

# Business & Environment

Annual Report 2024



Harvard  
Business  
School

## **The Business & Environment Initiative educates, connects, and mobilizes current and future business leaders to address climate change and other environmental challenges.**

This annual report highlights the climate, environment, and sustainability-focused activities at Harvard Business School (HBS) and our connected communities across Harvard and across the world. As we reflect on 2024—a year filled with dramatic change, events, and uncertainty—a few key themes emerge: Climate adaptation gaining ground alongside decarbonization; greater awareness of the need for basic climate literacy in all areas of business; the rapid acceleration of AI and its multi-layered intersections with climate; and the importance of systems thinking and partnership. In this report you will see these themes throughout our programming, alumni activities, publications, research, and teaching. In a space as complex as climate, we can only move forward by bringing together multiple areas of expertise, capability and perspective. The Business & Environment Initiative (BEI) is grateful for everyone who has conducted and supported the School’s business and environment activities throughout the year.

Enjoy your read through the many accomplishments of 2024. There remains much to do, and we appreciate your engagement.

In partnership,

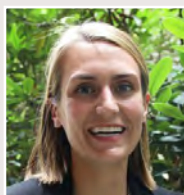
The Business & Environment Initiative Team



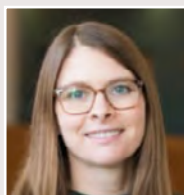
**Mike Toffel**  
Faculty  
Chair



**Lynn Schenk**  
Director



**Courtney Fairbrother**  
Associate  
Director



**Elise Clarkson**  
Community  
Manager

**INITIATIVES** focus on societal challenges that are too complex for any one discipline or industry to solve alone.

# The Snapshot

**In 2024, the Business & Environment Initiative (BEI) helped drive climate leadership** by convening faculty for shared learning, engaging student leaders and offering career support, and facilitating alumni networking and continued learning.



**Convened hundreds of alumni** through Harvard Climate Action Week, HBS Reunions, a virtual networking series, and the Alumni in Climate Networking Series.



BEI served as a hub for MBA students seeking visibility into the School's and University's business and environment resources. BEI collaborated across Harvard's schools and departments to **host or co-host over 20 programs and events**, including climate career coaching, coffee chats, sustainability career panels, networking events, a robust mentorship program, and extracurricular academic opportunities.



Faculty Affiliates authored **16 scholarly articles and 9 working papers** on topics such as adaptation, carbon markets, climate risk, and the energy transition. A complete list of publications appear in the appendix ([page 49](#)).



Faculty Affiliates wrote **more than 60 new teaching cases and over 70 new teaching notes** and plans, and other course materials on business and environment topics. New and available cases are sent to **over 650 climate and sustainability focused faculty for use worldwide** through the BEI Casebook, and **hundreds of thousands of cases** on business and environment topics are sold globally.



Students enrolled in over **26 environmentally focused and related MBA courses** addressing tough tech, energy, entrepreneurship, decarbonization, adaptation, and sustainable investing. A list of courses with significant environmental content appears in the appendix ([page 49](#)).



BEI partnered with HBS and Harvard organizations to extend our reach:

- **900 people across 50 universities** registered for the i-lab course Creating a Climate Venture
- BiGS roundtables with climate topics engaged **over 400 people** around the world
- Harvard Climate Action week attracted **655 in-person attendees & 8.4K livestream views**



BEI offered the opportunity for all incoming RC and rising EC students to take the new Harvard Business School Online Course "Business and Climate Change." The online publication *Poets & Quants* featured this opportunity, which **reaches more than 85% of the active MBA applicant market for the world's top 100 business schools.**



## **Business & Environment**

# **Highlights**

### **Objective 1**

**Engage and promote a faculty community on business and environment topics**

### **Objective 2**

**Educate students to transform or build organizations to accelerate climate solutions**

### **Objective 3**

**Disseminate insights from research and foster alumni engagement on critical environmental topics**

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## Engage and promote a faculty community on business and environment topics

### AREAS OF DEEPENING BUSINESS & CLIMATE CHANGE RESEARCH

Recognizing the far-reaching implications of climate change, leaders across industries and regions are seeking guidance to develop effective strategies to mitigate climate risk. Faculty research offers critical insights to develop and execute strategies that address climate challenges and highlight business opportunities. Key areas where research continues to evolve and contribute include:



**Decarbonization**, because without it, we will not avoid the worst consequences of global climate change.



**Adaptation & Resilience**, because regardless of how much mitigation occurs, we need to deal with the physical climate change implications of our actions to date.



**Climate Accounting, Finance & Investing**, because we manage what we measure, and climate solutions will require substantial capital.



**Climate Tech & Entrepreneurship**, because many of the technologies needed to fully decarbonize the global economy are not yet available on the market.



**Systems Change to Address Climate Change**, because changing government policies and other institutions and norms are vital to creating the incentives necessary to stimulate business strategies and products/services to mitigate climate impacts and accelerate climate adaptation and resilience.

## **NEW EXHIBIT: DECARBONIZING PRODUCTS HARVARD BUSINESS SCHOOL CLIMATE RESEARCH**

A new Decarbonizing Products exhibit displayed at Harvard Business School (HBS) features a set of products that illustrate market solutions to decarbonization. The exhibit showcases products and companies that have been the focus of HBS research, spanning industries from food & agriculture and transportation to building materials and athletics. Through a partnership between BEI and Baker Library, MBA students, Executive Education participants, faculty, staff, and campus visitors can explore this exhibit in Spangler and Chao to deepen their understanding of decarbonization.



## **NEW BUSINESS & ENVIRONMENT INITIATIVE FACULTY AFFILIATES**

The Business & Environment Initiative (BEI) welcomed three new faculty affiliates in 2024:



**Aliya Korganbekova**, Assistant Professor of Business Administration in the Accounting and Management Unit, whose research focuses on accounting disclosure and regulation with an emphasis on sustainability and the effects arising from state-level climate change regulations.



**John Mulliken**, Senior Lecturer of Business Administration in the Strategy Unit, who is focused on climate strategy, climate finance, and building climate technology ventures.



**Ishita Sen**, Assistant Professor of Business Administration in the Finance Unit, whose research focuses on financial intermediation, asset pricing, and insurance markets, with a deep focus on the impacts of physical climate risk on the insurance industry.

## HARVARD BUSINESS SCHOOL EXECUTIVE FELLOWS

The Executive Fellows Program seeks to leverage the expertise of outstanding practitioners to enhance teaching and learning at the School. All fellows partner with at least one faculty member to bring their business experience into the community. The fellows contribute to the School by collaborating on curricular and co-curricular activities. Harvard Business School (HBS) welcomed four new fellows working on climate related research.



**Tom Clay** (MBA 1997), CEO, Xtalic Corporation, is collaborating with Josh Krieger and Jim Matheson on supporting the MBA Elective Curriculum course Tough Tech Ventures, including supporting climate related topics.



**Spencer Glendon**, Founder, Probable Futures, is working with Mike Toffel on research projects related to visualization, understanding, and use of climate change data.



**Reynir Indahl** (MBA 1998), Managing Partner, Summa Equity, is working with George Serafeim on research related to climate and sustainability efforts in private equity.



**Philip Kuai** (OPM 2023), Partner, YUE Accelerator, is collaborating with Feng Zhu on the topics of tech entrepreneurship, sustainability, and emerging markets, including looking at how digitalization drives sustainability.



**Richard Vieira** (MBA 1995), Managing Director and Co-Head, Cowen Technology Media and Telecom Group, is working with Josh Krieger and Jim Matheson on supporting the MBA Elective Curriculum course Tough Tech Ventures, which will include climate related topics.



**Carolyn Weinberg** (MBA 2004), is working with Peter Tufano and Lynn Schenk on a white paper focused on climate finance and market structures.

## FACULTY SEMINAR SERIES

An increasing number of faculty are expanding research and teaching efforts to include business and environment topics. In order to share, strengthen, and build collaboration on the range of work being done on climate change at Harvard Business School, the Business & Environment Initiative organized three research roundtables.



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## Educate students to transform or build organizations to accelerate climate solutions

### MBA REQUIRED CURRICULUM

Environmental opportunities and challenges are embedded in 11 out of 13 Required Curriculum courses, preparing MBAs to make business decisions involving climate and sustainability issues. In 2024, over 25 class sessions in the Required Curriculum featured discussions of cases in which environment was a critical consideration, on topics ranging from energy to impact investing.

### MBA ELECTIVE COURSES

Business & Environment Initiative affiliated faculty offered the following 13 environmentally focused elective courses and 11 related courses with collective enrollment totaling 1,264 students:



**NEW**  
***Cities, Structures, and Climate Shocks***

Professor John Macomber

Prepares students to invest in, advise, or lead organizations in the context of increasing pressures of global urbanization, resource scarcity, and perils relating to climate change.



**NEW**  
***Climate Action Now***

Professor Rosabeth M. Kanter

Deepens students' ability to create and implement high-impact climate solutions by focusing on key ventures, cities, and regions, along with the leadership skills and tactics that can accelerate climate action.



***Energy***

Professor Dustin Tingley

Examines the energy transition in a time of surging global energy demand and in the era of climate change.



**Global Climate Change**

Professor Gunnar Trumbull

Explores the impact of human-induced climate change on modern society and economy. The premise of the course is that a changing climate, and the way we respond to it, will ultimately affect and even transform every aspect of modern capitalism.



**Immersive Field Course (IFC) Europe: Decarbonization and Sustainable Production**

Professors Willy Shih & Mike Toffel

Students observe and interact with business leaders engaged in a wide array of decarbonization and sustainable production businesses, from renewable energy production and storage to sustainable production of industrial and consumer goods.



**Immersive Field Course (IFC) India: Development While Decarbonizing: India's Path to Net Zero**

Professor Vikram Gandhi

Addresses and unpacks the fundamentals of decarbonization, the science and impact of net zero, and the need and ways to build a sustainable future.



**Reimagining Capitalism: Business & Big Problems**

Professor Ethan Rouen

Examines the role that business does and can play in addressing big social and environmental challenges including how to scale solutions that address societal and environmental issues.



**Reweaving Ourselves and the World: New Perspectives on Climate Change**

Professor Rebecca Henderson

Engages students committed to grappling with the reality of global heating and largescale ecosystem destruction, but wondering where to begin, and whether they can truly “make a difference.”



### ***Risks, Opportunities, and Investments in the Era of Climate Change (ROICC)***

Professor George Serafeim

With a focus on the challenges and opportunities posed by climate change, this course prepares students to succeed in a rapidly changing economic landscape and to make a positive impact on the world.



### ***Social Entrepreneurship & Systems Change***

Professor Brian Trelstad & Gerald Chertavian

Looks at how systems change requires entrepreneurs to think beyond their own organizations to collaborate within their field and to motivate collective action, and to combine direct impact with the indirect effects of changing culture and shaping policy.



### ***Sustainable Investing***

Professor Vikram Gandhi

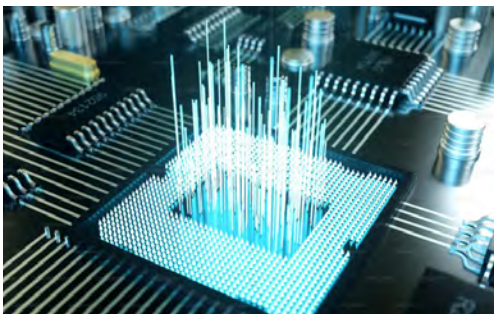
Explores how investors should incorporate what have traditionally been considered “non-financial” criteria in their decisions: for example, climate risk, environmental sustainability, minority representation on boards, and even the potential to create social good.



### ***Tough Tech Ventures***

Professors Josh Krieger & Jim Matheson

Tough technology has the potential to transform incumbent industries and tackle our most pressing societal issues and this course will dig deeply into these challenges to provide impactful and actionable frameworks to drive impact at scale.



### ***Tough Tech Ventures Labs***

Professors Josh Krieger & Jim Matheson

This field course immerses students in the strategic and commercialization challenges of real world, early-stage "tough tech" ventures. TTVs apply cutting-edge science and technology to tackle difficult and significant societal problems such as climate change.

## **THE BUSINESS & ENVIRONMENT INITIATIVE SPONSORS MBA STUDENTS TO TAKE HARVARD BUSINESS SCHOOL ONLINE BUSINESS & CLIMATE CHANGE COURSE**



Over the Summer, BEI sponsored a cohort of over 50 incoming RC and rising EC students to take the new Harvard Business School Online (HBSO) Business and Climate Change Course, developed by Professors Forest Reinhardt and Mike Toffel. Through participating in the course, these students connected with one another and were able to bring their business and climate change learnings from the course

into their HBS classrooms to share their new insights. The cohort of students who completed the course were invited to a formal dinner to share their experience and climate ambitions with Dean Datar. During the dinner, Vasu Purohit (MBA 2026), Lily Qian (MBA 2026), Jack Senft (MBA 2026), and Lia Turrini (MBA 2025) shared how climate change has impacted their lives and how they plan to use their careers to confront climate change. This opportunity also served a strong signal of HBS' commitment to climate change for prospective students as it was covered in *Poets & Quants*, an online publication which reaches more than 85% of the active MBA applicant market for the world's top 100 business schools. The article highlighted the experiences of Isaac Hendrik Kim (MBA 2026), Sabrina Montovanelli (MBA 2026) and Lia Turrini (MBA 2025).

## **NEW WEEKEND SPRINT: LAUNCHING CLIMATE VENTURES**



This fall, Professor Jim Matheson offered the inaugural "Launching Climate Ventures" Sprint, a one-day intensive program that taught the process of launching a climate-focused venture to over 150 climate concerned students from HBS and the Harvard John A. Paulson School of Engineering and Applied Sciences (SEAS). Students learned from a wide range of panelists who offered their expertise and

experience on climate innovation, licensing intellectual property, building a successful founding team, and raising early climate-tech capital. The Sprint was made possible by a partnership with The Harvard Grid (a partnership between Harvard John A. Paulson School of Engineering and Applied Sciences and Harvard's Office of Technology Development that champions entrepreneurship and the commercial deployment of cutting-edge research) and support from The Salata Institute for Climate and Sustainability, the Harvard Innovation Labs (i-lab), and BEI.



