

MIT SLOAN SCHOOL OF MANAGEMENT

# The MIT Climate Policy Center

## Translating Climate Research into Action

At MIT, we are committed to solving the world's greatest challenges. With its wide-ranging environmental, economic, political, and social impacts, climate change is arguably the most pressing issue of our time. The Institute's interdisciplinary expertise in subjects such as technology, engineering, science, and business make it well-positioned to lead the effort to change the planet's climate trajectory.

MIT has announced the launch of the Climate Project at MIT, an Institute-wide initiative to develop, deliver, and scale up climate solutions as quickly as possible. MIT Sloan will play a critical role in this initiative. The school recently announced a \$25M investment to jump-start the MIT Climate Policy Center, which will utilize the research and technologies of the Climate Project at MIT to help inform and support policymakers.

### THE CLIMATE PROJECT AT MIT

The Climate Project at MIT will facilitate collaboration among students, faculty, and staff across the Institute to combat climate change. The goal for MIT is to become, within the next decade, one of the world's most prolific and collaborative sources of technological, behavioral, and policy solutions for the global climate challenge. The Climate Project at MIT currently has the following focal areas, or Climate Missions:

- Decarbonizing Energy and Industry: Decarbonizing the world's industries with affordable low-emissions electricity and fuels in addition to climate-relieving industrial innovation.
- Restoring the Atmosphere, Protecting Land and Oceans: Removing, managing, and storing greenhouse gases. Protecting ocean and land ecosystems.
- Empowering Frontline Communities: Supporting the world's most vulnerable populations with technologies, finance, and policies for climate relief and resilience.
- Building and Adapting Healthy, Resilient Cities: Designing, building, and adapting habitable, resilient cities.
- Inventing New Policy Approaches: Inventing new institutions and incentives in addition to policies/systems for rapid scaling.

"The MIT Climate Policy Center seeks to become a primary trusted nonpartisan resource for policymakers, connecting them with faculty and students who want to make the greatest possible contribution to advancing evidence-based climate policy in the next decade."

**Bethany Patten**, EMBA '13, Executive Director, MIT Climate Policy Center

LEADERSHIP TEAM



**CHRISTOPHER KNITTEL**

Associate Dean for Climate and Sustainability  
George P. Shultz Professor of Energy Economics  
Professor, Applied Economics  
Faculty Director, MIT Climate Policy Center



**BETHANY PATTEN, EMBA '13**

Executive Director, MIT Climate Policy Center  
Senior Lecturer, Sustainability



**DREW STORY**

Policy Director, MIT Climate Policy Center  
Managing Director, MIT Policy Lab



**THE MIT CLIMATE POLICY CENTER**

Situated within MIT Sloan, the MIT Climate Policy Center will be key in helping all five MIT schools and the college address the above Climate Missions. The MIT Climate Policy Center will be led by Christopher Knittel (Associate Dean for Climate and Sustainability; George P. Shultz Professor of Energy Economics; Faculty Director, MIT Climate Policy Center); Bethany Patten, EMBA '13 (Executive Director, MIT Climate Policy Center; Senior Lecturer, Sustainability); and Drew Story (Policy Director, MIT Climate Policy Center; Managing Director, MIT Policy Lab). Initial affiliated faculty and researchers include John Sterman, PhD '82 (Jay W. Forrester Professor of Management; Co-Faculty Director, MIT Sloan Sustainability Initiative; Director, MIT System Dynamics Group); and Catherine Wolfram, PhD '96 (William Barton Rogers Professor in Energy; Professor, Applied Economics).

**Mission**

The MIT Climate Policy Center's mission is to serve as a trusted nonpartisan resource for policymakers who wish to advance evidence-based climate policy in the next decade. The center will facilitate interdisciplinary collaboration with MIT academic departments, centers, and initiatives across the Institute focused on the climate crisis, and determine how their research can be used to educate and support policymakers. It also will incentivize academics to form relationships with policymakers. Its core goals are to:

- Serve as MIT's "front door" for policymakers, coordinating and enhancing MIT's current, disparate climate research efforts;
- Amplify the efforts of the Climate Project at MIT's Climate Missions and work across all faculty, departments, centers, and initiatives engaged in climate-policy research and outreach; and
- Be a two-way street, deepening relationships between MIT and relevant policymakers to stay abreast of policymakers' needs.

