

BUSINESS & ENVIRONMENT

ANNUAL REPORT

2020

HARVARD | BUSINESS | SCHOOL

Initiatives

The HBS Business & Environment Initiative (BEI) educates, connects, and mobilizes current and future business leaders to address climate change and other environmental challenges. 2020 was a year of challenges, but through the combined efforts of faculty, alumni, students, and external partners we have published more research, brought more people together, and offered more opportunities for our students than ever before.

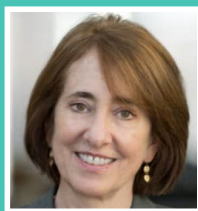
We are delighted to share highlights from the year and welcome your feedback, which you can share with us by emailing bei@hbs.edu.

THE BUSINESS & ENVIRONMENT TEAM



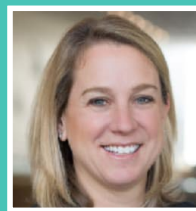
MIKE TOFFEL

Faculty Chair



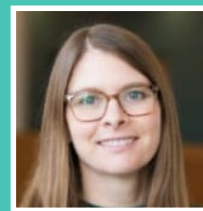
JENNIFER NASH

Director



LYNN SCHENK

Associate Director



ELISE CLARKSON

Coordinator

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

THE SNAPSHOT

IN 2020 WE TOOK STEPS TO INSPIRE LEADERSHIP IN ADDRESSING PRESSING ENVIRONMENTAL CHALLENGES such as climate change by convening faculty for shared learning, supporting student leadership, hosting a large-scale alumni conference, and creating new tools to disseminate business and environment insights.



Convened hundreds of alumni at HBS for **“Risks, Opportunities, and Investment in the Era of Climate Change,”** a groundbreaking and timely conference that asked a fundamental question: In the era of climate change, what will you do to stay ahead of the curve, preserve access to capital, anticipate and manage risk, and invest in new opportunities?



Served as a gateway for MBA students seeking to access the school’s business and environment resources. We collaborated to host or co-host over 25 program events, including a **series of sustainability career events** in partnership with the Career and Professional Development department and the MBA Sustainability Club.



Faculty authored **44 scholarly articles, working papers, and books** on topics such as how companies can use ESG to assess financial and impact performance, the parallels between COVID and climate change, and how to reimagine capitalism. A complete list of 2020 publications appears in the appendix (beginning on page 21).



Faculty wrote **31 teaching cases and 19 teaching notes** and other supplemental teaching materials on business and environment topics. More than 400,000 cases on business and environment topics were sold for use in classrooms around the world.



Over 700 MBA students enrolled in **environment-related elective courses** addressing food and agriculture, sustainable cities, and reimagining capitalism.



The **Impact Weighted Accounts Project** launched an open access dataset of corporate environmental impact that includes ~13,000 firm-year observations.

BUSINESS & ENVIRONMENT HIGHLIGHTS

OBJECTIVE 1

ENGAGE AND PROMOTE A FACULTY COMMUNITY ON BUSINESS
AND ENVIRONMENT TOPICS

OBJECTIVE 2

EDUCATE STUDENTS TO TRANSFORM ORGANIZATIONS TO
BECOME ENVIRONMENTALLY SUSTAINABLE

OBJECTIVE 3

DISSEMINATE INSIGHTS FROM RESEARCH AND FOSTER ALUMNI
ENGAGEMENT ON CRITICAL ENVIRONMENTAL TOPICS

HIGHLIGHTS

1 ENGAGE AND PROMOTE A FACULTY COMMUNITY ON BUSINESS AND ENVIRONMENT TOPICS

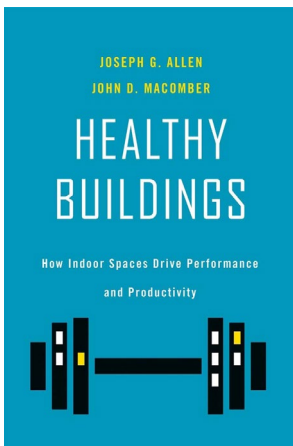


New BEI Affiliates

BEI welcomed two new faculty affiliates and one new executive fellow in 2020: Lynda M. Applegate, Baker Foundation Professor, Sarofin-Rock Professor of Business Administration, whose expertise spans the fields of innovation and entrepreneurship; Jurgen R. Weiss, Senior Lecturer of Business Administration, who brings expertise on the transformation of the energy industry; and Hiro Mizuno, former Chief Investment Officer of the Japan Government Pension Investment Fund (GPIF).

