task Force, and the Recycling Committee.

COLLABORATIVE CLIMATE ACTION PROGRAM AT MIT

In fall 2023, MITOS launched the Collaborative Climate Action Program at MIT to engage staff in supporting a more sustainable MIT. The program—which had 100 staff members from 62 DLCs sign up—is open to staff across the Institute and invites them to foster sustainable practices through a wide range of guided actions, such as hosting sustainable events, engaging in purposeful purchasing, reducing the carbon footprint of food procurement, improving recycling practices, cultivating a strong culture of reuse, and creating local climate and sustainability action plans. Following a cohort model, staff members meet biweekly on Zoom to learn about actions to support sustainability within their department, labs, and centers, and also share challenges, lessons learned, and ideas. Staff also receive action-oriented and educational emails biweekly to guide them along in the process.

> Summer 2024 cohort of the Collaborative Climate Action Program @ MIT



LOCAL AND REGIONAL CONSORTIUMS

MITOS also represents MIT at sustainability focuses committees at the state, national, and global levels. These committees include:

Boston Green Ribbon Commission

Boston Green Ribbon Commission Higher Ed Working Groups

The mission of the Green Ribbon Commission is to "accelerate Boston toward a climate safe, carbon free, equitable future." MITOS team members serve on three separate working groups as part of the Boston Green Ribbon Commission Higher Ed Working Group. The Higher Ed Working Group works to convene, study, explore, and jointly implement collaborative solutions to advance shared climate action objectives.



Ivy Plus Sustainability Consortium

The Ivy Plus Sustainability Consortium is committed to the ongoing exchange of campus sustainability solutions common to all our campuses. MITOS staff serve on several different working groups within the consortium.



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 opensource solutions for campus sustainability. 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.

Looking Ahead

Due to the nature of climate challenges, the work of the Office of Sustainability must evolve and change each year and 2024 was no exception. As the world saw record-breaking heat and previously unimaginable climate impacts, MIT continued to grow and adjust its strategy for responding to the challenges, expanding its efforts through new course offerings, engagement opportunities, and the debut of the Climate Project at MIT. MITOS remains an instrumental partner to all of these efforts and looks forward to growing alongside them in the year to come as decarbonization of the campus continues to take priority focus, with much of the work of the office building up to this tremendous goal.

SUSTAINABILITY MIT NEWS FEATURES



Al pilot programs look to reduce energy use and emissions on MIT campus

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

Series of 2030 quantitative campus impact goals aims to reduce emissions and inform and advance the Institute's commitment to climate.

The challenges of sustainability and climate change are immense, cutting across populations, geographies, and systems. At MITOS, we believe in a cascading approach to sustainability — one focused on strategies and impact that consider the individual, the campus, the city, the state, the nation, and globe.

Our campus serves as the foundation of this model, functioning as a test bed for sustainability and climate action. Here, we test and implement innovative solutions across interconnected systems, from energy and water to transportation and waste. The campus becomes a microcosm of broader societal systems through collaboration with partners and stakeholders, allowing us to refine and prove ideas at a manageable scale.



Faculty, staff, students to evaluate ways to decarbonize MIT's campus

New Decarbonization Working Group will leverage member expertise to explore and assess existing and in-development solutions to decarbonize the MIT campus by 2050.



At Sustainability Connect 2024, a look at how MIT is decarbonizing its campus

The event featured updates from faculty and staff from across MIT, as well as a panel on communicating climate in the media.



MIT Office of Sustainability

77 Massachusetts Ave, E38-346 Cambridge, MA 02139

sustainability.mit.edu sustainable@MIT.edu

Design by opusdesign.us