## **BUSINESS & ENVIRONMENT INITIATIVE-DRIVEN SHORT INTENSIVE PROGRAM: ACCELERATING CLIMATE SOLUTIONS**

In January 2024, 58 students gathered at Harvard Business School (HBS) and John A. Paulson School of Engineering and Applied Sciences (SEAS) for a four-day Short Intensive Program (SIP) on “Accelerating Climate Solutions,” co-led by Professors Eleanor Laurans, Jim Matheson, and Peter Tufano, plus an inspirational dinner talk by Professor Rebecca Henderson. This intensive program explored how new ventures can create significant financial and societal value by accelerating greenhouse gas emission reductions. The program brought more than 20 industry experts to explore the major verticals responsible for emissions: energy, buildings, transportation, food and agriculture, and materials and industrials. Through a mix of guest speakers, panels, case studies, articles, and a visit to Boston area climate facilities, students passionate about the role of business in combating climate change explored critical unsolved problems yet to be addressed.

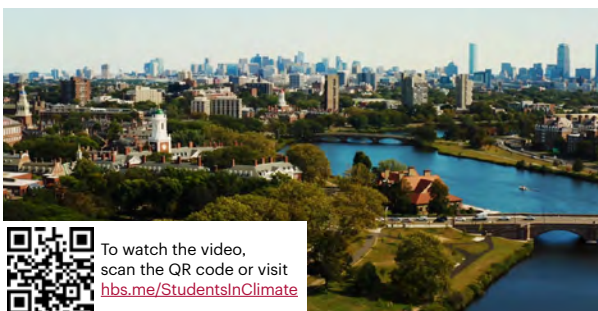
## **FINANCIAL ECONOMICS OF CLIMATE AND SUSTAINABILITY**

Professor Peter Tufano led the development of a global doctoral reading group offered to students at over 130 universities, hosted by Harvard Business School (HBS) in 2024, as well as a companion HBS doctoral course.

## **INDEPENDENT PROJECTS**

Many students extend their learning beyond the classroom through faculty-supervised Independent Projects (IPs). IPs take many forms—for example, students have advised companies on their sustainability strategies, written business plans for environmental ventures, and co-authored teaching cases with faculty. In 2024, there were over 15 business and environment related Independent Projects, ranging from EV charging infrastructure to carbon capture.

## **CLIMATE IN THE CURRICULUM VIDEO**



To watch the video,  
scan the QR code or visit  
[hbs.me/StudentsInClimate](https://hbs.me/StudentsInClimate)

Professors Jim Matheson, Vikram Gandhi, and Rebecca Henderson discuss how climate is integrated into the curriculum at HBS. They highlight topics taught in MBA cases and courses, the role of international field courses in climate education, and how students can utilize independent projects to further their learning.



### **PROVIDING STUDENTS WITH A BUSINESS & ENVIRONMENT ROADMAP**

In 2024, 45% of incoming RCs indicated an interest in BEI on their application and 54% of all current EC and RC students are interested in business and environment topics. BEI partnered with HBS Admissions to introduce these students to the School’s business and environment offerings through Admitted Student Welcome sessions and webinars. Upon arrival on campus, BEI welcomed them at the Business and Environment Kickoff, where they met BEI faculty affiliates, leaders of the School’s environmental clubs, sector leads from Career and Professional Development (CPD), Sustainability Operations staff, members of the Salata Institute, and leaders from The Harvard Grid.

### **STUDENT CONFERENCE: CLIMATE SYMPOSIUM**



*Conference Co-Chairs: Jakob Spiess (MBA 2025), Eli Litchman (MBA 2025), and Josefina Salas (MBA 2025).*

Three MBA student clubs—Energy & Environment, Food & Agriculture, and Sustainability—collaborated to host a Climate Symposium on the theme of “Confronting Reality, Celebrating Innovation,” reflecting the conference’s dual goals of confronting the stark reality of the climate crisis while highlighting the innovations and policies that are driving sustainable solutions.

Attracting more than 400 participants from around the world, the Climate Symposium facilitated conversations and reflections between leaders in the spheres of technology, business, and government with a focus on strategies to address climate change with the urgency and scale it demands. BEI sponsored the event and supported the student leaders throughout the planning stages, including filming the event to support marketing efforts going forward.

## RECOGNIZING STUDENT LEADERSHIP 2024–2025

### NEW

#### Business of Animal Protection Club



Co-Presidents  
Aastha Bhardwaj



David Kay

#### Energy & Environment Club



Co-Presidents  
Ian Naccaraella



Lia Turrini

#### Food & Agriculture Club



Co-Presidents  
David Kay



Sima Shah



Julia Siegel

#### Sustainability Club



Co-Presidents  
Matthew Hirschfeld



Brenda Stern

## STUDENT SUSTAINABILITY ASSOCIATES

The Harvard Business School Student Sustainability Associate (SSA) Program, founded in 2006, is the school's peer-to-peer education program that promotes sustainable behavior on and off campus. In 2024, SSAs completed the following projects:

- Continued Work Reducing Single-Use Waste in HBS by Beatriz Delorme, Carter Umetsu & Yiwei Zhi
- Social Equity & Environmental Justice at HBS: Understanding Opportunities for Student Community Engagement by RuiLin Guo & Seamus Bann
- Improving Sustainability and Reducing Carbon Emissions in Student Events at HBS by Ken Zeng & Tuneer De
- Automating and Improving HBS' Energy Use Reporting by Max Israelit, Danielle Mitalipov & Genesis Tang

The cohort of 2024–2025 SSAs includes: Connie Chan, Elisia Ceballo-Countryman, Sahar Ibrahim, Ryan Jackson, Pooja Joshi, Raina Karia, YB Kim, Perle Sand, Ben Stanley, and Gianluca Venegas.



## **PROMOTING SUSTAINABILITY CAREER OPPORTUNITIES**

The Business & Environment Initiative (BEI) continues to develop and build on programming that supports students interested in pursuing careers in business and environment related fields. In summer 2024, over 100 MBA students found internships at the intersection of business and the environment. BEI showcased some of these students through the BEI Blog.

Over the summer, BEI and the Social Enterprise Initiative (SEI) hosted a meet-up for MBA students with summer fellowships focused on climate and sustainability. This discussion provided an opportunity for students to meet each other, share ideas, topics, trends, and challenges.

Through a partnership between BEI and Career and Professional Development (CPD), Courtney Fairbrother was trained as climate and sustainability career coach to strengthen supports for students exploring environment-related careers. BEI has expanded its work with CPD to define employer demand for climate skills and create more visibility for climate careers and relevant supports. In addition, BEI collaborated with CPD to generate and promote several sustainability career events, including:

- **Alumni in Climate and Sustainability**

Moderated by Professor John Mulliken, students pursuing a career in climate change and sustainability heard from a panel of alumni working in this multi-segment sector. Students gained perspectives on various MBA roles and paths and heard their views on opportunities within the space, advice on navigating the job search.

- **Career Days: Climate and Sustainability**

Moderated by Courtney Fairbrother, this panel offered students the opportunity to learn about the range of opportunities and MBA careers within sustainability as well as the resources available at the School. A panel of ECs shared their experiences in the sector, including how they chose an area to focus on, tips for internship recruitment, and how they approached their search.

- **Career Days: Energy and Cleantech**

Moderated by Philip Andrews, CPD's sector lead for energy & cleantech, this session provided students with an overview of the variety of MBA careers across the energy and cleantech landscape through a panel of recent alumni sharing their insights from their career journeys.



- **Career Days: Impact Investing**

Professor Brian Trelstad offered his perspective on the field of impact investing based on his expertise and years of experience with Bridges Fund Management, Acumen, and as co-chair of Impact Capital Managers. The session also invited EC students to share their perspectives, and provided an overview of the resources available at Harvard Business School (HBS) for students to engage in impact investing.

- **Careers in Climate and Sustainability: Small Group Chats with Professor Jim Matheson**

Students had the opportunity to discuss careers in sustainability with Professor Matheson.

## **STUDENT-ALUMNI MENTORSHIP**



The Business & Environment Initiative (BEI) maintains relationships with many organizations and alumni who offer career advice and opportunities to our students. To facilitate connections with our students, the HBS Initiatives host a mentor match program on the platform Chronus with alumni contacts in business and environment, health care, and social enterprise. In 2024, there were over

200 MBA students interested in business and environment and over 250 alumni mentors with expertise in business and environment on the HBS Initiatives Mentor Match Program platform, which facilitates relationships between students pursuing careers that address climate change and other environmental challenges with alumni working in the field.

BEI facilitated a virtual networking session for students to gain insight from alumni working at the intersection of business and environment through short conversations using the Meetaway platform. These speed networking conversations fostered 290 connections.

## **BUSINESS & ENVIRONMENT INITIATIVE COFFEE CHATS**

Business & Environment Initiative (BEI) hosted coffee chats for students to meet with the BEI team to discuss the wide range of resources available to current MBA students interested in pursuing academic, extracurricular and career opportunities related to business and environment. Many students took advantage of this opportunity to connect with classmates and our staff, share experiences, and ask questions about academics, faculty research, mentorship, career opportunities, etc.

## **BUSINESS & ENVIRONMENT INITIATIVE STUDENT ADVISORY MEETINGS**

In 2024, BEI hosted two student advisory meetings to enable the BEI team to gather student input and suggestions about the HBS curriculum, extracurricular activities, and career support, as they relate to business and environment. The BEI team uses feedback from these meetings to develop and improve the School's offerings.

### **ClimateCAP**



Each year, BEI sponsors a select group of MBA students to attend the ClimateCAP summit, an annual conference that brings together MBA students, business leaders, and experts from around the world to assess the implications of climate change for business and investment.

Ian Naccarella (MBA 2025) was selected to join the 2024 ClimateCAP Fellows, which is an immersive cohort-based experience for MBA students that empowers them to become the next generation of climate leaders and changemakers through workshops, community building, and project development.

### **LUNCH & LEARN: ENERGY TRANSITION & THE GRID**

In support of Professor Dustin Tingley's Energy course, BEI hosted a lunch and learn with case protagonists Odaro Omusi (MBA 2023) Project Manager of Grid United, and Peter Smith (MBA 1995) CEO of Citizens Energy. MBA students engaged in a topical discussion around the complex and critical aspects of the energy transition.



**NEW VENTURE COMPETITION**

The New Venture Competition is an annual competition sponsored by the Rock Center for Entrepreneurship and the Social Enterprise Initiative (SEI) open to all HBS students and alumni who are launching new business and social impact ventures. In 2024, 22 entrants focused on climate and sustainability topics.



**Business Track Winner:**

**Crop Diagnostix**

Brandon Chi MBA 2024  
Joseph Swift  
Amitesh Pratap

Redefining precision agriculture through AI-powered, genetic insights.

**Social Enterprise Track Crowd Favorite:**

**SeaCycle**

Hande Ilhan MBA 2025  
Jakob Spiess MBA 2025

Pioneering sustainable biopolymer production.



**Social Enterprise Track Winner:**

**Solara**

Rea Savla MBA 2024  
Vishesh Mehta

Providing an on-demand solar irrigation service to Indian farmers, increasing their access to affordable, reliable, and clean irrigation.

**Tough Technology Prize Winner:**

**RESILIFT**

Maiky Iberkleid Szainrok MBA 2023  
Marcus Landers MBA 2023

Provides end-to-end residential flood-proofing solutions.



## **EXECUTIVE EDUCATION**

BEI Faculty Chair Mike Toffel is working with faculty colleagues—including Tarun Khanna, Shirley Lu, Scott Mayfield, Raffaella Sadun, George Serafeim, Gunnar Trumbull, Peter Tufano, and others—to infuse climate change and other environmental topics across various HBS executive education programs.

### **Harvard Business School Online: Business and Climate Change Course**

In 2024, HBSO continued to offer the online course, Business and Climate Change. This course helps participants to identify and communicate climate risks and opportunities and implement relevant strategies. Through the course, participants understand the science, economic impact, and policy implications of climate change and explore how companies in various industries are adapting and preparing to do business in a changing climate.

### **Integrating Climate and other Environmental Topics into Comprehensive Leadership Programs**

The School is increasingly integrating business and climate topics in the Comprehensive Leadership Programs, including the Advanced Management Program (AMP), General Management Program (GMP), and Program for Leadership Development (PLD).

In the fall, CEO of INGKA Group (IKEA Retail) Jesper Brodin joined the Owner/President Management and Advanced Management Programs for a fireside chat on strategy, sustainability and company culture. The conversation hosted by the Institute for Business in Global Society (BiGS) and moderated by Professors Cynthia Montgomery and Mike Toffel.

### **Increased Business and Climate Topics into Custom Programs**

HBS is developing custom executive education programs for clients to address their distinct business and climate objectives and challenges. Additionally, several custom and open-enrollment programs include sessions on climate and sustainability.

### **Agribusiness Seminar**

Led by BEI affiliate Professor Forest Reinhardt, the Agribusiness Seminar explores the industries' challenges, innovations, and opportunities, which is both a major contributor to and heavily impacted by climate change. With support from the Executive Education team, BEI facilitated a networking reception between participants and current MBA students interested in pursuing a career in this field.

## **Harvard's Advanced Leadership Initiative: Climate Change Deep Dive**

The Advanced Leadership Initiative (ALI) is an innovative academic program designed to unleash the potential of experienced leaders to help solve society's most pressing challenges. Professor Mike Toffel led a two-day Climate Change Deep Dive, in which executive participants and faculty from across the University explored the impact of climate change across economics, investment, policy, public health, and adaptation. The program included sessions led by BEI affiliates Rebecca Henderson, Shirley Lu, and John Macomber. In 2024, seven ALI participants pursued projects related to climate and sustainability, with topics ranging from sustainable brands and the energy transition to climate adaptation and regenerative agriculture.

## **HARVARD BUSINESS PUBLISHING**

### **Collections**

In 2024, BEI and Professor Mike Toffel curated a collection of course materials for Harvard Business Publishing (HBP), including:

- “Climate Change in the Core MBA Curriculum”, which features cases and supplemental materials that help faculty integrate fundamental content on business and climate change into core business school classes for MBA and undergraduate programs.
- “CEO Activism”, which features cases and other materials on when executives should publicly support non-business issues.

## 3

# Disseminate insights from research and foster alumni engagement on critical environmental topics

### ALUMNI IN CLIMATE NETWORKING SERIES

BEI is traveling to cities around the world to meet with and connect our alumni to each other. In 2024, BEI continued the “Alumni in Climate Networking Series” with the goal of connecting alumni leveraging their careers to address climate change. These networking events offered alumni the opportunity to discuss ideas, trends, opportunities, and challenges at the intersection of business and the environment.



#### Washington, D.C.

BEI collaborated with the Institute for Business in Global Society (BiGS) to assemble over 80 alumni and practitioners to the University Club for a fireside chat between Professor Debora Spar and Audrey Choi (MBA 2004) on inequality and climate change.



#### Chicago

Over 40 alumni heard from Professors David Bell and Forest Reinhardt on how businesses and governments are altering their strategies and operations in light of global climate change.