Notable Faculty Publications

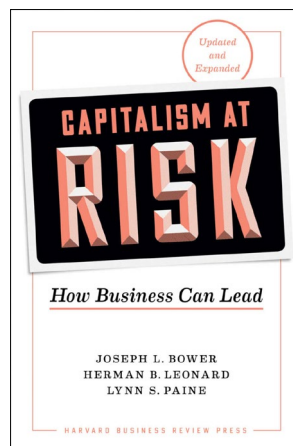
BEI Faculty published influential books:



Healthy Buildings: How Indoor Spaces Drive Performance and Productivity

Joseph Allen and John Macomber

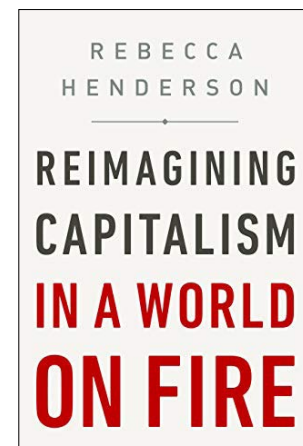
An American Institute of Architecture, New York, Best Book of 2020 and a *Fortune* Best Book of 2020.



Capitalism at Risk: How Companies Can Lead

Lynn Payne, Joseph Bower, and Herman Leonard

Updates and expands upon these authors' 2011 book.



Reimagining Capitalism in a World on Fire

Rebecca Henderson

Shortlisted for the Financial Times/McKinsey Book of the Year 2020.

Impact Weighted Accounts Project

Professor George Serafeim established the [Impact Weighted Accounts Project](#) in 2019 to make the measurement of corporate performance more inclusive and sustainable. In 2020, the project developed a product impact measurement framework and applied it to the airline, consumer packaged foods, and consumer finance industries. To encourage other researchers to adopt an impact weighted accounts approach, it created an open access dataset of corporate environmental impact.

Faculty Lunch Discussion Series



Planetary Health: Protecting Global Health on a Rapidly Changing Planet

Samuel S. Myers, MD, MPH, Principal Research Scientist, Harvard T.H. Chan School of Public Health, Director, Planetary Health Alliance



What's Happening (and Not) In Sustainability Focused Technology Innovation and VC Investing

Professor Jim Matheson



Exposure to Air Pollution and Severity of COVID 19: Data Science Challenges and Opportunities

Francesca Dominici, Clarence James Gamble Professor of Biostatistics, Population and Data Science, Harvard Chan School of Public Health



Teaching HBS MBAs about Climate Change: Proposed SIP on 'Climate Data, Analysis, and Finance'

Professors Vikram Gandhi and George Serafeim



How Americans Were Persuaded that Markets Are Magic

Naomi Oreskes, Henry Charles Lee Professor of History of Science, Harvard University

Alumni Focus Group for Transportation Mode Switching

In partnership with Professor Ashley Whillans, BEI helped to facilitate an alumni focus group session with the goals of troubleshooting ways to get people out of single occupancy vehicles and finding ways to use behavioral science approaches to nudge “mode shifts.”

HIGHLIGHTS

2 EDUCATE STUDENTS TO TRANSFORM ORGANIZATIONS TO BECOME ENVIRONMENTALLY SUSTAINABLE

MBA Required Curriculum

Environmental opportunities and challenges are embedded in eight out of 10 Required Curriculum courses, preparing MBAs to make business decisions involving sustainability issues. In 2020, 14 class sessions in the Required Curriculum featured discussions of cases in which environment was a critical consideration, on topics ranging from carbon credits to regenerative agriculture.

MBA Elective Courses

BEI-affiliated faculty offered seven environmentally focused elective courses that enrolled over 700 students:



Entrepreneurial Solutions to the World's Problems

Professor William Sahlman

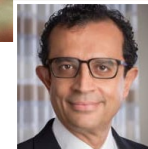
The basic premise of this course is that entrepreneurs view problems as opportunities, from climate change to pandemics.



Food and Agribusiness

Professor Forest Reinhardt

A survey of the global food and agribusiness system and management issues associated with changing consumer preferences, technological advances, public policy shifts, food safety, and risk management.



