

Pathway to Sustainability Leadership by MIT

Incubation, Transformation, and Mobilization

A summary of the Five Pathways

MIT seeks to leverage this vision and act boldly to advance the Pathway to Sustainability leadership and become an organizational standard-bearer for a sustainable future.

Framing Sustainability at MIT: *The world faces a profound challenge: the current organization of human societies and economies is environmentally unsustainable [Hoekstra & Wiedmann 2014; Steffen et al 2015]. The planet simply cannot support the current population growth rate and ensuring natural-resource demands and environmental degradation that result from ever increasing impacts of human activity.*

Sustainability, as framed by the need to promote health and wellbeing for a growing world population while reducing our global footprint to within Earth's capacity to sustain us, is a defining challenge for the world's citizens in the 21st century, and for MIT.

Five Pathways

1. Model of Sustainability

MIT must exemplify the incorporation of sustainability principles and practices into campus infrastructure, operations, student life, and daily decision making.

Through data-driven practice, MIT will use its campus to understand and solve complex environmental challenges, and will provide a model of environmental sustainability.

Commitments

1. Develop a methodology for sustainability goal setting and set short- and medium-term goals for the campus by leveraging the scientific expertise of MIT faculty, staff, and students.
2. Adopt a long-term perspective on life-cycle costs in all units at MIT that acknowledges the long-term presence of the Institute in Cambridge and our impact on the economy and intellectual landscape of the greater Boston region.
3. Ensure that MIT sustainability commitments support the evolving nature of a university campus and inform the Institute's overall campus planning process.
4. Create model sustainable-living communities for students so they can innovate and experience cutting-edge sustainable living choices within a connected urban environment.
5. Establish full accountability and transparent reporting from leadership across the Institute via an annual campus sustainability report developed by the Office of Sustainability.

2. Transformed Organization

MIT must transform itself into a resilient and environmentally sustainable organization, demonstrating and modeling the process for such transformation.

We seek to catalyze and implement innovative sustainability research to inform how to achieve sustainable systems and organizations.

Commitments

1. Embed sustainability into all aspects of the MIT experience, ranging from dorms, living groups, classrooms, labs, offices, and other facilities to our integration with the broader community.
2. Establish appropriate governance and management systems on an as-needed basis to ensure short- and long-term sustainability transformation on campus.
3. Develop systems at all levels—from basic campus maintenance to research and educational impacts—to monitor performance against sustainability goals, identify gaps, and take corrective action.
4. Build the capacity of decision makers at all levels and of all MIT stakeholders to take responsibility for sustainability in order to ensure the success of the Institute's mission and goals.
5. Develop mechanisms by which every member of MIT can contribute to the success of these commitments.

3. Generator of Sustainability Research

MIT must become a generator of new ideas and meaningful sustainability research, building on its history and capacity for contributing solutions to vital global needs and priorities.

We seek to generate opportunities to expand and apply MIT research regarding environment and sustainability.

Commitments

1. Embed within the planning, development, and maintenance of MIT the information tools necessary to enable the campus to serve as a test bed for research, novel solutions, innovation, implementation, and transformation toward sustainable practices at every level and within every unit of the Institute.
2. Provide ongoing, expanded opportunities for MIT faculty, staff, and students to implement the research and technology emerging from our labs and classrooms; expand the reach of those opportunities by partnering with the cities of Cambridge and Boston, and beyond.
3. Establish an open access database of research and implementation opportunities that enlists the efforts and resources of the Environmental Solutions Initiative, the MIT Energy Initiative, the MIT Innovation Initiative, and other Institute-wide organizations and associated research groups, labs, and entities, and connect it with the venture and angel investing community that orbits MIT generally and, specifically, with the newly opened MIT Engine.
4. Develop metrics and monitor progress to measure the success of applying research results to creating a sustainable campus.

4. Educational Innovator

MIT must be an innovator of educational experiences for its diverse communities of learners, both on and off campus

We seek to generate opportunities to expand and mobilize the MIT educational enterprise in environment and sustainability with the aim of creating a sustainable campus and world.

Commitments

1. Develop a portfolio of diverse curricular and extracurricular experiences to serve all MIT undergraduate and graduate students; ensure that all MIT students have access to comprehensive sustainability education.
2. Establish a central information portal for all student sustainability learning opportunities, including undergraduate and graduate subjects, learning modules associated with the campus as a living laboratory, student-supported and peer-to-peer learning projects, and outreach opportunities for teaching and learning.
3. Create a sustainability career “ecosystem” involving campus organizations, networks of MIT alumni, and friends of MIT who are committed to guiding the next generation. The ecosystem will provide professional development tools and student advising through a roadmap of the local, regional, national, and international career pathways for students from all majors and disciplines.
4. Build mechanisms for linking MIT’s educational efforts, both in the classroom and through edX and MITx, with innovation and entrepreneurial thinking.
5. Provide ongoing, expanded opportunities for MIT students to explore and engage in innovation and entrepreneurship activities that can lead to the creation of successful startups.

5. Thoughtful Partner, Disseminator, and Mobilizer

MIT must be a thoughtful partner within its local and global communities, a disseminator of great ideas, and a mobilizer of actors to implement sustainability solutions.

Therefore, MIT must strive to bring diverse perspectives to bear upon the challenge of finding comprehensive solutions to the complex problems of sustainability.

Commitments

1. Create multiple venues for on-campus dialogues that inform and challenge a vision of sustainability at MIT.
2. Deepen partnerships with the cities of Cambridge and Boston to create and implement more impactful solutions.
3. Seek opportunities to convene stakeholders, from the local to the global scale, with diverse perspectives to develop solutions, and mobilize the appropriate actors to implement them.