#### London

In collaboration with the HBS Alumni Association of the UK, BEI brought together over 50 alumni for a fireside chat between Professor Peter Tufano and Paul Polman, Co-Author of Net-Positive and former CEO of Unilever.



#### Boston

Over 35 alumni and students came to campus to network and hear from a panel of leaders in climate tech, including Mitchell Goldstein (CFO at Commonwealth Fusion Systems, MBA 1986), Pasi Miettinen (CEO at Sagewell Inc., MBA 2000), and Emily Stoler (principal Scientist, Sustainable Materials at the Wyss Institute at Harvard University) and moderated by BEI Faculty Chair Professor Mike Toffel.



## **ALUMNI REUNION PROGRAMMING**

Summer and Fall Reunions featured extensive climate programming, including opportunities to engage with the BEI team and faculty, campus sustainability tours, an open house, faculty presentations, and sessions on climate organized by alumni and faculty:

- “Business in Global Society” by Professor Debora Spar
- “Accelerating Climate Solutions” by Professor Jim Matheson
- “Climate and Biodiversity Finance” by Professor Boris Vallee
- “Conducting Business Experimentation” by Professor Ben Roth
- “Entrepreneurial Solutions to World Problems” by Professor William Sahlman
- “Five Ways to Make Things Better: Taking Positive Action in a Troubled World” by Professor Rosabeth M. Kanter
- “How Investors Think about Climate Adaptation” by Professor John Macomber
- “Investing in Energy Transition: Opportunities and Challenges” by Professor Vikram Gandhi
- “Navigating Uncertain Times: Teaching Through Political Shifts and Advancing the Curriculum” by Professors Debora Spar and Matthew Weinzierl
- “Sustainable Investing: What Does the Research Say?” by Professor Shawn Cole
- “Drawdown Fund: Scaling the Impact of Climate Technology” Climate Rising Podcast Live Recording with Professor Mike Toffel featuring Erik Snyder (MBA 2009), Founder and CEO, Drawdown Fund
- “Perspectives on Climate Leadership: Veritas vs. Human Nature—Which Future Will We Choose?” - Class of 1974 Climate Leadership Panel
- Campus Sustainability Tour
- BEI Session: Alumni Networking for Climate Solutions

## **ALUMNI REGIONAL EVENT: DAKAR & KAMPALA—CLIMATE ADAPTATION & URBAN ECONOMIC DEVELOPMENT**

In August, Professor John Macomber and Pippa Armerding (Executive Director of the HBS Africa Research Center) visited multiple sites and businesses in Dakar, Senegal culminating in alumni events on how developing cities and economies can grow while being resilient in the face of the impacts of climate change.

## **ALUMNI-TO-ALUMNI NETWORKING: MEETAWAY**

In an effort to foster connections between alumni working in climate-related sectors, BEI hosted a series of alumni-to-alumni virtual speed networking events on the Meetaway platform. During these virtual events, over 300 connections were made.

## **SUSTAINABLE MBA ALUMNI NETWORKING RECEPTION**



In collaboration with the Sustainable Business Education Collaborative (SBEC) schools and programs, HBS alumni were invited to the Yale Club of New York City Tap Room in New York for an evening of networking and an opportunity to connect with MBA alumni from other schools leveraging their careers in sustainability and confronting climate change. The event provided an opportunity to meet others interested in

sustainability, climate tech, and ESG, and get to know one another through a series of short conversations and speed networking prompts. SBEC includes the following business schools: Cornell, Duke, HBS, MIT, Stanford, UC Berkeley, University of Michigan, and Yale.





## **CLIMATE RISING**

In 2024, the [Climate Rising podcast](#) released over 25 episodes that address a wide array of business and climate change themes including artificial intelligence, adaptation, climate in media and entertainment, decarbonization, and hard-to-abate sectors. In 2024, the podcast attracted over 326,000 downloads.

### **Adaptation**

- Visualizing our Changing Climate with Probable Futures: Spencer Glendon, Founder of Probable Futures and Harvard Business School Executive Fellow; Alison Smart, Executive Director at Probable Futures
- The Lightsmith Group’s Adaptation Investment Strategy: Jay Koh, Co-founder and Managing Director of the Lightsmith Group
- Building Climate-Resilient Cities and Infrastructure: John Macomber (MBA 1983), Senior Lecturer at Harvard Business School
- How Insurance Companies are Addressing Climate Risks: Claudine Blamey, Group Director of Sustainability at Aviva
- Helping Companies Become More Climate Resilient: Peter Hall, Managing Director, Resonance Impact Advisory

### **Artificial Intelligence**

- Using AI to Optimize Energy Demand: Pasi Miettinen (MBA 2000), CEO of Sagewell
- Using AI to Fight Wildfires: How Dryad Networks is Scaling Climate Technology: Carsten Brinkschulte, CEO of Dryad
- Using AI and Satellite Data to Transform Agriculture: A Conversation with Alyssa Whitcraft

### **Climate in Media and Entertainment**

- CNN Chief Climate Correspondent Bill Weir: Media’s Role in Shaping Climate Action: Bill Weir, Chief Climate Correspondent, CNN
- Telling Climate Stories at Scale: Netflix’s Strategy for Sustainability and Impact: Emma Stewart, Sustainability Officer at Netflix
- Sam Read, Sustainable Entertainment Alliance: Sam Read, Executive Director, Sustainable Entertainment Alliance
- Joel Makower @ Greenbiz: Joel Makower, Chairman and Co-founder, Trellis Group

## Decarbonizing Value Chains

- Green Concrete: Decarbonizing Construction with Recycled Glass (bonus episode featuring HBR Cold Call): Robert S. Kaplan, Senior Fellow; Marvin Bower Professor of Leadership Development, Emeritus at Harvard Business School; Shirley Lu, Assistant Professor of Business Administration at Harvard Business School interviewed by Brian Kenny, Chief Marketing and Communications Officer, Harvard Business School
- H2 Green Steel: Decarbonizing Steel Production with Green Hydrogen: Maria Persson Gulda, Chief Technology Officer at H2 Green Steel
- Regenerative Agriculture and “The Profiteers” with Cambridge Professor Chris Marquis: Chris Marquis, Professor at the University of Cambridge Judge Business School
- How Lab-Grown Cotton Can Decarbonize Textiles: Luciano Bueno (OPM 62 & 74), Founder and CEO at GALY
- A Biotech Solution to Palm Oil Deforestation: Shara Ticku (MBA 2017), Co-founder and CEO, C16 Biosciences

## Hard-to-Abate

- Decarbonizing Aviation with McKinsey: Robin Riedel, Partner and co-head of the McKinsey Center for Future Mobility
- Decarbonizing Industrial Processes with Material Science: Shreya Dave, CEO and Co-founder Via Separations

## Additional Bonus Episodes

- MethaneSAT: The EDF Satellite Tracking Methane Emissions from Oil & Gas Operations: Fred Krupp, President of Environmental Defense Fund (EDF)
- Drawdown Fund: Scaling the Impact of Climate Technology: Erik Snyder (MBA 2009), Founder and CEO of Drawdown Fund
- BCG Global Chair Rich Lesser: How Businesses Can be “Bold and Pragmatic” on Climate Change: Rich Lesser (MBA 1988), Global Chair, BCG
- How Public Policy Can Drive Climate Innovation and Business Opportunities: A Conversation with USEPA’s David Cash: David Cash, Regional Director, USEPA, New England
- A Preview of COP29: What Business Leaders Should Know with Outrage & Optimism Co-hosts: Paul Dickinson and Tom Rivett-Carnac, co-hosts of Outrage & Optimism
- The Health Risks of Natural Gas Stoves (bonus episode featuring Better Off from Harvard Chan School of Public Health): Brady Seals, Manager of RMI’s Carbon-Free Buildings program; Drew Michanowicz, senior scientist, PSE Healthy Energy; and Jon Kung, Chef, interviewed by Anna Fisher-Pinkert, Director of Digital Strategy at Harvard T.H. Chan School of Public Health
- Raízen’s Decarbonization Strategy (bonus episode featuring HBR Cold Call): Gunnar Trumbull, Phillip Caldwell Professor of Business Administration at Harvard Business School and Paula Kovarsky, Vice President of Strategy & Sustainability at Raízen interviewed by Brian Kenny, HBS Chief Marketing and Communications Officer
- Decarbonizing Fashionable Materials (bonus episode featuring the TED Climate): Dan Widmaier, CEO at Bolt Threads interviewed by Dan Kwartler, host of TED Climate

## **BUSINESS & ENVIRONMENT INITIATIVE BLOG POSTS**

[The Business Environment Initiative \(BEI\) blog](#), managed by Elise Clarkson, highlights how different stakeholders associated with BEI are confronting climate change, including features of faculty, alumni, students, and staff:

### **Curricular & Extracurricular Opportunities**

- “Business of Animal Protection Club” by David Kay (MBA 2025) and Aastha Bhardwaj (MBA 2025)
- “Energy & Environment Club” by Lia Turrini (MBA 2025)
- “Energy & Environment Club’s Icelandic Adventure!” by Tyler Grim (MBA 2024) and Sydney Falle
- “Exploring California’s Climate Frontier: E&E Club’s Bay Area Trek” by Luca Mantovani (MBA 2025)
- “Weekend Sprint: Accelerating Climate Solutions” by Elise Clarkson

### **Career Advice**

- “2024 Summer Internships in Business & Environment” by Elise Clarkson
- “Alumni Career Journey: Ben Schutzman (MBA 2016)—Driving Positive Impact on Community and Climate” by Ben Schutzman (MBA 2016)
- “Alumni Career Journey: Rob Self (MBA 2021)—Integrating Climate into Consulting” by Rob Self (MBA 2021)
- “Career Advice from the Guests of the HBS Climate Rising Podcast” by Kelsey Carter and Courtney Fairbrother
- “Climate Stories Episode #15: Hilton Augustine III (MBA 2021) on Financing Climate Ventures” by Jacqueline Adams (MBA 1978)
- “Climate Stories: Water Series—Episode #16: Tim Murdoch (MBA 1990) – Learning about Climate Change and Water” by Jacqueline Adams (MBA 1978)
- “Climate Stories: Water Series—Episode #17: Leni Peterson Redondo (HBS MS/MBA 2023), Founder & CEO of Celeste” by Jacqueline Adams (MBA 1978)
- “Climate Stories: Water Series—Episode #18: Tom Ferguson (MBA 2014) Venture Capitalist and Water Evangelist” by Jacqueline Adams (MBA 1978)
- “Climate Story #19: Nicole Neeman Brady (MBA 2008): The Critical Role of Business in Tackling Water Challenges” by Jacqueline Adams (MBA 1978)
- “My Summer of Joy with the National Parks Service” by Rhea Choudhury (MBA 2024)

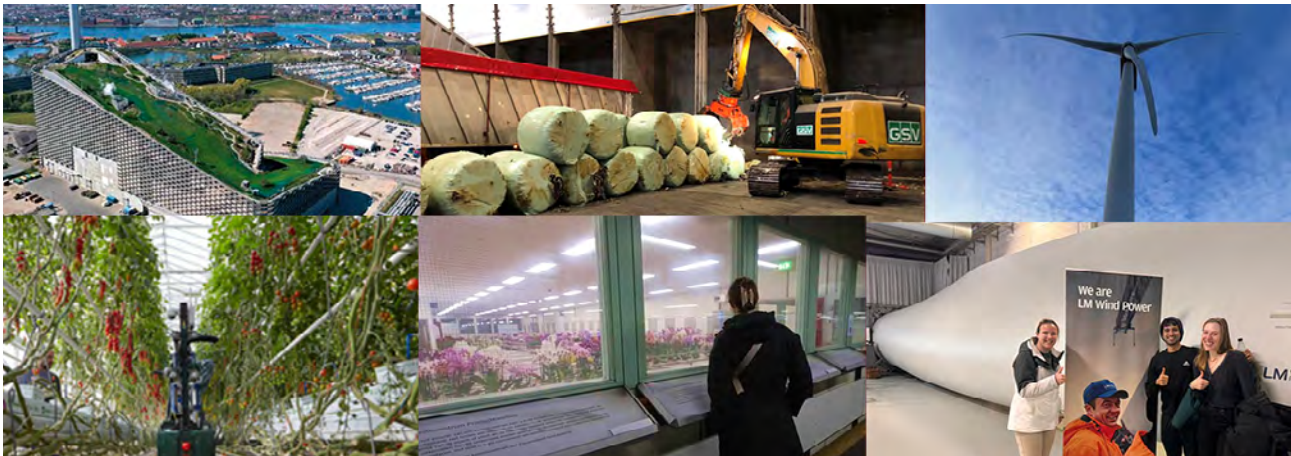
### **Entrepreneurship**

- “Creating Emerging Markets Sustainability Series—How to Build a Culture of Intrapreneurship” by Maxim Pike Harrell

### **Event Highlights**

- “Alumni and Students in Climate Networking Series: Boston” by Elise Clarkson
- “Alumni in Climate Networking Series: Chicago” by Courtney Fairbrother
- “Alumni in Climate Networking Series: London” by Courtney Fairbrother
- “ClimateCAP 2024” by Ian Naccarella, Vanessa Wu, Mitch Hirai and Aman Baboolal
- “ClimateCAP and the Bonus of Climate Educator Collaboration” by Lynn Schenk

- “Climate Finance in Africa: Health, Self-Interest, Avoided Future Cost” by John Macomber (MBA 1983)
- “Climate Symposium 2024: Confronting Reality, Celebrating Innovation” by Elise Clarkson
- “DC Alumni and BEI Present Talk on Inequality and Climate Change” by Margie Kelley
- “Harvard Students Reflect on COP28” by Christina Marie Strachn
- “New Venture Competition 2024: Business and Environment Ventures” by Elise Clarkson
- “Opportunity to Offset Travel Emissions with Carbon Credits that Meet HBS Criteria” by Leah Ricci
- “Reunions: Accelerating Climate Solutions with Professor Jim Matheson (MBA 2001)” by Jim Matheson (MBA 2001)



## **IMMERSIVE FIELD COURSE EUROPE: DECARBONIZATION AND SUSTAINABLE PRODUCTION 2024 BEI BLOG SERIES**

In January 2024, Professors Willy Shih and Mike Toffel led 45 MBA students on site visits to witness the energy transition and innovative sustainable production activities throughout Denmark and the Netherlands, in the second year of their Immersive Field Course (IFC). Those students of MBA class of 2024 wrote nine essays posted on the BEI Blog that highlight their reflections.