Investing - Risk, Return, and Impact

Professors Shawn Cole and Vikram Gandhi

Explores whether 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.



Purpose and Profit

Professor Mark Kramer

Rather than viewing social and environmental issues as a matter of corporate social responsibility, this course offers corporate leaders practical guidance in driving business results through measurable social impact.



Reimagining Capitalism: Business and Big Problems

Professors Ethan Rouen and George Serafeim

Explores the idea that problems such as environmental degradation and accelerating inequality can be effectively addressed by high performing private firms.



Strategy for Entrepreneurs Intensive: Critical Choices in Creating a Successful Enterprise

Professor John Wells

Takes an integrated view of the strategic challenges faced by entrepreneurs as they move from conceiving an idea to creating a large sustainable enterprise.



Sustainable Cities and Resilient Infrastructure

Professor John Macomber

Provides students with tools to address rapid urbanization, increasing pressure on the environment and basic resources, and the growing difficulty governments face in managing the confluence of these trends.



“As a Student Sustainability Associate, I had the opportunity to engage with fellow students, faculty, and the BEI on new EC curriculum focused on the environment and climate change. It’s exciting to see new courses such as Tough Tech and a BGIE Energy course on the horizon. Additionally, I had the opportunity to take Professor Sahlman’s new course Entrepreneurial Solutions to the World’s Problems and write a case on CarbonCure (a concrete technology company focused on abating 550 gigatons of CO2 annually) as a final project.”

ROB SELF
MBA 2021



“As a Co-President of the Food, Agriculture and Water Club I have worked with our leadership team to create opportunities for students to gain hands-on, field experience with food and agricultural producers. In January of 2020 we spearheaded the club’s first AgTrek, visiting a number of businesses in Northern California – from a hydroponics leader, to a regenerative cattle rancher, to a natural winemaker. By experiencing businesses run in harmony with the planet, our members are inspired to lead sustainably in their future careers.”

ALI KOKOT
MBA 2021

Educating Students Around the World

In 2020, more than 400,000 copies of cases with significant environmental content were sold for use in classrooms around the world with top sales in Japan, Peru, Spain, the United Kingdom, and the United States. The three top-selling cases (noted below) address strategic opportunities associated with environmental innovation*:



Tesla Motors

Eric Van den Steen

Analyzes competitive advantage in the context of drastic technology change required to reduce carbon emissions from the automotive sector.



Patagonia

Forest Reinhardt, Ramon Casadesus-Masanell & Hyun Jin Kim

Introduces students to a unique type of business model that prioritizes environmental protection, so that they may understand and assess its sustainability and evaluate innovative ways to compete.



Unilever's New Global Strategy: Competing Through Sustainability

Christopher Bartlett

Calls on students to analyze the appropriateness of Unilever’s radically different transformational global corporate strategy and consider the requirements for effective organization transformational change.

*Sales are from fiscal year 2020



New Short Immersive Program (SIP): *Is the end (of oil) near?*

This one-day course, taught by Professor Jurgen Weiss, juxtaposes various perspectives by industry experts on the future demand (and supply) of oil to better understand whether the current COVID-related demand reduction is just a temporary phenomenon or reinforces underlying trends that would result in transitioning away from oil.

Executive Education: *Agribusiness Seminar*

For over 50 years, business leaders from around the world have gathered at HBS for the Agribusiness Seminar. Taught by BEI affiliates Professor David Bell, Professor Forest Reinhardt, and Professor José Alvarez, the seminar explores the changing agribusiness landscape, which is both a major contributor to and heavily impacted by climate change.

Providing Students with a Business & Environment Roadmap

In 2020, more than one-third of admitted students indicated interest in business and environment in their applications. BEI partnered with HBS Admissions to introduce these students to the School's business and environment offerings. Upon arrival on campus, BEI welcomed them at the School's Business & Environment Kickoff, where they met BEI faculty affiliates; leaders of School's environmental clubs; Student Sustainability Associates; sector leads from the Career and Professional Development department; and Sustainability Operations and Initiatives staff.

Supporting Student Clubs

In 2020, three student clubs dedicated to business and environment increased their visibility and impact. BEI collaborated with these clubs to support the successful launch of their conferences.