**Strategy**

The MIT Climate Policy Center will achieve its mission through a comprehensive, three-pronged strategy informed by MIT's accomplishments in the climate space. Below are the components of this strategy and examples of current and previous MIT projects that employ these strategies.

AFFILIATED FACULTY



**JOHN STERMAN, PHD '82**

Jay W. Forrester Professor of Management  
Professor, System Dynamics and  
Engineering Systems  
Co-Faculty Director,  
MIT Sloan Sustainability Initiative  
Director, MIT System Dynamics Group



**CATHERINE WOLFRAM, PHD '96**

William Barton Rogers Professor in Energy  
Professor, Applied Economics

1. Heighten Awareness of MIT Expertise and Tools: The MIT Climate Policy Center will heighten awareness of MIT's expertise, tools, and scenario analysis capabilities within the global policy community. En-ROADS and the Climate Pathways Project serve as examples of work that elevated MIT's reputation as a trusted resource for policymakers. Building on decades of work originated in the MIT Sloan System Dynamics Group by John Sterman, the En-ROADS climate policy simulator is a collaboration between MIT Sloan and the think tank Climate Interactive. En-ROADS is a publicly available computer simulation tool that models how different policies affect elements such as the cost of energy, global temperatures, air quality, and rising sea levels. Over 11,000 leaders in business, government, and civil society have participated in climate policy workshops using En-ROADS, including heads of state, legislative leaders, state agencies, and leaders in the global business community. The Climate Pathways Project team has run workshops for government leaders in 165 countries.
2. Convene, Inform, and Recommend: The MIT Climate Policy Center will convene leaders in government, industry, academia, and the nonprofit sector to exchange knowledge and ideas around climate policy. In 2018, MIT held a workshop that included stakeholders from oil and gas companies, credit rating agencies, investment firms, nongovernmental organizations, academics, and others who influence worldwide climate scenarios. The following year, MIT released a report entitled "Climate-Related Financial Disclosures: The Use of Scenarios," which was informed by the discussions that took place at this workshop. The report contains recommendations about how oil and gas companies can use scenario analysis to transparently communicate the risks and opportunities they encounter due to climate change.
3. Analyze Policy Proposals and Translate Research: The MIT Climate Policy Center will provide rigorous and timely analysis of policy proposals by leveraging expertise from across the Institute. In 2023, Story identified federal legislation in development that could benefit from MIT analysis. The proposal, introduced as the "BIG WIRES Act" by US Senator John Hickenlooper and US Representative Scott Peters, would update the US electricity transmission system. Story and Knittel worked with Juan Senga (Postdoctoral Associate, MIT Center for Energy and Environmental Policy Research) to collaborate with the congressional offices on the design of a research project to analyze the potential impacts of the legislation using an existing model at MIT. Within a matter of

weeks, the team completed the analysis and shared the results with the congressional offices, who immediately began referencing the work in press releases and promotional materials aimed at recruiting additional cosponsors onto the legislation. This project also resulted in the publication of a working paper entitled "Research Commentary: Evaluating the Impact of the BIG WIRES Act," which was co-authored by Audun Botterud (Principal Research Scientist, MIT Laboratory for Decisions and Information Systems); Knittel; John Parsons (Deputy Director of Research, MIT Sloan Center for Energy and Environmental Policy Research; Senior Lecturer, MIT Sloan); Senga; and Story. Subsequent work on similar federal legislation, the "Connect the Grid Act," has received national media coverage in *The Hill*, *E&E News*, and *The Economist*.

## **CREATING A BRIGHTER FUTURE TOGETHER**

By bringing together the brightest minds in academia and government policy, the MIT Climate Policy Center will be instrumental in the fight against climate change. Its activities will include raising awareness of MIT research, facilitating conversations among diverse climate policy stakeholders, and responding to the research needs of policymakers. These efforts will build the relationships with policymakers that are needed to amplify the interdisciplinary work of the Climate Project at MIT across the country and around the world.

Bridging the gap between climate research and policy will enable the MIT Climate Policy Center to contribute to climate innovation in a unique and impactful way. We invite you to support the MIT Climate Policy Center and join us in creating a healthier and more sustainable future for all.