- “A Day at Royal FloraHolland: The Epicenter of the Global Flower Market” by Nguyen Le, Trang Nguyen and Jack Yan
- “Amager Bakke: I Like This Waste Incinerator in My Backyard!” by Meghana Jayam, Aishwarya Narayan, Erik Roberts and Katie Thomson
- “District Heating in Denmark: How Fjernvarme Fyn fuels an integrated and sustainable future” by Bonnie Chen, Ryan Fuller and Anita Wang
- “Exploring Sustainable Energy: A Visit to Vestas Wind Turbine Manufacturing in Odense, Denmark” by Paul D’hyver, Elizabeth Gelb and Mutiara Siregar
- “High-Tech Greenhouse Innovations in The Netherlands” by Adele Tran, Amrut Rajkarne and Ryan Boyd
- “LM Wind Power Test and Validation Center” by Amy Chambers, Nabig Chaudhry and Caroline Frost
- “Navigating the Future of Renewable Energy at Port Esbjerg” by Olivia Clink, Karishma Gajaria, Tyler Bennett and Tyler Grim
- “Syngenta Tomato Vision” by Chad Gruzin, Roget Mo, Varnika Menghnani and Jenny Gao
- “Van den Ende Rozen” by Amy Chiang, Ethan Madigan, Jessie Pease and Sai Akshaya Ramaeshan



## **IMMERSIVE FIELD COURSE INDIA: DEVELOPMENT WHILE DECARBONIZING: INDIA'S PATH TO NET-ZERO 2024 BEI BLOG SERIES**

Professor Vikram Gandhi's Immersive Field Course (IFC) "Development While Decarbonizing: India's Path to Net-Zero" delved into the critical aspect of decarbonization and sustainability goals amid India's rapid development. The course presented an opportunity for students to advance their knowledge of sustainability efforts, decarbonization, and net zero in the context of a broader development agenda. The class culminated in a series of site visits in January 2024 in Mumbai and Bangalore and students of the class of 2024 wrote 14 essays posted on the BEI Blog that highlight their reflections on uncovering sustainable solutions across the country.

- "A Circular Journey Through JSW Cement—From Steel Slag to Stronger Shores" by Louise Bodem, Emily Manges and Jake Sweed
- "Electric Mobility in India" by Julia Azeredo, Anuj Chadha and Willis Wilson
- "Financing the Climate Transition in India" by CC Salzman, Julia Gareeva, Marina Osborn and Vinura Welgama
- "From Trash to Treasure: Inside a Waste Management Site in Mumbai" by Shreya Raghuraman, Malay Shah and Katherine Manweiler
- "Green-tech Entrepreneurship in India" by Audrey Atencio, Jada Haynes, Bryant Warmate and Jaron Wright
- "JSW Steel" by Nikki Steltenkamp, Adi Shah and Nirja Bhatt
- "JSW Steel and Cement and the Quest to Capture Carbon in Hard to Abate Sectors" by Patricia Patrão, Paul Divet and Rob Snook
- "Our Godrej Site Visit" by Ling Li, Ben Weltman and Margot Zuckerman
- "Renewable Energy - CleanMax" by Adam Chen, Alliyah Gary and Rory Finnegan
- "RMZ EcoWorld" by Keanu Mitanga, Tatiana Theoto and Pauline Leeuwenburg
- "SELCO—Last Mile Solar Powered Energy for Rural India" by Rohan Mehta, Dusty Stahl and Kazumi Kanagawa
- "Tata Power—Trombay Thermal Power Plant Takeaways" by Lucienne Oyer, Lucas Cardoso and Mackenzie Welch
- "Understanding India's Agriculture Landscape" by Matteo Bramani, Felipe Mejia and Ian Fergie
- "Urban Adaptation in a Changing World" Kit Clemente, Patrik Kast and Valeria Tiberi

## **NEWS FEATURING BUSINESS & ENVIRONMENT INITIATIVE & PARTNERSHIPS**

News stories featuring climate and sustainability efforts at the School:

### **Thought Leadership**

- “5 Steps to Build a Climate-Literate Workforce” by Lynn Schenk and Alison Smart

### **Faculty**

- “Harvard Hires 8 New Climate Faculty Across FAS, Graduate Schools” featuring Professors Aliya Korganbekova and John Mulliken, *The Harvard Crimson*
- “Harvard hires eight new climate faculty – with more on the horizon” featuring Professors Aliya Korganbekova and John Mulliken, *The Harvard Gazette*
- “New Faculty Profiles: Aliya Korganbekova” *Harvard Business School Newsroom*
- “New Faculty Profiles: John Mulliken” *Harvard Business School Newsroom*
- “New Faculty Profiles: Matteo Gasparini” *Harvard Business School Newsroom*

### **Campus**

- “Harvard, MIT, Mass General form renewable energy collaboration” *The Harvard Gazette*

### **Careers, Curriculum and Academics**

- “28 courses to boost your ESG, sustainable finance skills” *Trellis*
- “Business and Climate Change: Three Harvard Business School Student Perspectives” *Harvard Business School Newsroom*
- “Ex-execs go back to university” featuring Professors Rosabeth M. Kanter and Brian Trelstad, *The Financial Times*
- “Hiring at HBS: How Summer Interns Make an Impact at Bridges Fund Management” *HBS Insights & Advice*
- “Summer School: Inside Harvard’s New Online Course Teaching MBAs The Business of Climate Change”, *Poets & Quants*

### **Events and Recognition**

- “Guest Column: Sustainability Management students encourage sustainable 2024 with New Year’s resolutions list” *The Eagle Online*

# Alumni Perspectives

## ALUMNI STORIES & ALUMNI IN THE NEWS

- “2023 Most Disruptive MBA Startups: Earthbond, Harvard Business School” featuring Chidalu Onyenso (MBA 2023), *Poets & Quants*
- “2024 Harvard Business School New Venture Competition: Uniting Cutting Edge Ideas, Innovative Ventures, and Talented Alumni and Students” featuring Brandon Chi (MBA 2024), Rea Savla (MBA 2024), Maiky Iberkleid Szainrok (MBA 2023), and Marcus Landers (MBA 2023), *Harvard Business School Newsroom*
- “3-Minute Briefing: Kruti Patel Goyal” featuring Kruti Patel Goyal (MBA 2004), *HBS Alumni Stories*
- “Alumni Host Energy CEO Summit in Houston; Austin Club Co-Hosts SXSW Reception” featuring Osmar Abib (MBA 1987), Eric Calderon (MBA 2013), Todd Harris (MBA 1997), Stephen Horn (MBA 1983), Sarah Jewett (MBA 2019), Andrew Judge (MBA 2019), Sanjay Kalavar (MBA 2004), Andrew Leonpacher (MBA 2019), Lourdes Long (MBA 2014), Deviyani Misra-Godwin (MBA 2018), Hardy Murchison (MBA 2001), Suzanne Nimocks (MBA 1987), William Simmons (MBA 2017), Pablo Vegas (AMP 187, 2014), Stephanie Wisner (MBA 2014), *HBS Alumni Stories*
- “Alumni Profile: Raquel Schreiber, S.B. ‘15, MS/MBA ‘21 - Using AI to help regenerate the earth” featuring Raquel Schreiber, S.B. ‘15, MS/MBA ‘21, *Harvard John A. Paulson School of Engineering and Applied Sciences News*
- “Building the Future: An HBS Alumna’s Journey in Sustainable Infrastructure Investment” featuring Abisinuola David-Olusa (MBA 2024), *MBA Voices Blog*
- “Democratizing Access to Climate Finance” featuring Grace Lam (MBA 2024), *The Salata Institute*
- “How the Insurance Industry Can Weather the Storms” featuring Tim Sweeney (MBA 1991), *Skydeck*
- “Initiatives showcase solutions to world problems” featuring Brandon Chi (MBA 2024) and Rea Savla (MBA 2024), *The Harvard Gazette*
- “Leni Peterson R. (MS/MBA 2023): Solving Big Problems Through Entrepreneurship” featuring Leni Peterson (MS/MBA 2023), *MBA Voices Blog*
- “OC Alumni Get Clarity on AI; Inequality and Climate Change Explored in DC” featuring Patrick Coady (MBA 1966), Aurey Choi (MBA 2004), and Raj Patil (OPM 42, 2012), *HBS Alumni Stories*
- “The International Experience at HS: Zoe Sun (MBA 2024)” featuring Zoe Sun (MBA 2024), *MBA Voices Blog*
- “The Road Less Traveled” featuring Horace Dediu (MBA 1996), *HBS Alumni Stories*
- “Trailblazing Success with Global Reach and Impact: Scott Wallinger (AMP 82, 1979)” featuring Scott Wallinger (AMP 82, 1979), *HBS Alumni Stories*
- “Turning Ideas into Impact: Chaku Foods” featuring Nikki Okrah (MBA 2021), *i-lab YouTube*

## ALUMNI APPRECIATION

BEI extends our gratitude to these and all other alumni who shared their valuable perspectives in 2024 at alumni and student conferences and events, the Climate Rising podcast, the BEI Blog, and Alumni Stories.

### Accelerating Climate Solutions Short Intensive Program

Rebecca Henderson (MBA 1985)*	Nam Tran Nguyen (MBA 2003)
Eleanor Laurans (MBA 2006)*	Alexander Radomsky (MBA 2022)
Jim Matheson (MBA 2001)*	Ben Schutzman (MBA 2016)
Peter Tufano (MBA 1984)*	Jayant Sinha (MBA 1992)
Zaid A. Ashai (MBA 2006)	Sarah Wright (MBA 1997)
Alex Bondar (MBA 2014)	

### Alumni featured in Alumni Stories, MBA Voices Blog, Harvard Business School Newsroom

Osmar Abib (MBA 1987)	Andrew Leonpacher (MBA 2019)
Eric Calderon (MBA 2013)	Lourdes Long (MBA 2014)
Brandon Chi (MBA 2024)	Devayani Misra-Godwin (MBA 2018)
Aurey Choi (MBA 2004)	Hardy Murchison (MBA 2001)
Patrick Coady (MBA 1966)	Suzanne Nimocks (MBA 1987)
Abisinuola David-Olusa (MBA 2024)	Raj Patil (OPM 42, 2012)
Horace Dediu (MBA 1996)	Leni Peterson (MS/MBA 2023)
Kruti Patel Goyal (MBA 2004)	Rea Savla (MBA 2024)
Todd Harris (MBA 1997)	William Simmons (MBA 2017)
Stephen Horn (MBA 1983)	Zoe Sun (MBA 2024)
Sarah Jewett (MBA 2019)	Maiky Iberkleid Szainrok (MBA 2023)
Andrew Judge (MBA 2019)	Pablo Vegas (AMP 187, 2014)
Sanjay Kalavar (MBA 2004)	Scott Wallinger (AMP 82, 1979)
Marcus Landers (MBA 2023)	Stephanie Wisner (MBA 2014)

### Alumni in Climate Networking Series

Peter Tufano (MBA 1984)*	Mitchell Goldstein (MBA 1986)
Audrey Choi (MBA 2004)	Pasi Miettinen (MBA 2000)
Patrick Coady (MBA 1966)	Julie Mulcahy (GMP 24, 2018)
Brent Gledhill (MBA 1997)	Raj Patil (OPM 42, 2012)

### Business & Environment Initiative Blog Features

John Macomber (MBA 1983)*	Tom Ferguson (MBA 2014)
Jim Matheson (MBA 2001)*	Tim Murdoch (MBA 1990)
Peter Tufano (MBA 1984)*	Leni Peterson Redondo (HBS MS/MBA 2023)
Jacqueline Adams (MBA 1978)	Ben Schutzman (MBA 2016)
Hilton Augustine III (MBA 2021)	Rob Self (MBA 2021)
Nicole Neeman Brady (MBA 2008)	

\* in their role as faculty



## **Career & Professional Development Panels**

Jim Matheson (MBA 2001)\*  
Bhargavi Chevva (MBA 2016)  
Sarah Jewett (MBA 2019)  
Sophie Levin (MBA 2022)

Micah McFarlane (MBA 2020)  
Ratnika Prasad (MBA 2020)  
Andrés Pérez Valenzuela (MBA 2020)  
Monica Varman (MBA 2016)

## **Climate Rising**

John Macomber (MBA 1983)\*  
Luciano Bueno (OPM 62 & 74)  
Rich Lesser (MBA 1988)

Pasi Miettinen (MBA 2000)  
Erik Snyder (MBA 2009)  
Shara Ticku (MBA 2017)

## **Climate Symposium: Confronting Reality, Celebrating Innovation**

John Macomber (MBA 1983)\*  
Paul Deninger (MBA 1984)  
Irina Gerry (MBA 2009)

Eleanor Laurans (MBA 2006)  
Rea Savla (MBA 2024)  
Anne-Marie Schoonbeek (MBA 2017)

## **Executive Fellows**

Tom Clay (MBA 1997)  
Reynir Indahl (MBA 1998)  
Philip Kuai (OPM 2023)

Richard Vieira (MBA 1995)  
Carolyn Weinberg (MBA 2004)

## **Harvard Innovation Labs (i-lab) Climate Experts**

Alex Bondar (MBA 2014)

## **Lunch & Learn**

Odaro Omusi (MBA 2023)  
Peter Smith (MBA 1995)

## **Rock Center for Entrepreneurship Entrepreneurs-in-Residence**

Shara Ticku (MBA 2017)

## **Reunions**

Vikram Gandhi (MBA 1989)\*  
John Macomber (MBA 1983)\*  
Jim Matheson (MBA 2001)\*

William Sahlman (MBA 1975)\*  
Roger Shamel (MBA 1974)  
Erik Snyder (MBA 2009)

## **Skydeck Podcast**

Tim Sweeney (MBA 1991)

## **Weekend Sprint**

Jim Matheson (MBA 2001)\*  
Tom Clay (MBA 1997)  
Ann DeWitt (MBA 2009)  
Rebekah Emanuel (MBA 2015)

Paul Hayre (MBA 1999)  
Ben Schlatka (MBA 2005)  
Ted Wiley (MBA 2009)

\* in their role as faculty



### **PARTNERSHIP & COLLABORATION: CLIMATE ACROSS THE UNIVERSITY**

There is robust climate change engagement happening across the School and University, through departments at the Digital, Data and Design Institute at Harvard (D<sup>3</sup>), the Harvard Innovation Lab (i-lab), the Institute for Business in Global Society (BiGS), the Salata Institute for Climate and Sustainability, and on the HBS campus through Operations. This section showcases the breadth and depth of climate work happening across the University in partnership with the School and BEI.

