Climate Strategy for Leaders

Three MIT Sloan resources to support long-term decision-making

CONTENTS

En-ROADS Climate Simulator 3

Investor's Guide to Systemic Investing 4

Deploying Established Climate Technologies and Solutions for Buildings 5

The effects of a changing climate no longer feel distant and abstract.

Here in the U.S., climate risk is eroding home values, Los Angeles is still recovering from last year's destructive wildfires, and winter weather patterns are challenging power grids in both the East and the West.

Long-term strategic planning is essential. The three resources in this report bring climate strategy work from MIT Sloan researchers directly to decision makers. Each one represents a different application of systems thinking: An interactive climate simulator makes the consequences of policy decisions visible, a guide to systemic investing offers practical advice for investors, and a policy brief outlines scalable and sustainable building technologies for developing economies.

If these resources help your organization make an informed investment decision or strengthen its assessment of climate risk, they will have done their job. For more ideas and research from MIT Sloan faculty members, follow MIT Sloan on LinkedIn and sign up for our weekly Thinking Forward newsletter.

Sincerely,
Zach Church
Director, Editorial and Digital Media

LETTER FROM THE EDITOR

1. The En-ROADS Climate Solutions Simulator

What it is: En-ROADS is a global climate simulator that allows users to test how policies — from electrifying transport, pricing carbon, and improving agriculture — affect hundreds of factors, like energy prices, temperature, air quality, and sea-level rise.

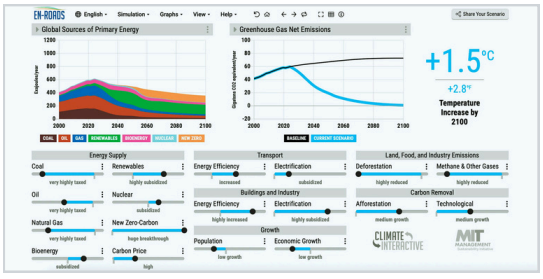
A system dynamics model grounded in the best available science, En-ROADS is calibrated against a wide range of existing integrated assessment, climate, and energy models. It equips policymakers, business leaders, advocates, and educators with the knowledge they need to prioritize high-level climate solutions and implement them fairly. Free and easy to use, it is available in 22 languages.

Who it's for: Everyone. More than 492,000 people in 185 countries — including more than 170 members of Congress — have used En-ROADS and its sister model, C-ROADS. Peer-reviewed studies have found that people who engage with En-ROADS are empowered to take action, with a heightened sense of urgency and an improved understanding of climate issues.

Who made it: En-ROADS was co-developed by Climate Interactive and MIT Sloan. Professor John Sterman oversees the simulator's modeling science.

Adapted from "The En-ROADS Climate Solutions Simulator: Your Key to Understanding and Addressing the Climate Challenge"

Use the En-ROADS Simulator



SOLUTIONS SIMULATOR

2. Systemic Investing for Social Change: A Starter Kit

What it is: Traditional investing often focuses on individual assets or projects in isolation, but today's complex challenges demand a broader, systemic approach. **Systemic investing** is an approach to deploying capital that seeks to transform entire systems for better long-term outcomes for people and the planet.

Rather than treating the symptoms of complex problems, this starter kit guides investors to move beyond one-off investments and embrace strategies that address areas of leverage in the underlying system dynamics. It replaces a project-by-project mentality with a search for synergies across projects that might enhance impact and returns.

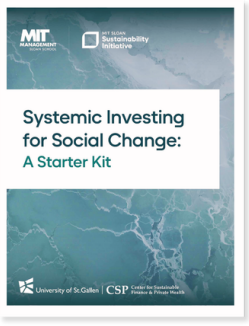
The kit looks across asset classes and beyond economic capital to consider the knowledge, networks, and reputational resources available to investors.

Who it's for: Anyone getting started in systemic investing, whether to deploy capital, shape strategy, design ecosystems, or support other investors.

Who made it: MIT Sloan students and practitioners across the investing ecosystem, including Hibah Khan, MBA '25, and MIT Sloan Sustainability Initiative director Jason Jay, in collaboration with the Center for Sustainable Finance and Private Wealth at the University of Zurich.

Adapted from "Systemic Investing for Social Change: A Starter Kit"

Download the Starter Kit



STARTER KIT

3. Deploying Established Climate Technologies and Solutions for Buildings and Infrastructure

What it is: Buildings and infrastructure account for nearly 40% of global energy-related greenhouse gas emissions. The urgency to transform these sectors is most apparent in developing countries, which typically have acute vulnerabilities to climate risks such as extreme heat, flooding, and resource scarcity. Addressing these challenges requires a dual focus on mitigation (reducing operational and embodied carbon) and adaptation (enhancing resilience to climate extremes).

The policy brief:

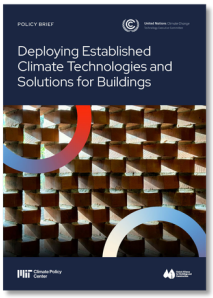
- **Outlines established climate technologies** ready to be deployed across climatic zones and building types.
- **Highlights innovative materials**, circular-economy principles, and advanced solutions such as modular construction and heat pumps.
- **Provides policy recommendations** to facilitate climate technologies' widespread adoption.

Who it's for: Policymakers, who create incentives and ensure equity; industry stakeholders, who implement sustainable, cost-effective solutions; and development organizations, which provide expertise, funding, and capacity-building.

Who made it: The United Nations Climate Change Technology Executive Committee, the Global Alliance for Buildings and Construction, and the MIT Climate Policy Center. Professor Christopher Knittel, associate dean for climate and sustainability at MIT Sloan, is a signatory.

Adapted from "Deploying Established Climate Technologies and Solutions for Buildings," by the UNFCCC Technology Executive Committee, GlobalABC, and the MIT Climate Policy Center, 2025.

Download the Policy Brief



POLICY BRIEF

INVENT THE FUTURE WITH MIT SLOAN

Want more MIT Sloan expert insights?

- Sign up for our weekly Thinking Forward newsletter
- Delivered to your inbox every Tuesday morning

THINKING FORWARD

Business Dynamics: Diagnosing and Solving Complex Business Problems

In person at MIT Sloan

REGISTER NOW →

MIT MANAGEMENT EXECUTIVE EDUCATION

MIT MANAGEMENT SLOAN SCHOOL

Questions and Comments: thinkingforward@mit.edu

mitsloan.mit.edu