Energy & Environment Club

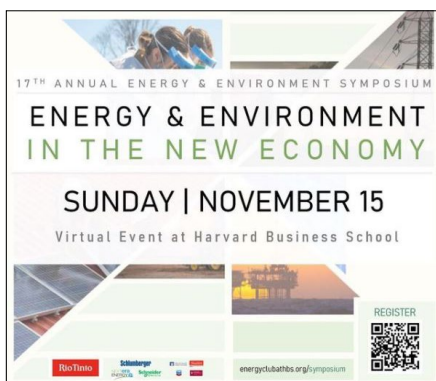
Co-Presidents



Stephen Moch
MBA 2021

Lucy Shaw
MBA 2021

The Energy & Environment Club organized its 17th annual symposium, Energy and Environment in the New Economy, which examined the future of the energy and environment sectors in an economy shaped by COVID, recession, and the climate crisis.



Food, Agriculture & Water Club

Co-Presidents



Natalie Jackson
MBA 2021

Ali Kokot
MBA 2021

Alex Neuber
MBA 2021

The Food, Agriculture & Water Club hosted its annual conference, Building a Resilient, Sustainable, and Nourishing Global Food System, which featured industry experts who are addressing COVID-19 challenges, tackling climate change, taking steps to create a more resilient food system, and innovating in how to nourish the growing global population.



Sustainability Club

Co-Presidents



Zack Jacobson
MBA 2021

Megan Murday
MBA 2021

Roxanne Tully
MBA 2021

The Sustainability Club hosted its inaugural conference, The Rise of Corporate Sustainability, that addressed the growth of sustainability standards and need for ESG, the emerging role of corporate chief sustainability officers, and the responsibilities of government and corporations to address climate change.



In addition, the HBS Student Association Presidents added a new position this year: VP of Sustainability. The focus of the role is to make it easier for students to reduce the environmental impact of lifestyle choices and increase the visibility of student sustainability campaigns, programs, and events. Morgan Sheil, MBA 2021, is the inaugural VP of Sustainability.

Helping to Meet Harvard Climate Goals

In late 2019, Harvard University President Larry Bacow created a Presidential Committee on Sustainability (PCS) to advise him on sustainability vision, goals, and strategy. The PCS views the Harvard University campus as a testbed for initiatives to become fossil-fuel-neutral by 2026 and fossil-fuel-free by 2050. HBS Professor Rebecca Henderson co-chairs PCS. Professor Mike Toffel co-chairs its subcommittee on fossil fuel neutral by 2026.



“Organizing and hosting the school-wide Circular Economy & Waste Campaign was the highlight of 2020 for me. Circular economy is a personal passion of mine and I loved bringing all the sections together to learn more about it through a fun and competitive trivia challenge. One of my top goals is to help reframe sustainability in a way that is relatable for everyone, especially businesses, by demonstrating mutual cost-reward synergy benefits. I hope this will motivate businesses to embed sustainability in the very fabric of their operations instead of leaving it as an afterthought. In 2021, I am excited to work together with other Student Sustainability Associates on quantifying carbon emissions related to student air travel and how we can work together to build sustainable practices around this.”

MILLY WANG

MBA 2022



“Zack Jacobson, Roxanne Tully, and I co-founded the Sustainability Club to serve as a student hub for sustainability learning, networking, and resource sharing. This fall, the club collaborated with BEI to host the first club conference, ‘The Rise of Corporate Sustainability,’ which attracted 600 students, alumni, and practitioners to discuss pressing environmental challenges and opportunity for private sector action.”

MEGAN MURDAY

MBA 2021

Partnering with Sustainability Operations

On the HBS campus, BEI has partnered with HBS Operations to take steps toward meeting University sustainability goals. We supported student campaigns to establish a system for donating leftover food from campus events, reduce plastic use on campus, increase ride-sharing when traveling to Logan Airport, and strengthen sustainability content in the elective curriculum.

Promoting Sustainability Career Opportunities

This year, BEI worked closely with the Career and Professional Development (CPD) department to support students interested in pursuing careers in business and environment related fields. These efforts included flagging job and internship postings that have a sustainability component to make it easier for students to find them. We collaborated with CPD to organize sustainability career events, including 'Trends in Sustainability' with Professor Jim Matheson; 'Careers in Energy and Cleantech' with Professor Jurgen Weiss, and 'Careers in Sustainability' with Katie Kross, author of the book *Profession and Purpose: A Resource Guide for MBA Careers in Sustainability*. With help from BEI, CPD, and the Sustainability Club, Baker Library developed a [sustainability resource guide](#) for students.