## HARVARD BUSINESS SCHOOL CAMPUS—**SUSTAINABILITY OPERATIONS**



Leah Ricci, Associate Director, Sustainability and Energy Management, Operations

Jessica Fixsen, Sustainability Manager (OFS), Operations

Rachel Huxhold, Manager of Energy and Commissioning (UG2 LLC), Operations

Kerrien Farr, Assistant Director of Design for Health & Sustainability (OFS), Operations

Harvard Business School (HBS) Operations is committed to the mission in [Harvard's](#)

[Sustainability Action Plan](#) to accelerate the adoption of systems and practices that protect the climate and environment, advance a more equitable society, and promote the wellbeing of people at Harvard and beyond. HBS has made strong progress, with a 54% GHG emissions reduction and a 53% waste reduction (CY23 vs 2006). HBS has 9 solar PV systems that help Harvard meet its State Renewable Energy Requirements, 1 solar thermal system, and implemented 300+ energy reduction projects since 2006. There are also 9 green roofs, 3 honeybee hives & 2 wild bee hotels, 20 LEED certified projects, along with student & staff engagement programs.

Recent highlights include:

### **Carbon Credit Recommendations to Offset Travel GHG Emissions**

- In response to requests for carbon credit recommendations, HBS Operations' sustainability staff worked with Calyx Global (a stringent carbon credit rater), Professor Mike Toffel and Harvard's Office for Sustainability to provide options for personal use and to offset a portion of academic air travel emissions.

### **Fossil Fuel Free by 2050 Goal & Water Use Reduction**

- To support Harvard's Fossil Fuel Free goal, domestic water heating in Residence Halls and little houses has been electrified. Additionally, studies are underway on kitchen electrification and converting building heat from steam to low-temperature hot water, enabling possible future heat electrification. Energy conservation projects for building controls, lighting, HVAC along with new water efficient toilet installations have been completed.

### **Food GHG Emissions & Waste Reduction**

- HBS Dining has made a 29% GHG emissions/kilocalorie reduction (CY23 vs CY19) through expansion of plant-based/lower emissions food.
- Donations to Food for Free expanded to include more prepared foods, resulting in 2,175 "heat-n-eat" meals along with an additional 35,815 pounds of rescued food in FY24.

### **Sustainable, Healthier Design & Construction**

- Healthier materials along with efficient, healthier lighting that more closely mimics daylight were installed in a pilot Aldrich classroom and the Spangler Auditorium.

### **Engagement**

- Nine student projects were completed, ranging in topics from organic menstrual product benefits to a student event planning sustainability scorecard.
- There were 25 community activities, including an Earth Day event, a clothing swap, and honey harvesting sessions. A [self-guided sustainability tour](#) was launched.

## THE HARVARD INNOVATION LAB



Rebekah Emanuel, Senior Advisor,  
Social Impact & Climate

The Harvard Innovation Lab (i-lab) supports Harvard innovators from idea to venture building through guidance, community, funding, and other resources. Over recent years, the i-lab has significantly increased its support and programming for climate-focused entrepreneurs. Now, climate is one of the top 5

focus areas of student ventures. The three primary climate offerings include:

- **Climate Experts:** The i-lab offered students the opportunity to meet with industry experts, including serial entrepreneurs, venture capitalists, creative directors, lawyers, and more. MBA students were encouraged to schedule 1:1 time with seasoned experts to gain valuable knowledge and support. In 2024, Alex Bondar (MBA 2014) served as a Climate Expert, among many others.
- **How to Create a Climate Venture Ideation Class:** A free online class for entrepreneurs who want to found a climate startup but need an idea first. In this course, Harvard alumni, students, staff, and faculty get help with coming up with an idea, testing the viability of their idea, and connecting with fellow climate entrepreneurs. 900 registrants. Participants are now recruited from across 50 universities.
- **Harvard Climate Entrepreneurs Circle:** A selective incubation program for high-potential ventures working to address climate change that offers world-class coaching, legal counsel, warm connections to industry leaders, and a peer group of Harvard founders who are all working on innovative solutions to tackle climate change. The program invites approximately 20-30 new ventures a year, with a total of 95 ventures to date at the end of 2024.

In 2024, the i-lab selected 30 ventures to join the fourth annual Harvard Climate Entrepreneurs Circle:

1Climate (HKS 2023); Aclaria Partners (HBS 1997); AgDev (HBS 1999); Algoma (HBS 2023); Carbon Counts (HBS 1996); Charli Charging, Inc. (Harvard College 2016); Crop Diagnostix (HBS 2024); Eki Agrivoltaics (HKS 2023); Finpublica (HLS 1997); FlatPeak (HBS 1995); GoPowerEV (HBS 1996); GramHeat (HKS 2024); Henua Technologies (HBS 2001); Invert Inc. (HBS 2021); Keystone Climate (HES 2023); Laboratorio de Ideas Sostenibles (The Sustainable Ideas Lab) (GSAS 2023); MicroAvionics (SEAS 2024); NetaCarbon (HBS and HKS 2024); Offstream (HBS 2023); PelaStar (HKS 1993); Pacto Medical (HSPH 2023); Prisere LLC (HBS 2009); RESILIFT (HBS 2023); Solara (HBS 2024); Tender Food (HBS 2023); The Surpluss (HSPH 2023); Trellis Air (GSD 2017); Wenverter (HKS 1991).

Climate Circle teams had several notable accomplishments in 2024, including:

- **Carbon Re**, a venture focused on using AI for industrial decarbonization, announced a cooperation with FLSmidth Cement.
- **CassVita** has invented a simple methodology for increasing the shelf-life of cassava from 3 days to 18 months. This year, Government of Cameroon has updated their policy inspired by the work of CassVita which will result in both less food waste and more local climate resilience.
- **EarthBond** provides African small businesses with reliable solar energy that saves them money on fuel for their generators. This year, the company was named one of the Most Disruptive MBA Startups by *Poets & Quants*.

- **Focal** uses smart sensing and directional heat to warm people, rather than entire spaces. This year, the company continued to see organic growth through word-of-mouth referrals and was profiled on the Harvard Innovation Labs Stories page.
- **GoPowerEV** builds an affordable, hassle-free EV charging solution for multifamily communities. This year, the company received a California Energy Commission grant to scale EV charging in disadvantaged communities.
- **Metafin** works with Indian retail customers who want to install cleantech solutions but lack the upfront capital. This year, Metafin raised \$5 million in funding.
- **Mitti Labs**, a company focused on increasing the sustainability of rice farming, launched five projects in South Asia.
- **Pacto Medical**, inventors of a collapsible syringe with a smaller packaging footprint, was named one of 10 World Health Organization Emergency Medical Team Innovation Champions for 2024.
- **Resilift** provides end-to-end residential flood-proofing solutions focusing on project financing and physical mitigation using innovative technology to optimize the process. This year, the company received SBIR phase I funding.
- **The Surpluss** won the Malaysia industry 4.0 ESG challenge with corporate partner Maybank—supported by Mydigital Malaysia, Bursa Stock Exchange and World Economic Forum.
- **SXD** combines award-winning design with AI technology to deliver zero waste fashion. This year, the company was honored as a sustainable fashion innovator by the Industrial Sewing and Innovation Center and 2x'd the income of climate refugees.
- **TerraStor** enables electrical grids to achieve 100% renewable penetration by developing grid-scale, long-duration energy storage systems. This year, the company was featured as one of Global Corporate Venturing's 9 startups changing what's possible below the Earth's surface.
- **XCharge**, a global leader in integrated EV charging solutions, announced its initial public offering (IPO) and was successfully listed on Nasdaq. XCharge is the i-lab's 10th unicorn.
- **Henua** provides SaaS solutions for companies to achieve ESG goals. Founder Octavio Zapata started his work out of the “How to Create a Climate Venture” ideation class. The world's largest copper mine is now using Henua's software to decarbonize, as is a Chilean state government and firms in Asia. They moved from a prototype to these sales in only one year.
- **Several Climate Circle teams who met via the Climate Circle have inaugurated partnerships:** **Grensol** is utilizing the residues from car recycling as a source of useful raw materials. This year, the company announced an electric charging recycling partnership with XCharge, another Climate Circle venture and global leader in integrated EV charging solutions.
- **Subject to Climate (MA-based) and Earth Warriors**, who connected via the Climate Circle, are entering their third year of partnership

## CLIMATE & SUSTAINABILITY IMPACT LAB, DIGITAL DATA DESIGN INSTITUTE



### Faculty Principal Investigators

George Serafeim  
Mike Toffel  
Peter Tufano

### Affiliated Faculty

Shirley Lu  
Christian Kaps  
Aliya Korganbekov

### Postdoctoral Fellows

Simon Xu  
Matthias Roesti  
Franziska Hittmair

### Lab Director

Nina Cohodes

Led by BEI affiliated faculty Mike Toffel, George Serafeim, and Peter Tufano, the [Climate & Sustainability Impact Lab at the Digital Data Design \(D<sup>3</sup>\) Institute](#) advances research at the intersection of technology, climate, and sustainability, and focuses on how companies can decarbonize and adapt. Other Lab members include faculty affiliates Professors Christian Kaps, Aliya Korganbekova, and Shirley Lu, and the postdoctoral fellows Franziska Hittmair, Matthias Roesti, and Simon Xu.

Some key activities from this past year:

### Climate Solutions

This project adopts a business opportunity perspective by exploring Climate Solutions—products and services that foster the transition to a low-carbon economy. Examples include solar panels, wind turbines, electric vehicles, battery storage, heat pumps, energy efficient equipment and buildings, and plant-based food products. This project has already produced four HBS Working Papers:

- Shirley Lu and George Serafeim. “The Financial Anatomy of Climate Solutions: A Large Language Model Approach to Company Classification and Analysis.”
- Shirley Lu, George Serafeim, and Simon Xu. “Catalysts for Climate Solutions: Corporate Responses to Venture Capital Financing of Climate-tech Startups.”
- Shirley Lu, Edward Riedl, George Serafeim, and Simon Xu. “Climate Solutions, Transition Risk, and Stock Returns.”
- Shirley Lu, George Serafeim, Simon Xu, Marc Antonio Awada. “Tracking Business Opportunities for Climate Solutions using AI in Regulated Accounting Reports.”

### Net Zero Systems Solutions Roundtable: Fleet Electrification

Harvard Business School and the Environmental Defense Fund, with support from the D<sup>3</sup> Climate & Sustainability Lab and the Salata Institute, hosted two workshops for shippers and carriers to surface challenges, best practices, and collaboration opportunities to accelerate the deployment of battery electric cargo trucking.

### D<sup>3</sup> Climate and Sustainability Impact Lab Seminars

- When Insurers Exit: Climate Losses, Fragile Insurers, and Mortgage Markets — Ishita Sen
- Charger Reliability in U.S. Electric Vehicle Infrastructure — Omar Asensio, Mike Toffel
- Climate Solutions and Stock Returns — Simon Xu

- How Carbon Credit Suppliers React to Media Criticism: Evidence from the Voluntary Carbon Market — Franziska Hittmair
- PR and Climate Solutions - Walk the walk, but mind the talk? — Matthias Roesti

### **Data Commons**

The Lab developed a tool available on the Lab's D<sup>3</sup> website which identifies, lists, and describes a wide array of climate change and sustainability datasets. This tool is useful for the broader community of scholars interested in ESG disclosures, weather and climatology, extreme weather events, and net zero commitments.

### **Additional Publications**

- George Serafeim. “Ten Questions for a Winning Climate-transition Business Strategy.” *Strategy + Business* (website) (September 9, 2024).
- Aaron K. Chatterji and Michael W. Toffel. “It’s Time to Unbundle ESG.” *Harvard Business Review* (September 20, 2024).
- Matteo Gasparini, Knut Haanaes, Emily Tedards, and Peter Tufano, “The Case for Climate Alliances.” *Stanford Social Innovation Review* 22, no. 4 (Fall 2024): 48–57.

## THE SALATA INSTITUTE FOR CLIMATE & SUSTAINABILITY AT HARVARD UNIVERSITY



James H. Stock, Director of the Salata Institute; Vice Provost for Climate and Sustainability; Harold Hitchens Burbank Professor of Political Economy, Faculty of Arts and Sciences

Peter Tufano, Senior Advisor to the Salata Institute; Baker Foundation Professor, Harvard Business School

The mission of the [Salata Institute for Climate and Sustainability](#) is to develop and promote durable, effective, and equitable solutions to the climate change challenges confronting

humanity. The institute serves as a fulcrum for collaboration across Harvard's many areas of expertise. A few collaborations between the Salata Institute and Harvard Business School (HBS) in 2024 include:

### Salata & Harvard Business School: Research

- **Climate Research Clusters:** The Climate Research Clusters program supports university-wide endeavors that produce useful and practical solutions to pressing climate problems. The following clusters involve Harvard Business School faculty:
  - **Climate Adaptation in South Asia:** Professor Tarun Khanna in collaboration with faculty from the Harvard Kennedy School, Harvard Medical School, Harvard T.H. Chan School of Public Health, Harvard University Center for the Environment, and the Faculty of Arts and Sciences- The purpose of this Cluster is to advance climate adaptation research and implementation at the household, community, state, and federal levels in South Asia, particularly in the context of climate-driven migration.
  - **Corporate Net-Zero Targets Project:** Professors Michael Toffel and George Serafeim in collaboration with faculty from Harvard Kennedy School and Harvard Law School - This Cluster is developing tools and methodologies to evaluate whether corporate targets are leading to emissions reductions consistent with U.S. greenhouse gas goals and strategies to ensure that corporate pledges are meaningful, verifiable, accountable, and able to support the energy transition and spur systems change.
  - **Recusing Global Methane Emissions:** Professors Forest Reinhardt and Michael Toffel in collaboration with faculty from the Belfer Center for Science and International Affairs, the Harvard Initiative to Reduce Global Methane Emissions, Harvard Kennedy School, Harvard Law School, Harvard T. Chan School of Public Health, Faculty of Arts and Sciences, and MIT—The Cluster seeks meaningful and sustained progress in global methane-emissions reductions through research and effective engagement with government policymakers— and with key stakeholders in business, nongovernmental organizations, and international institutions.

### Salata & Harvard Business School: Curriculum

- **Committee on Climate Education (CCE):** The CCE at Harvard comprises senior leaders and faculty across the Schools whose research and teaching focus on how to prepare Harvard students for leadership in a world with a changing climate. Led by Professor Dustin Tingley with participation from Professors Mike Toffel and Rebecca Henderson and BEI Director Lynn Schenk, the CCE is exploring multi-disciplinary opportunities for climate education for advanced degree students at Harvard University.



