



## CORPORATE ENGAGEMENT WITH THE MIT ENVIRONMENTAL SOLUTIONS INITIATIVE

Thank you for your interest in working with MIT's [Environmental Solutions Initiative](#) (ESI). This document will give you examples of our current corporate collaboration opportunities.

Our agenda is growing and evolving, and we are committed to working with outside partners in ways that will maximize our impact.

Please contact us directly to discuss your interests and needs, or just to familiarize yourself with our agenda and future plans. We'd like to hear from you! Our contact information is at the end of this document.

ESI develops and conducts programs and activities across the MIT campus. We are also a portal to the [broad range of environment-related MIT activities](#) and to other centers at MIT that are engaged in environment-related programs, such as the [MIT Energy Initiative](#) and the [MIT Sloan Sustainability Initiative](#).

*ESI's mission is to advance science, engineering, policy and social science, design, the humanities, and the arts towards a people-centric and planet-positive future. We pursue this mission by mobilizing students, faculty, and staff across MIT in partnerships for interdisciplinary education, research, and convening.*

ESI's activities fall in three broad and connected areas:

- [Research](#): Climate science and Earth systems; Cities and Infrastructure; and Sustainable Production and Consumption.
- [Education](#): multidisciplinary; hands-on and problem-oriented; career-relevant.
- [Convening](#): direct and sustained engagement with the world beyond MIT in dialogue, problem identification and the development of solution pathways.

### OPPORTUNITIES FOR INDUSTRY:

MIT has many decades of experience working cooperatively with industry in customized sponsored research projects and broader consortia. We also nurture an active entrepreneurial ecosystem that corporations engage with through connections such as the [MIT Startup Exchange](#).



**General opportunities for corporate engagement** include licensing of work products for commercial use, corporate education, business strategy, visiting scientists, student networking for internships and hiring, participation in ideation and reporting events, visibility and support of common agendas, etc.

Examples of research activities — most with the potential for educational and convening components as well — that may be of interest:

#### GENERAL PROGRAMS:

- [ESI Seed Grants](#): Short research projects that have the potential to lead to more substantial programs.
- [Martin Fellows for Sustainability](#): Graduate fellowships for Ph.D students pursuing sustainability-related research.
- *One-day events, hackathons and ideas competitions*: The [schedule](#) is continuously evolving.

#### CLIMATE SCIENCE AND EARTH SYSTEMS:

- *A.I./machine learning*: Natural systems, biogeochemical cycles, biodiversity; Advanced sensor design and deployment: Assessing and monitoring the health of natural systems (coastlines, tropical forests and other environments); Robotics for varied terrains: mobile sensor packages in all kinds of terrain in all climates for long periods of time; swarming technology.
- *Toxicity of industrial substances and local urban and rural pollution sources*.
- *Plastics in the environment*: Impact of plastics on the environment at every stage of the manufacturing, use and disposal processes; strategies to mitigate the impact.

#### CITIES AND INFRASTRUCTURE:

- *The “Future City”*: sustainable building and neighborhood design, blue-green infrastructure, climate-change mitigation and adaptation, urban mobility, waste management, urban-rural and intracity equity.
- *Kendall Square/MIT sea-rise program*: Addressing the impact of projected 21st-century sea-rise on the “test bed” of the MIT campus and the Kendall Square area of Cambridge: sea-rise and flooding technology, architectural issues, economics, urban planning, social impact, private/public partnerships.

#### SUSTAINABLE PRODUCTION AND CONSUMPTION:

- [Metals and Minerals for the Environment](#): Primary metals and other strategic minerals. Rate of extraction, intensity of consumption. Mining and minerals technology, environmental economics and social impact; exploration, production, transport, manufacturing, use, recycling, disposal, construction demolition, closing and rehabilitation of mining and mineral facilities.
- *Nature-based solutions*: replacement of environmentally stressful and/or CO2-emitting processes by alternative processes and materials that are more synergistic with the environment, and that achieve carbon neutrality or sequestration. Protection and restoration of ecosystems, carbon-sequestering land management, urban green spaces, economic return on ecological function, carbon offset programs and incentives.
- *Environmental Entrepreneurship*: programs to provide support for environmental entrepreneurs in the MIT community and ecosystem. Nurturing of environmental and social enterprise, collaboration and business relationships with environmental entrepreneurs.

Please contact us to discuss how we might work together.

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