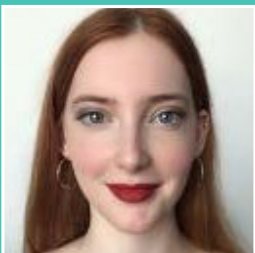
BEI's alumni mentorship program has grown from 36 alumni-student matches in 2016 to 117 in 2020. Over the course of a year, mentors and mentees share perspectives on business trends and career opportunities, sometimes fostering long-term connections. To further strengthen alumni connections for students seeking careers in renewable energy, BEI hosted alumni-student receptions as part of student career treks in London, San Francisco, Houston, and New York City.



"In the coming year, I want to learn more about how climate-tech entrepreneurs can apply an environmental justice lens to their work. Climate change tends to exacerbate global inequality. How can we use technology to mitigate this effect?"

KEVIN SANI

MBA 2022



"As someone committed to addressing climate change through business, I'm grateful for the opportunity I've had to further my business education at HBS and help strengthen connections between students, staff, and professors as VP of Sustainability for the Student Association. While the US and the world are woefully behind in addressing climate change, I am heartened by the seriousness and urgency that so many of our community feel, and how willing they have been to make changes, big and small, for a better future."

MORGAN SHEIL

MBA 2021

HIGHLIGHTS

3 DISSEMINATE INSIGHTS FROM RESEARCH AND FOSTER ALUMNI ENGAGEMENT ON CRITICAL ENVIRONMENTAL TOPICS



Alumni Conference: *Risks, Opportunities, and Investment in the Era of Climate Change*

On March 4, BEI and Alumni Relations hosted the conference, “Risks, Opportunities, and Investment in the Era of Climate Change.” The conference drew over 200 alumni and was co-chaired by Professor Ramana Nanda, Professor George Serafeim, and Professor Mike Toffel. Conference speakers and panels explored transition and physical risks from climate change, investment strategies to preserve access to capital, and new investment opportunities.

Alumni Events: Rebecca Henderson

Surrounding the launch of her highly impactful new book, *Reimagining Capitalism in a World on Fire*, Professor Rebecca Henderson shared her work with alumni in a series of widely attended events, including a conversation with Dean Nohria. The HBS Clubs of London and Singapore hosted events with Professor Henderson and alumnus Sir Ronnie Cohen entitled “Driving Impact: A Dialogue on Capitalism, Climate, and Social Change,” moderated by faculty members George Serafeim and Vikram Gandhi.



Alumni Event: *Business and Climate Policy: Your Vital Role*

In collaboration with the HBS Club of Washington, DC, BEI hosted “Business and Climate Policy: Your Vital Role.” a panel discussion and reception to explore how current U.S. government policies with respect to climate change – at the federal, state, and local levels – are affecting key business sectors; the state-of-play of climate legislation and critical trends; and how business leaders can make a difference. Over 60 alumni and other business leaders turned out for the event. Moderated by Professor Mike Toffel, the panel included The Honorable Donald S. Beyer; Anne Kelly of Ceres; Elizabeth Lewis of the International Finance Corporation; Sarah Wright Meyers of Hull Street Energy; and Matt Sonnesyn of the Business Roundtable.

Climate Week

In recognition of Climate Week, BEI organized “Building a Just and Climate-Ready Economy in a Post-COVID World”, a university-wide conversation with HBS Professor Rebecca Henderson and Harvard Geology Professor Daniel Schrag, attended by over 200 people.

CLIMATE RISING

Climate Rising Season 2

Summer 2020 marked the launch of the second season of [Climate Rising](#), which featured content from the HBS conference, “Risks, Opportunities, and Investment in the Era of Climate Change.” The episodes include leading one of the world’s largest financial institutions in the era of climate change; incorporating climate risk in pension fund investment decisions; uncovering and pricing climate risk; and financial regulation and climate risk management. Episodes from season 2 include:

- *Leading State Street Corporation in the Era of Climate Change* with guest Ron O’Hanley (MBA 1986), Chairman and CEO of State Street Corporation
- *Incorporating Climate Risk in Pension Fund Investment Decisions* with guest Hiro Mizuno, then Executive Managing Director and CIO of GPIF
- *Uncovering and Pricing Climate Risk* with guests Wendy Cromwell, Vice Chair, Senior Managing Director, Partner, Sustainable Investment and Portfolio Manager of Wellington Management; Tony Davis, CEO and CIO of Inherent Group; Audrey Choi, (MBA 2004), Chief Sustainability Officer and Chief Marketing Officer of Morgan Stanley; and Luca Albertini CEO and Founding Partner of Leadenhall Capital Partners
- *Financial Regulation and Climate Risk Management* with guests Robert Litterman, Risk Committee Chairman at Kepos Capital; Nushin Kormi, a trustee and partner at Loring, Wolcott, & Coolidge; and Kevin Stiroh, executive vice president at the Federal Reserve Bank of New York



New Online Exhibit: *Confronting Climate Change: From Business as Usual to Business as Vital*

In 2020, BEI revitalized our website to showcase our exhibit, [“Confronting Climate Change: From Business as Usual to Business as Vital.”](#) Our new site offers a fresh layout with improved access to the latest faculty research and opportunities for student and alumni engagement. This year also marked the launch of the @green.HBS Instagram account, a hub for all environmental and sustainability related events, programs, and news on the HBS campus.



Award for Impact Research

In 2020, the organization Environmental Finance recognized the HBS Impact Weighted Accounts Project and BEI with its award for Impact Research of the Year. The award announcement mentioned the launch of BEI’s Climate Rising podcast, our conference on “Risks, Opportunities, and Investment in the Era of Climate Change,” and the creation of the exhibit “Confronting Climate Change: From Business as Usual to Business as Vital.”

ALUMNI HIGHLIGHTS

Thanks to these alumni who spoke at BEI and student events in 2020:

Business and Climate Policy: Your Vital Role

BEI Alumni Event - February 12, 2020, Washington, DC

- Elizabeth Lewis, MBA 2006, Senior Engagement Officer for Climate and Impact Investing, International Finance Corporation.
- Sarah Wright Meyers, MBA 1997, Founder & Managing Partner, Hull Street Energy.

Risks, Opportunities, and Investment in the Era of Climate Change

BEI Alumni Conference - March 4, 2020, HBS

- Audrey Choi, MBA 2004, Chief Sustainability Officer and Chief Marketing Officer, Morgan Stanley
- Nushin Kormi, MBA 2005, Trustee and Partner, Loring, Wolcott & Coolidge.
- Ronald O’Hanley, MBA 1986, Chairman and CEO, State Street Corporation.
- David Perry, MBA 1997, President, CEO, and Director, Indigo Ag.
- Ted Wiley (MBA 2009), Cofounder, President, and COO, Form Energy, Inc.

The Future of Food: Helping the World One Bite at a time

BEI-Operations-Sustainability Club Event - April 22, 2020, virtual

- Philip C. Behn, MBA 2005, Chief Executive Officer, Imperfect Foods.

Driving Impact: A Dialogue on Capitalism, Climate, and Social Change

BEI-Alumni Relations Panel - September 22 & 23, 2020, virtual

- Sir Ronald Cohen, MBA 1969, Chairman of the Global Steering Group for Impact Investing and The Portland Trust.
- Cissy Chen, MBA 2019, Vice President, NatWest Markets.
- Julie Mulcahy, GMP 24, Chief Operating Officer, H2O AM LLP.

Energy & Environment Symposium

Energy & Environment Club - November 15, 2020, virtual

- Christina Maria Belsito, MBA 2019, VP of Business Development, Mori.
- Judith F. Judson, MBA 2000, Vice President, Distributed Energy Systems, Ameresco.
- Elizabeth Lewis, MBA 2006, Senior Engagement Office for Climate and Impact Investing, International Finance Corporation.

- John A. Mascari, MBA 2012, COO, Blueland.
- Rick Needham, MBA 2002, Partner, Energy Sector Lead, TPG, The Rise Fund.
- Rachel Leah Steinberg, MBA 2014, Product, Sidewalk Labs.
- Matthew Stephen Valle, MBA 2007, VP Development, Florida Power & Light.
- Ted Wiley, MBA 2009, Co-Founder & President, Form Energy.