## Salata & Harvard Business School: Engagement

- **Career Expo:** In collaboration with HBS and several School's across the University, the Salata Institute hosted the largest university-wide career fair focused on climate careers. The fair connected organizations focused on climate, sustainability, and the environment with Harvard undergraduates, graduate students, and alumni.
- **Harvard Climate Action Week:** In June, the Salata Institute hosted Harvard Climate Action Week. This conference invited climate experts, leaders, and stakeholders to come together and explore solutions to the most complex and challenging dimensions of the climate crisis. The events dove deep into the policies, private actions, and leadership needed to drive further reductions in U.S. greenhouse gas emissions. The talks included presentations from Professors Peter Tufano and Jim Matheson.
- **Book Talk:** The New Nature of Business: The Salata Institute and the Business & Environment Initiative hosted a book talk featuring businessman and philanthropist André Hoffmann and journalist Peter Vanham on their book, *The New Nature of Business: The Path to Prosperity and Sustainability*. The book explores how companies can balance business needs with impacts on nature, shareholders with stakeholders, and short-term vs. long-term profits.
- **Climate Week NYC:** During Climate Week NYC in September, Professor Peter Tufano co-led a session with the Environmental Defense Fund (EDF) with leaders from insurance and climate tech on how insurance-based tools can help unlock climate tech. During the session, the group discussed how to align insurance with clean tech innovation, deployment, and scaling.

## INSTITUTE FOR BUSINESS IN GLOBAL SOCIETY



Professors Mike Toffel and Cynthia Montgomery with Jesper Brodin of Ingka Group.

Debora L. Spar, Jaime and Josefina Chua Tiampo  
Professor Business Administration Senior Associate  
Dean for Business in Global Society

Drew Keller, Director

The Institute for Business in Global Society (BiGS) works with scholars, business leaders, and community leaders around the world to advance the understanding of business' role in society and to develop a thriving ecosystem for translating that research into action.

### Institute for Business in Global Society Climate Visiting Fellows

These scholarly researchers who focus on the intersection of business and climate change.

Climate Fellows during 2024 include:



**Omar Asensio**, researches using AI to ensure an equitable distribution of EV infrastructure



**Matteo Gasparini**, studies the financial economics of climate change and sustainability



**Gunther Glenk**, researches corporate transitions toward zero net emissions



**Conor Hickey**, examines the financial and organizational impacts of delayed climate action on corporations



**Andrew Hoffman**, explores a systems-level view of climate change.



**Jonas Meckling**, focuses on the political economy of decarbonization



**Robyn Meeks**, explores the study of climate resilience in developing countries

### **Institute for Business in Global Society Global Leadership Roundtables**

- **Boston:** A collaborative session on China’s green transition, featuring faculty-led discussions on climate-related work, fostering dialogue on climate change and China’s business environment, and exploring shared strategies for sustainable development.
- **Paris:** The BiGS Paris Roundtable brought together leading academics, executives, and policymakers to discuss innovative strategies for managing climate-related risks and advancing global decarbonization efforts, with sessions exploring the roles of business, collaboration, and financial models in driving sustainable change.
- **Washington, D.C.:** A high-level roundtable in Washington, D.C., convened senior leaders from business, government, and nonprofits, along with Harvard Business School faculty, to assess the impacts of U.S. industrial policies, focusing on reshoring supply chains, infrastructure revitalization, manufacturing growth, job creation, and the clean energy transition.

### **Institute for Business in Global Society Seminars with climate content**

- Andrew Hoffman, 2023–2024 BiGS Climate Fellow: “Business Education as if People and the Planet Mattered: Rejuvenating the Intellectual and Moral Training of Future Business Leaders”.
- Dyanna Jaye, co-founder of the Sunrise Movement: “From Protest to Climate Justice Policy”.
- Matteo Gasparini and Jonas Meckling, 2024–2025 BiGS Climate Fellows: Matteo presented on the financial economics of sustainability and climate change. Jonas presented on the politics of clean energy transitions and why some economies are moving faster than others and the recent rise of green industrial policy.

### **Institute for Business in Global Society Publications with climate content featuring Business & Environment Initiative Faculty Affiliates, Fellows & MBA students**

- “Clean Energy Businesses Can’t Ignore the Value of Good Community Relations, Harvard Professor Says” featuring Dustin Tingley
- “Harvard Research: New Business Model for Profitable, Remote Hybrid Power Projects” featuring Christian Kaps, Michael W. Toffel, and George Serafeim
- “Working With Academics: ‘A Very Cost-Effective Approach to Get Real Innovation’” featuring Omar Asensio
- “Industrial Decarbonization: Harvard Research Offers Model To Navigate the Challenge” featuring Gunther Glenk
- “The state of EV charging in America: Harvard research shows chargers 78% reliable and pricing like the ‘Wild West’” featuring Omar Asensio
- “Gig-economy drivers are boosting the need for public EV chargers” featuring Omar Asensio
- “Forget ‘range anxiety.’ EV drivers face a new hassle that has implications for the green energy transition, research reveals” featuring Omar Asensio
- “Billions in clean energy tax breaks, federal expenditures in play during 2024 elections” featuring Dustin Tingley and Jonas Meckling
- “In Latin America, a franchisee with 2,300 McDonald’s restaurants aims for a livable planet” featuring Michael W. Toffel
- “The future of climate finance: a ‘whole-system’ approach” featuring Peter Tufano

- “Expert view: Deployment strategy is as important as technology for innovative climate companies” featuring Jim Matheson
- “Harvard roundtable reveals CEO perspectives on industrial policy” featuring Debora L. Spar and Joseph B. Fuller
- “Breaking up with fossil fuel taxes is hard to do” featuring Dustin Tingley
- “Are we at the tipping point of a reimagined consumer-goods market?” featuring George Serafeim and Shirley Lu
- “Implementing an infrastructure project in a newly spurred trillion-dollar market? Here’s some advice for bridge-building” by Kate Swain-Smith (MBA 2025)
- “How the 2024 elections will shape the future of America’s green economy” featuring Gunnar Trumbull
- “Introducing the BiGS Climate Innovators 100 list” featuring George Serafeim
- “Harvard research reveals which U.S. public companies are pursuing 88 distinct climate solutions” featuring George Serafeim
- “Harvard research: 45% of U.S. public companies in major industries are developing or selling climate solutions” featuring George Serafeim, Shirley Lu, and Simon Xu
- “BiGS Election Guide: What companies can expect in the new Trump era” featuring Debora L. Spar, Willy Shih, Gunnar Trumbull, Joseph Fuller, and Sandra Sucher
- “The contagion of carbon pricing” featuring Annabel Ware (MBA 2025)





**Faculty**

# Research & Teaching





# Research, teaching & engagement by topic

At Harvard Business School, faculty research, teaching, and engagement on business and the environment is broad and deep.

**We grouped this body of work into six topical areas:**

**1**

**Decarbonization & Energy Transition**

**2**

**Climate Accounting, Finance & Investing**

**3**

**Climate Tech & Entrepreneurship**

**4**

**Adaptation & Resilience**

**5**

**Systems Change:  
Governance, Policy & Regulation**

**6**

**Climate & Sustainability Strategy & Leadership**

The School's research, teaching, and engagement about mitigating and adapting to climate change—including how to reduce risks it poses and embrace opportunities it offers for innovation—spans many of these topics.

# Decarbonization & Energy Transition

The combustion of fossil fuels to generate energy is one of the largest sources of greenhouse gas emissions. Innovations are needed to generate vast amounts of carbon free electricity and to use electricity much more efficiently. Faculty are working to address the market potential for renewable energy and nuclear energy as well as grid flexibility and improved demand response technologies. Highlights from the year appear below.

## Course Materials

- “Allbirds: Decarbonizing Fashion (A) and (B) Video Supplement” by Michael W. Toffel, Kenneth P. Pucker and Stacy Straaberg (supplement, 625–702)
- “Allbirds: Decarbonizing Fashion (B)” by Michael W. Toffel, Kenneth P. Pucker and Stacy Straaberg (supplement, 625–004)
- “Aluminum Smelting in Algeria: The AluAlgeria Project” by Ramon Casadesus-Masanell, Johnson Elugbadebo and Jordan Mitchell (case, 725–375)
- “Aramco: Navigating the Energy Transition” by Tarun Khanna and Gizem Cihan Dincsoy (case, 725–358)
- “BWX Technologies” by Suraj Srinivasan, Yuan Zou and Aldo Sesia (case, 124–071; supplement, 125–713; supplement, 125–712)
- “Colbún and Chile’s Energy Transition” by Forest Reinhardt, Jenyfeer Martinez Buitrago and Mariana Cal (case, 724–026)
- “Copenhagen Infrastructure Partners: Leading the Energy Transition” by John Macomber and Maxwell Nii Laryea (case, 225–012)
- “Development while Decarbonizing: India’s Path to Net-Zero” by Vikram S. Gandhi and Radhika Kak (course overview note, 325–040)
- “District Heating: An Overview” by Willy Shih and Michael W. Toffel (background note, 625–008)
- “Divesting Harvard’s Endowment” by Daniel Green and Luis M. Viceira (teaching note, 224–084)
- “Driving Decarbonization at BMW” by Shirley Lu, Georgios Serafeim and Michael W. Toffel (supplement, 124–020)
- “Ferrari: Shifting to Carbon Neutrality” by Raffaella Sadun (teaching note, 724–480)
- “Fusion Industry Association: Igniting the Future of Clean Energy” by Joshua Lev Krieger, Jim Matheson, Kyle R. Myers and Henry Tao (case, 624–064; teaching note, 624–067; supplement, 624–082)
- “H2 Green Steel: A Clean-Tech Triple Play?” by Debora L. Spar, Gunnar Trumbull, Henry Tao and Julia Comeau (case, 324–101)
- “Harvard University and Urban Mining Industries: Decarbonizing the Supply Chain” by Shirley Lu and Robert S. Kaplan (supplement, 124–703; supplement, 124–701; teaching note, 124–079)
- “Iogen: Decarbonizing Hard-to-Abate Sectors” by George Serafeim, Charlotte Foody and John Mulliken (case, 125–037)

- “JSW Steel: Balancing Growth While Decarbonizing” by Vikram S. Gandhi and Radhika Kak (teaching note, 324–136)
- “Kawasaki Heavy Industries Bets on Clean Hydrogen” by Gunnar Trumbull, Nobuo Sato and Akiko Kanno (case 724–035)
- “Mitigating Climate Change with Machine Learning” by Michael W. Toffel, Kelsey Carter, Amy Chambers, Avery Park and Susan Pinckney (background note, 625–014)
- “New Belgium Brewing and Climate Change” by Michael W. Toffel, Kenneth P. Pucker and Michael Norris (case, 624–069)
- “Reimagining Enel: Enabling Sustainable Progress” by Michael L. Tushman and Kerry Herman (supplement, 424–088; teaching note, 424–070)
- “ReNew (B): A New Direction” by Gunnar Trumbull and Malini Sen (supplement, 724–032)
- “Shell’s Balancing Act: Resource Allocation and the Green Transition (Abridged)” by David Collis and Haisley Wert (abridged case, 725–354; case 724–455)
- “The Carbon Age” by Gunnar Trumbull (background note, 724–025)
- “‘The Wheels on the Bus’ Go Electric: Highland Electric Fleets and Partners” by Rosabeth M. Kanter and Jacob A. Small (case, 324–107; teaching note, 324–129)
- “Transforming a Region: Gothenburg’s Path from Shipyards to E-mobility” by Christian H.M. Ketels and Orjan Solvell (case, 724–403; teaching note, 724–423)
- “Vehicle Lifecycle Emissions Calculator” by Michael W. Toffel, Shirley Lu and George Serafeim (simulation, 124–721)
- “X: The Foghorn Decision” by Kyle Myers and Walter Frick (supplement, 624–066; supplement, 624–711; teaching note, 624–065)

### Courses

- “Energy” EC course taught by Professor Dustin Tingley
- “Decarbonization and Sustainable Production – Europe” Immersive Field Course (IFC) taught by Professors Willy Shih and Mike Toffel
- “Development While Decarbonizing: India’s Path to Net Zero” Immersive Field Course (IFC) taught by Professor Vikram Gandhi

### In the News

- “1 in 5 EV Chargers in America Don’t Work, Harvard Study Finds” featuring Omar Asensio, *The Epoch Times*
- “Can ChatGPT Get the EV Transition Back on Track?” featuring Omar Asensio, *The Boston Globe*
- “Can Second-Generation Ethanol Production Help Decarbonize the World?” featuring Gunnar Trumbull, *Cold Call* podcast
- “Could Clean Hydrogen Become Affordable at Scale by 2030?” featuring Gunther Glenk, *Working Knowledge*
- “For Decades, Installing E.V. Chargers Didn’t Pay Off for Retailers. Now It Does.” featuring Omar Asensio, *The New York Times*

- “How Could Harvard Decarbonize Its Supply Chain?” featuring Robert Kaplan and Shirley Lu, *Cold Call* podcast
- “How Used Products Can Unlock New Markets: Lessons from Apple’s Refurbished iPhones” featuring George Serafeim, *Working Knowledge*
- “Industrial Decarbonization: Confronting the Hard Challenges of Cement” featuring Gunther Glenk, *Working Knowledge*
- “It Takes a Village: Global Field Courses at Harvard Business School” featuring Vikram S. Gandhi, *Harvard Business School Newsroom*
- “One in five public EV chargers in the US do not work, says study” featuring Omar Asensio, *Verdict*
- “One in Five Public EV Chargers in the US Don’t Work, Study Finds” featuring Omar Asensio, *Bloomberg*
- “The Climate Targets Leaders Need to Know as Regulations Loom” featuring Mike Toffel, *Working Knowledge*
- “The EV Revolution Is Stalling Out. Blame Prices and Infrastructure” featuring Omar Asensio, *Fast Company*
- “Three questions for Gunther Glenk, University of Mannheim ‘Electrolytic hydrogen is becoming competitive’” featuring Gunther Glenk, *energate*
- “To grow local support, Washington must share renewable energy revenues” featuring Dustin Tingley, *The Boston Globe*
- “When Climate Goals, Housing Policy, and Corporate R&D Collide, Social Good Can Emerge” featuring Omar Asensio, *Working Knowledge*

### Scholarly Research

- “Design of Off-Grid Lighting Business Models to Serve the Poor: Field Experiments and Structural Analysis” by Bhavani Shanker Uppari, Serguei Netessine, Ioanna Popescu and Rowan P. Clarke, *Management Science*
- “Economics of Enhanced Methane Oxidation Relative to Carbon Dioxide Removal” by Conor Hickey and Myles Allen, *Environmental Research Letters*
- “Housing policies and energy efficiency spillovers in low and moderate income communities” by Omar Asensio, Olga Churkina, Becky D. Rafter and Kira E. O’Hare, *nature sustainability*
- “Measurement and Effects of Bank Exit Policies” by Daniel Green and Boris Vallée, *Journal of Financial Economics*
- “Model-based Financial Regulations Impair the Transition to Net-zero Carbon Emissions” Matteo Gasparini, Matthew C. Ives, Ben Carr, Sophie Fry and Eric Beinhocker, *Nature Climate Change*
- “When Batteries Meet Hydrogen: Dual-Storage Investments for Load-Shifting Purposes” by Christian Kaps and Simone Marinesi, *Working Paper*

# Climate Accounting, Finance & Investing

Many businesses are investing in practices that protect natural systems while delivering business value. But despite widespread interest in sustainable business models, many barriers remain. Faculty are working to understand the conditions under which new tools—such as impact investing and environmental, social, and governance metrics—can lead to change on a wide scale.

## Books & Book Chapters

- “The 10 Rules of Investing: Best Practices for Building Wealth and taking Care of Your Future Self” by Vikram S. Gandhi and Katie Reilly, *Investopedia*

## Course Materials

- “CLSA: Integrating ESG in Stock Valuation” by Shirley Lu, Aaron Yoon and Billy Chan (case, 124–069)
- “CPP Investments—The Road to Zero” by Vikram S. Gandhi and Radhika Kak (case, 324–054)
- “Forecasting Climate Risks: Aviva’s Climate Calculus” by Mark Egan (teaching note, 224–072)
- “Generation Investment Management: Sustainable Investing in a Warming World” by Vikram S. Gandhi, Michael Norris and David Allen (case, 324–043; teaching plan, 325–038)
- “Investing in the Climate Transition at Neuberger Berman” by George Serafeim (teaching plan, 124–098)
- “Masdar City: Aiming for Sustainable and Profitable Real Estate” by Boris Vallee and Sean Bracken (teaching note, 224–063)
- “Politics Comes to ESG Investing” by Shawn Cole and Jonah Zahnd (background note, 224–107)
- “PortageBay and ESG Analytics” by Vikram S. Gandhi and Radhika Kak (case, 324–065)
- “Ranger Energy Services: Bridging Public & Private Markets” by Joseph Pacelli, Ravi Ramniklal Gondalia and James Weber (case, 125–023)
- “Risks, Opportunities, and Investments in the Era of Climate Change (ROICC)” by George Serafeim (course overview note, 125–052)
- “Sustainable Finance at Itau BBA” by George Serafeim (teaching plan, 124–097)
- “SWEN Blue Ocean: Impact Investing Goes to Sea” by Vikram S. Gandhi and David Allen (case, 325–013)
- “Teaching Plan: EKI Energy Services: One Billion Carbon Credits” by George Serafeim (teaching plan, 124–099)
- “TPG Rise Climate: Deploying ‘Climate Capital’” by Vikram S. Gandhi, David Allen, Sarah Mehta and Shannon Roche (case, 824–077; teaching plan, 325–032)

## Courses

- “Risks, Opportunities, And Investments in the Era of Climate Change (ROICC): Solutions Lab” EC course taught by Professor George Serafeim
- “Sustainable Investing” EC course taught by Professor Vikram Gandhi

## In the News

- “Are Companies Getting Away with ‘Cheap Talk’ on Climate Goals?” featuring Shirley Lu, *Working Knowledge*
- “Getting to Net Zero: The Climate Standards and Ecosystem the World Needs Now” featuring Robert S. Kaplan, Shirley Lu, and Rosabeth M. Kanter, *Working Knowledge*
- “Prof. Vikram Gandhi on Overcoming Green Tech Challenges & Investment Returns” featuring Vikram S. Gandhi, *Business Today TV*
- “The Emerging Field of Climate Finance with Peter Tufano” featuring Peter Tufano, *SSRN Blog*
- “What campus protesters get wrong about divestment” featuring Daniel Green and Boris Vallee, *The Economist*
- “When Does Impact Investing Make the Biggest Impact?” featuring Shawn Cole, *Working Knowledge*

## Managerial Articles

- “A Better Way to Measure Social Impact” by Robert S. Kaplan and Constance Spitzer, *Harvard Business Review*
- “Accountability of Corporate Emissions Reduction Targets” by Shirley Lu, Shawn Kim, and Xiaoyan Jiang, *Harvard Law School Forum on Corporate Governance*
- “Disclosing Downstream Emissions” by Robert S. Kaplan and Karthik Ramanna, *Harvard Business Review*
- “How One Company Added Carbon Estimates to Its Customer Invoices” by Robert S. Kaplan and Timmy Melotte, *Harvard Business Review*
- “How Private Investors Can Help Solve Africa’s Climate Crisis” by John Macomber, *Working Knowledge*
- “It’s Time to Change How ESG Is Measured” by Lauren Cohen, Umit G. Gurun, and Quoc Nguyen, *Harvard Business Review*

## Scholarly Research

- “CSR Under the Pressure of Financial Shocks” by Monica Kabutey, Syrena Shirley and Anywhere Sikochi, *HBS Working Paper 25-006*
- “Disclosure Standards and Communication Norms: Evidence of Voluntary Sustainability Standards as a Coordinating Device for Capital Markets” by Khrystyna Bochkay, Jeffrey Hales and George Serafeim, *Review of Accounting Studies*
- “Establishing the Foundation for Carbon Trading Markets” by Robert S. Kaplan, Karthik Ramanna and Marc Roston, *Accountability in a Sustainable World Quarterly*
- “Principles and Content for Downstream Emissions Disclosures” by Robert S. Kaplan and Karthik Ramanna, *HBS Working Paper 24-050*
- “The Allocation of Socially Responsible Capital” by Daniel Green and Benjamin N. Roth, *Journal of Finance*
- “The Financial Anatomy of Climate Solutions: A Large Language Model Approach to Company Classification and Analysis” by Shirley Lu and George Serafeim, *HBS Working Paper 25-026*

# Climate Tech & Entrepreneurship

As a growing field of interest, faculty research, teaching, and engagement at Harvard Business School (HBS) continues to explore exciting and innovative entrepreneurial opportunities to confront climate change. Because many climate solutions are not yet operationalized, faculty are developing research and teaching focused on new ways to finance, manage, and scale potentially game-changing climate solutions.

## Course Materials

- “Ather Energy: The Future of Mobility” by Shunyuan Zhang, Kannan Srinivasan and Malini Sen (case, 525–040)
- “Bosch (A-B): Entering the Electric Bike Market?” by Ramon Casadesus-Masanell, Oliver Gassmann, Felix Wortmann, Sven Jung and Jordan Mitchell (teaching note, 724–427)
- “Commonwealth Fusion Systems: Born at Scale” Joshua Lev Krieger, Jim Matheson, Kyle Myers, Gunnar Trumbull and Richard Vietor (case, 825–061)
- “eBee: Affordable Mobility for Africa” by Ramon Casadesus-Masanell, Gamze Yucaoglu and Jordan Mitchell (teaching note, 724–435)
- “Elon Musk at Tesla” by George Serafeim (teaching plan, 124–104)
- “Flashfood: The Magic of Commitment” by Reza Satchu and Patrick Sanguinetti (case, 824–131)
- “Helmy Abouleish: Making a Desert Bloom” by Geoffrey G. Jones and Maxim Pike Harrell (teaching plan, 324–124)
- “Hippo: Weathering the Storm of the Home Insurance Crisis” by Lauren Cohen, Grace Headinger and Sophia Pan (case, 224–080)
- “KOKO Networks: Bridging Energy Transition and Affordability with Carbon Financing” by George Serafeim (teaching plan, 124–105)
- “Miami’s Climate Tech Potential (A): The State of Play” by Rosabeth M. Kanter and Ai-Ling Jamila Malone (case, 324–119; teaching note 324–132)
- “Miami’s Climate Tech Potential (B): The 2024 Tech Hub Proposal” by Rosabeth M. Kanter and Jacob A. Small (case, 324–135; teaching note, 325–014)
- “Recycle & Re-Match: The Future of Soccer Turfs” by George Serafeim (supplement, 124–707; teaching plan, 125–033)
- “Seeds of Innovation: GALY’s Quest to Cultivate the Future of Agriculture in the Lab” by George Serafeim, Michael Norris and ZeSean Ali (supplement, 124–705; teaching plan, 124–081)
- “The Engine” by Joshua Lev Krieger, Jim Matheson, Fiona Murray and Nicholas Christman (case, 824–147)

## Courses

- “Tough Tech Ventures” EC course taught by Professors Joshua Lev Krieger and Jim Matheson
- “Tough Tech Ventures Labs” EC course taught by Professors Joshua Lev Krieger and Jim Matheson

## In the News

- “Can AI Match Human Ingenuity in Creative Problem-Solving?” featuring Jacqueline Ng Lane, Karim Lakhani, Miaomiao Zhang, *Working Knowledge*
- “Climate Solutions: The Next Engine for Growth” Featuring George Serafeim, Shirley Lu, and Simon Xu, *Working Knowledge*
- “Could Insurtech Firm Hippo Weather Climate Change and Disrupt the Insurance Industry?” featuring Lauren Cohen, *YouTube*
- “How a Mission to Cut Food Waste Launched a Multimillion-Dollar Venture” featuring Reza R. Satchu, *Working Knowledge*
- “How One Insurtech Firm Formulated a Strategy for Climate Change” featuring Lauren Cohen, *Cold Call* podcast
- “Reduce, Reuse, Recycle” featuring George Serafeim, *Alumni Stories*
- “The emerging world leader in climate tech could soon be Massachusetts, experts say” featuring Jim Matheson, *ABC News*

## Scholarly Research

- “Climate Solutions, Transition Risk, and Stock Returns” by Shirley Lu, Edward J. Riedl, Simon Xu and George Serafeim, *HBS Working Paper 25-024*
- “Catalysts for Climate Solutions: Corporate Responses to Venture Capital Financing of Climate-tech Startups” by Shirley Lu, George Serafeim and Simon Xu, *HBS Working Paper 25-025*



# Adaptation & Resilience

The world is currently undergoing the largest wave of urban growth in human history. Cities provide opportunities to innovate to address development needs and to reduce greenhouse gases. Below are examples of faculty work in this critical area.

## Course Materials

- “Can Cities Beat the Heat? (A): A Comparative Analysis of Climate Actions and Change Enablers in 14 U.S. Cities” by Rosabeth M. Kanter and Jacob A. Small (case, 324–080)
- “Can Cities Beat the Heat? (B1): Birmingham Climate Action Snapshot” by Rosabeth M. Kanter, Natania Elias and Jacob A. Small (supplement, 324–082)
- “Can Cities Beat the Heat? (B2): Boston Climate Action Snapshot” by Rosabeth M. Kanter, Margot Zuckerman and Jacob A. Small (supplement, 324–083)
- “Can Cities Beat the Heat? (B3): Chattanooga Climate Action Snapshot” by Rosabeth M. Kanter, Coelin P. Scibetta and Jacob A. Small (supplement, 324–084)
- “Can Cities Beat the Heat? (B4): Columbus Climate Action Snapshot” by Rosabeth M. Kanter, Coelin P. Scibetta and Jacob A. Small (supplement, 324–085)
- “Can Cities Beat the Heat? (B5): Detroit Climate Action Snapshot” by Rosabeth M. Kanter and Jacob A. Small (supplement, 324–086)
- “Can Cities Beat the Heat? (B6): Miami Climate Action Snapshot” by Rosabeth M. Kanter, Ai-Ling Jamila Malone and Jacob A. Small (supplement, 324–087)
- “Can Cities Beat the Heat? (B7): Milwaukee Climate Action Snapshot” by Rosabeth M. Kanter, Coelin P. Scibetta and Jacob A. Small (supplement, 324–088)
- “Can Cities Beat the Heat? (B8): Minneapolis-St. Paul Climate Action Snapshot” by Rosabeth M. Kanter, Praveen Kumar and Jacob A. Small (supplement, 324–089)
- “Can Cities Beat the Heat? (B9): Nashville Climate Action Snapshot” by Rosabeth M. Kanter and Jacob A. Small (supplement, 324–090)
- “Can Cities Beat the Heat? (B10): Pittsburgh Climate Action Snapshot” by Rosabeth M. Kanter, Coelin P. Scibetta and Jacob A. Small (supplement, 324–091)
- “Can Cities Beat the Heat? (B11): Salt Lake City Climate Action Snapshot” by Rosabeth M. Kanter, Praveen Kumar and Jacob A. Small (supplement, 324–092)
- “Can Cities Beat the Heat? (B12): San Antonio Climate Action Snapshot” by Rosabeth M. Kanter, Natania Elias and Jacob A. Small (supplement, 324–093)
- “Can Cities Beat the Heat? (B13): Seattle Climate Action Snapshot” by Rosabeth M. Kanter, Hailey Chen and Jacob A. Small (supplement, 324–094)
- “Can Cities Beat the Heat? (B14): San Jose Climate Action Snapshot” by Rosabeth M. Kanter, Hailey Chen and Jacob A. Small (supplement, 324–095)
- “Lemonade Crypto Climate Coalition: Navigating Innovation and Sustainability in Agricultural Insurance” by Marco Di Maggio (case, 224–058; teaching note, 224–093)

- “Physical Climate Risk” by Michael W. Toffel, Spencer Glendon and Alison Smart (background note, 624–059)
- “Vinalhaven: The Downtown Project” by Richard S. Ruback, Matthew Preble, Ruth Page and Dave Habeeb (case, 224–735)

### Courses

- “Cities, Structures, and Climate Shocks” EC course taught by Professor John Macomber
- “Climate Action Now” EC course taught by Professor Rosabeth M. Kanter

### In the News

- “Behind the Research: Marco Tabellini” featuring Marco Tabellini, *YouTube*
- “Casten, Waters, Whitehouse Call on State Insurance Commissioners to Share Updates on Efforts to Address Urgent Climate-Related Insurance Risks” featuring Ishita Sen, *Sean Casten*
- “Democrat Senator Sounds the Alarm on Climate Change Impact on the Housing Market” featuring Ishita Sen, *Building Elements*
- “Florida Insurance Market Full of ‘Low Quality’ Companies, Study Find” featuring Ishita Sen, *Tampa Bay Times*
- “Florida’s Home Insurance Industry May Be Worse Than Anyone Realizes” featuring Ishita Sen, *Bloomberg*
- “Florida’s insurance crisis goes to Washington” featuring Ishita Sen, *Tampa Bay Times*
- “How to make climate risk good business” featuring John Macomber, *Tedx Talks*
- “How to Pay for Climate Adaptation in Africa” featuring John Macomber, *The Salata Institute for Climate and Sustainability*
- “Helene Could Expose Deeper Flaws in Florida’s Insurance Market” featuring Ishita Sen, *The New York Times*
- “Home Insurance Rates in America Are Wildly Distorted. Here’s Why.” featuring Ishita Sen, *The New York Times*
- “How the Home Insurance Market Became So Distorted” featuring Ishita Sen, *The New York Times*
- “Hurricane Helene spotlights rising prices for home and flood insurance” featuring Ishita Sen, *ABC News*
- “Rhode Island senator says Florida’s insurance market looks to be ‘swirling the drain’” featuring Ishita Sen, *Newswires*
- “The Home-Insurance Crisis That Won’t End After Hurricane Season” featuring Ishita Sen, *New Yorker*
- “The Quiet Rise of Lightly Regulated Home Insurance” featuring Ishita Sen, *Bloomberg*
- “Uneven US insurance regulation could lead to financial crisis, say experts” featuring Ishita Sen, *Green Central Banking*
- “US Senate searches for fix to homeowners insurance woes” featuring Ishita Sen, *S&P Global*

## Managerial Articles

- “5 Steps to Build a Climate-Literate Workforce” by Lynn Schenk and Alison Smart
- “Homeward bound: How migrants seek out familiar climates” by Marguerite Obolensky, Marco Tabellini, and Charles A. Taylor, *Vox Centre for Economic Policy Research (CEPR)*
- “Homeward Bound: How Migrants Seek Out Familiar Climates” by Marco Tabellini and Charles Taylor, *e-axes Forum*

## Scholarly Research

- “Budget Committee Testimony on Riskier Business: How Climate Is Already Challenging Insurance Markets” presentation by Ishita Sen
- “Financial Constraints and Short-Term Planning Are Linked to Flood Risk Adaptation Gaps in U.S. Cities” by Shirley Lu and Anya Nakhmurina, *Communications Earth & Environment*
- “When Insurers Exit: Climate Losses, Fragile Insurers, and Mortgage Markets” by Pari Sastry, Ishita Sen and Ana-Maria Tenekedjieva, *HBS Working Paper 24-051*

# Systems Change: Governance, Policy & Regulation

Businesses cannot drive societal-level change toward sustainability by working on their own. Industry collectives, public-private partnerships, and government regulatory agencies all play important roles in fostering change. Faculty are working to identify the most effective governance mechanisms, including industry self-regulation, government policy, and hybrid approaches. Examples from the past year are noted below.