Sustainability Club Conference

Sustainability Club - November 17-19, 2020, virtual

- Martin Aares, MBA 2001, Managing Director at Closed Loop Partners.
- Adzmel Adznan, MBA 2017, Partner & Operating Manager, Piva Capital.
- Jim Andrew, MBA 1986, Chief Sustainability Officer, PepsiCo.
- Audrey Choi, MBA 2004, Chief Marketing Officer and Chief Sustainability Officer, Morgan Stanley.
- Taylor Leyden, MBA 2020, Program Manager, Energy & Sustainability, Microsoft.

Food, Agriculture, and Water Conference

Food, Agriculture, and Water Club - November 18, 2020, virtual

- Haven Baker, MBA 2009, Co-founder, Chief Business Officer, Pairwise.
- Sasha Duchnowski, MBA 2010, Partner, Bain & Company.
- Noela Gonzalez, PLDA 16, Executive Director, Natac USA.
- Mira Mehta, MBA 2014, Founder and CEO, Tomato Jos.
- Mike Messersmith, MBA 2010, President, North America, Oatly.
- Ndidi Okonkwo Nwuneli, HBS 1999, Co-Founder and Managing Partner, Sahel Consulting.

FACULTY
RESEARCH &
TEACHING

RESEARCH, TEACHING, AND ENGAGEMENT BY TOPIC

At HBS, faculty research, teaching, and engagement on business and the environment is broad and deep.

WE HAVE GROUPED THIS BODY OF WORK INTO EIGHT TOPICAL AREAS:

**ENERGY
TRANSITION**

**ENVIRONMENT
AND
CONSUMERS**

**FINANCE AND
INVESTING**

- ESG Measurement and Reporting
- Impact Investing
- Finance & Innovation
- Climate Change and Finance
- Conservation

**FOOD AND
AGRICULTURE**

**GOVERNANCE
AND
REGULATION**

**REIMAGINING
CAPITALISM**

**SUSTAINABLE
CITIES AND
INFRASTRUCTURE**

**SUSTAINABILITY
STRATEGY**

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.

ENERGY TRANSITION

The combustion of fossil fuels to generate energy is the largest source of greenhouse gas emissions and the largest contributor to climate change. 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 Material

- “1366 Technologies: Surviving in a fast changing world” by Jurgen Weiss, William Sahlman, and Joseph Lassiter (case, 721-015).
- “24M Technologies” by John Wells and Benjamin Weinstock (case, 721-386).
- “d.light” by Michael Chu, Krishna Palepu, and Dilyana Karadzhova Botha (case, 321-069).
- “GreenFire Energy, 2020: Geothermal Innovation” by John Wells and Benjamin Weinstock (case, 721-392).
- “Holaluz: Taking on the Spanish Energy Market” by Elie Ofek, Marco Bertini, Oded Koenigsberg, Elena Corsi and Emer Moloney (case, 521-045).
- “Wuxi Lead Intelligent Equipment Co., Ltd.” by John Wells and Benjamin Weinstock (case, 720-419).

Courses

- “2020 Climate Change Deep Dive” Advanced Leadership Initiative taught by Professor Forest Reinhardt.
- “Is the end (of oil) near?” Fall SIP (Short Intensive Program) taught by Professor Jurgen Weiss.

Practitioner-Oriented Materials

- “Who's Afraid of 100%?” by Jurgen Weiss, *UtilityDive*.

In the News

- “Companies press for renewables support in COVID-19 recovery package, but near-term effects in doubt” feature of Jurgen Weiss by Emma Penrod, *UtilityDive*.
- “Is renewable natural gas a serious alternative to ‘electrify everything?’” feature of Jurgen Weiss by Emily Pontecorvo, *Grist*.
- “Know Your Audience – Recruiting HBS Students for Energy” by Becca Carnahan, *HBS Recruiting Blog*.
- “Rhode Island Targets 100 Percent Renewable by 2030” feature of Jurgen Weiss by Tim Faulkner, *EcoRI News*.
- “Why the U.S. faces a steep path to a CO2-free grid” feature of Jurgen Weiss by Peter Behr, *E&E News*.

ENVIRONMENT AND CONSUMERS

Consumer demand for environmentally preferable products is growing, as is consumer awareness of the environmental performance of the firms they do business with. Businesses seeking to meet the environmental expectations of their customers require sophisticated understanding of what motivates and sustains consumer environmental preferences. The following list includes examples of work in this area in 2020.