## Course Materials

- “Business Implications from Regulating Carbon Emissions in the EU” by George Serafeim (teaching plan, 124–103)
- “Christiana Figueres and the Paris Climate Negotiations (A), (B), (C)” by James K. Sebenius, Laurence A. Green, Hannah Riley-Bowles, Lara SanPietro and Mina Subramanian (HLS cases)
- “Climate Governance at Linde plc (A)” by Lynn S. Paine, Suraj Srinivasan, Emilie Billaud and Vincent Dessain (case, 324–140; supplement, 324–141)
- “Doing Business in Buenos Aires, Argentina” by Alan D. MacCormack, Nori Gerardo Lietz, Leonard A. Schlesinger, Karina Souza and Zeke Gillman (case, 324–108)
- “Doing Business in Ho Chi Minh City, Vietnam” by Karen G. Mills, Allison H. Mnookin, Leonard A. Schlesinger, Shu Lin, Julianne Bliss and Morgane Herculano (case, 324–096)
- “Doing Business in Medellín, Colombia” by Nori Gerardo Lietz, Leonard A. Schlesinger and Karina Souza (case, 224–079)
- “Doing Business in São Paulo, Brazil” by Laura Alfaro, Hise O. Gibson, Leonard A. Schlesinger and Pedro Levindo (case, 324–079)
- “Fit for 55: Europe at a Climate Crossroads?” by Laura Jakli, Jonas Meckling and J. Gunnar Trumbull (case, 724–036)
- “Net Zero Insurance Alliance: An Alliance in Crisis” by Peter Tufano and Karina Val (case, 324–063)
- “NextGen CDR Facility: From Davos to Details” by Peter Tufano, Emily A. Chien and Karina Val (case, 325–056)
- “President Biden’s Industrial Policy” by Robin Greenwood, Richard Ruback, Justin Katz and Robert Lalenti (case, 224–050)
- “U.S. Policy and Battery Supply Chains” by Debora L. Spar, Julia Comeau and Amram Migdal (case, 324–073)

## Courses

- “Global Climate Change” EC course taught by Professor Gunnar Trumbull
- “Reimagining Capitalism: Business and Big Problems” EC course taught by Professor Ethan Rouen
- “Social Entrepreneurship and Systems Change” EC course taught by Professor Brian Trelstad

## In the News

- “A common sense, win-win idea — and both right, left agree” featuring Dustin Tingley, *The Harvard Gazette*
- “Climate change experts see dark clouds ahead” featuring Peter Tufano, Jim Stock, Robert Stavins, and Jody Freeman, *The Harvard Gazette*
- “Do Disasters Rally Support for Climate Action? It’s Complicated.” featuring Paula C. Rettl, *Working Knowledge*
- “Election 2024: What’s at Stake for Business and the Workplace?” featuring Vincent Pons, Elisabeth Kempf, Sandra J. Sucher, and Marco E. Tabellini, *Working Knowledge*
- “Harvard Professor William Kirby on U.S.-China Relations and Clean Tech” featuring William Kirby, *Harvard Magazine YouTube*
- “How giving forests legal rights can help the fight against climate change” featuring Rebecca Henderson, *World Economic Forum*
- “Many Climate Policies Struggle to Cut Emissions, Study Finds” featuring Jonas Meckling, *The New York Times*
- “SEC’s Gensler Sees ESG Plans Thwarted as Biden’s Term Nears End” featuring Ethan Rouen, *Bloomberg Law*
- “What Does Trump 2.0 Mean for Climate Change?” featuring Peter Tufano, Jim Stock, Robert Stavins, and Jody Freeman, *YouTube*
- “When It Comes to Climate Regulation, Energy Companies Take a More Nuanced View” featuring Jonas Meckling, *Working Knowledge*

## Managerial Articles

- “How Robust Is Your Climate Governance?” by Lynn S. Paine and Suraj Srinivasan, *Harvard Business Review*
- “The Case for Climate Alliances” by Matteo Gasparini, Knut Haanaes, Emily Tedards and Peter Tufano, *Stanford Social Innovation Review*

## Scholarly Research

- “Coordinating the Energy Transition: Electrifying Transportation in California and Germany” by Nicholas Goedeking and Jonas Meckling, *Energy Policy*
- “How Foes Become Allies: The Shifting Role of Business in Climate Politics” by Irja Vormedal and Jonas Meckling, *Policy Sciences*
- “ESG Amnesia in M&A Deals” by Caley Petrucci and Guhan Subramanian, *Journal of Corporation Law*
- “Private Regulation, Institutional Entrepreneurship and Climate Change: A Business History Perspective” by Ann-Kristin Bergquist and Geoffrey Jones, *HBS Working Paper 24-041*
- “Social Movements and Public Opinion in the United States” by Amory Gethin and Vincent Pons, *NBER Working Paper Series*, No. 32342
- “State Capacity and Varieties of Climate Policy” by Jonas Meckling and Ari Benkler, *Nature Communications*
- “The Home State Effect: How Subnational Governments Shape Climate Coalitions” by Jonas Meckling and Samuel Trachtman, *Governance*

# Climate & Sustainability Strategy & Leadership

Over the past several decades a growing number of firms have incorporated a range of sustainability practices. For some firms, sustainability has been a differentiation strategy, while for others it has become a strategic necessity to ensure survival. Research, teaching, and engagement at Harvard Business School (HBS) has explored the conditions under which sustainability strategy and leadership can lead to superior performance.

## Books & Book Chapters

- “Corporations as the Central Institutions of Society” by Joseph L. Badaracco, Chap. 4 in “Justifying Next Stage Capitalism: Exploring a Hopeful Future,” *Springer*

## Course Materials

- “Building Innovation at VINCI” by Dennis Campbell, Aluna Wang and Carlota Moniz (case, 124–092)
- “Continuity & Change at Boston Consulting Group” by David G. Fubini, Suraj Srinivasan and David Lane (case, 124–011)
- “ECOALF: Fashion for the Future” by Elizabeth A. Keenan, Diego Aparicio, Carlota Moniz and María José Satrústegui (case, 524–057; teaching plan, 524–095)
- “Frank Cornelissen: The Great Sulfite Debate (A)” by Tiona Zuzul and Susan Pinckney (case, 724–391; supplement 724–398; teaching note, 724–458)
- “From ‘BIG’ Ideas to Sustainable Impact at ICL Group (A)” by Linda A. Hill and Lydia Begag (case, 424–042; supplement 424–043)
- “Jamie Dimon’s 2024 Letter to JP Morgan’s Shareholders and the Role of Business in Society” by Hubert Joly (case, 325–045)
- “Living Up to Purpose and Performance at Parker Hannifin” by Hubert Joly, Alicia Dadlani and Martha Hostetter (case, 525–015)
- “Michelin in Motion: Putting Purpose to Work” by Hubert Joly, Nitin Nohria and Emilie Billaud (case, 324–127)
- “Purpose of the Firm” by Debora L. Spar and Julia M. Comeau (module note, 325–035)
- “Polish Agro: Where Do We Grow From Here?” by Willy Shih, Lena Duchene and Daniela Beyersdorfer (case, 625–061)
- “RHI Magnesita (A): Brick by Brick—Organic Growth or Another Major Merger?” By Ramon Casadesus-Masanell, David M Wagner, Oliver Gassmann and Jordan Mitchell (case, 724–437; supplement, 724–861; supplement, 724–440; teaching note, 724–439)
- “Sona Comstar and Blackstone: Unlocking Value Through Business Transformation” by Ranjay Gulati and Kanika Jain (case, 425–035)

- “Sprouts Farmers Market” by Rajiv Lal, Forest L. Reinhardt and Natalie Kindred (case, 524–059)
- “Tesla in 2024: Holding On to the EV Lead?” by Ramon Casadesus-Masanell, Eric J. Van den Steen and Karen Elterman (case, 724–466; supplement, 724–864; teaching note, 724–467)
- “Tesla in 2023: ‘Electrified’ Competition” by Ramon Casadesus-Masanell and Jordan Mitchell (teaching note, 724–460)
- “Tesla Motors in 2024—Turbulence Ahead?” by Felix Oberholzer-Gee and Kate Stoppiello (case, 724–446)
- “The ICARUS Principles: What It Takes to Tackle the World” by Debora L. Spar and Julia M. Comeau (technical note, 324–055)
- “Together for Sustainability” by Ranjay Gulati, David Shin and Emily Tedards (case, 424–062)
- “Vineyard Wind Starts Spinning (A): Overcoming Onshore Challenges to Offshore Wind” by Rosabeth M. Kanter and Jacob A. Small (case, 324–113; teaching note 324–143)
- “Vineyard Wind Starts Spinning (B): Breakdown” by Rosabeth M. Kanter and Jacob A. Small (supplement, 325–054)
- “Vineyard Wind Starts Spinning (B): Breakdown and (C): Recovery and Progress” by Rosabeth M. Kanter and Jacob A. Small (supplement, 325–055; teaching note, 325–061)

### Courses

- “Reweaving Ourselves and the World: New Perspectives on Climate Change” HBS/HKS EC course taught by Professor Rebecca Henderson

### In the News

- “10 Trends to Watch in 2024” featuring Rosabeth M. Kanter, *Working Knowledge*
- “181 CEOs pledged to lead companies for ‘all stakeholders’ in 2019. Did it make a difference?” featuring Lynn S. Paine, *BiGS Fix*
- “Andy Hoffman: It’s time for business schools to respond to a changing world” featuring Andrew Hoffman, *YouTube*
- “Business schools pushed to provide a more responsible education” featuring Andrew Hoffman, *Financial Times*
- “Debora Spar the Social Purpose of The Firm” featuring Debora Spar, *Authentic Leadership for Everyday People* podcast
- “Forest Reinhardt on Climate Change and the Tragedy of the Commons” featuring Forest Reinhardt, *The Parlor Room* podcast
- “How Natural Winemaker Frank Cornelissen Innovated While Staying True to His Brand” featuring Tiona Zuzul, *Cold Call* podcast
- “Out of the woods and into the ethos: Unique business course still resonates” featuring Andrew Hoffman, *Michigan Today*
- “Should Businesses Take a Stand on Societal Issues?” featuring Hubert Joly, *Cold Call* podcast

- “Vatican conference on ‘climate resilience’ is the latest in a long line of environment initiatives by Pope Francis and the Catholic Church – 5 essential reads” featuring Andrew Hoffman, *The Conversation* podcast
- “What should business schools teach about the climate crisis?” featuring Peter Tufano, *Vox EU CEPR*

### **Managerial Articles**

- “Academic ‘Elders’ Wanted: Inquire Within” by Andrew J. Hoffman, *AACSB*
- “Business Education Is Broken. Here Are Strategies to Fix It” by Andrew J. Hoffman, *Harvard Business School Publishing Education*
- “How Companies Should Weigh In on a Controversy” by David M. Bersoff, Sandra J. Sucher, and Peter Tufano, *Harvard Business Review*
- “It’s Time to Unbundle ESG” by Aaron “Ronnie” Chatterji and Michael W. Toffel, *Harvard Business Review*
- “Making Sense of Wicked Problems” by Andrew J. Hoffman, *Stanford Social Innovation Review*
- “The Business Roundtable’s Stakeholder Pledge, Five Years Later” by Lynn S. Paine, *Harvard Business Review*
- “Ushering in the eco-digital era” by Suraj Srinivasan, *Capgemini*

### **Scholarly Research**

- “Addressing Climate Change with Behavioral Science: A Global Intervention Tournament in 63 Countries” by Madalina Vlasceanu, Kimberly C. Doell, Joseph B. Bak-Coleman, Boryana Todorova, Michael M. Berkebile-Weinberg, Amit Goldenberg, Eric Shuman and et al., *Science Advances*
- “Ten Questions for a Winning Climate-transition Business Strategy” by George Serafeim, *Strategy + Business*
- “The Eco-Digital Era™: The Dual Transition to a Sustainable and Digital Economy” by Suraj Srinivasan, Andy Feinstein, Amol Khadikar, Jiani Zhang, Noémie Lauer, Hiral Shah, Sally Epstein, Jerome Buvat and Vaishnavee Ananth, Report, *Capgemini Research Institute*





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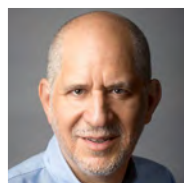
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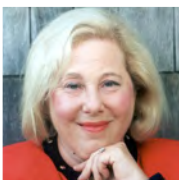
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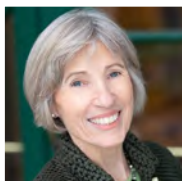
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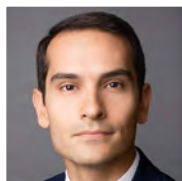
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