Course Material

- “Retailing” EC Course taught by Professor Jose Alvarez.

Scholarly Research

- “Air Pollution, State Anxiety, and Unethical Behavior: A Meta-Analytic Review” by Jackson Lu, Julia Lee, Francesca Gino, and Adam Galinsky, *Psychological Science*.
- “Nudging the Commute: Using Behaviorally-Informed Interventions to Promote Sustainable Transportation” by Ashley Whillans, Joseph Sherlock, Jessica Roberts, Shibeal O’Flaherty, Lyndsay Gavin, Holly Dykstra, and Michael Daly, HBS Working Paper, 21-022.
- “What We Can Learn from Five Naturalistic Field Experiments That Failed to Shift Commuter Behaviour” by Ariella Kristal and Ashley Whillans, *Nature Human Behavior*.

In the News

- “Giving Back and Diverting Waste – Donations at HBS” *HBS Newsroom*.
- “How to Launch a New Biosciences Product: Start Small or Dive in?” interview of Jeffrey Busgang, *Cold Call* podcast.
- “Real Leaders: Rachel Carson Seeds the Environmental Movement” feature of Nancy Koehn, *HBR IdeaCast* podcast
- “We Are Taking Climate Action” feature of HBS Staff, *Staff Stories* podcast.

FINANCE AND 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. Select accomplishments from the year appear below, categorized by (1) environmental, social, and governance (ESG) measurement and reporting; (2) impact investing; (3) finance and innovation; (4) climate change and finance; and (5) conservation.

PART 1: ENVIRONMENTAL, SOCIAL, AND GOVERNANCE (ESG) MEASUREMENT AND REPORTING

Course Material

- “BlackRock: Linking Purpose to Profit” by Rohit Deshpande, Aiysha Dey, and George Serafeim (case, 120-042).
- “Should a Pension Fund Try to Change the World? Inside GPIF's Embrace of ESG” by Rebecca Henderson (supplement, 320-704).
- “US Private Equity Firms: ESG and Impact (A)” by Lynn Paine and Holly Fetter (background note, 321-036).
- “US Private Equity Firms: ESG and Impact (B)” by Lynn Paine and Holly Fetter (background note, 321-037).

Practitioner-Oriented Materials

- “Companies must include environmental and social performance measures” by George Serafeim, *Financial Times*.
- “Harvard Business School on Impact-Weighted Accounts: the Missing Piece in Economy Puzzle” by Robert Zochowski, *cfi.co*.
- “How to Measure a Company’s Real Impact” by Ronald Cohen and George Serafeim, *Harvard Business Review*.
- “Larry Fink Isn’t Going to Read Your Sustainability Report” by Mark Kramer, *Harvard Business Review*.
- “Research on Corporate Sustainability: Review and Directions for Future Research” by Jody Grewal and George Serafeim, *Foundations and Trends in Accounting*.
- “Social Impact Efforts That Create Real Value” by George Serafeim, *Harvard Business Review*.
- “The Future of ESG Is...Accounting?” by Richard Barker, Robert Eccles, and George Serafeim, *Harvard Business Review*.
- “Where ESG Ratings Fail: The Case for New Metrics” by Mark Kramer, Nina Jais, Erin Sullivan, Carina Wendel, Kerry Rodriguez, Carlo Papa, Carlo Napoli, and Filippo Forti, *Institutional Investor*.

Scholarly Research

- “Accounting for Organizational Employment Impact” by David Freiberg, Katie Panella, George Serafeim, and Robert Zochowski, HBS Working Paper 21-050.
- “Corporate Environmental Impact: Measurement, Data and Information” by Georgios Serafeim, DG Park, David Freiberg and Robert Zochowski, HBS Working Paper 20-098.
- “Human Capital and the Future of Work: Implications for Investors and ESG Integration” by Sakis Kotsantonis and George Serafeim, *Journal of Financial Transformation*.
- “Material Sustainability Information and Stock Price Informativeness” by Jody Grewal, Clarissa Hauptmann, and George Serafeim, *Journal of Business Ethics*.
- “Measuring the Cost of Corporate Water Usage” by DG Park, George Serafeim and Robert Zochowski, HBS Working Paper 21-036.
- “Public Sentiment and the Price of Corporate Sustainability” by George Serafeim, *Financial Analysts Journal*.
- “The Allocation of Socially Responsible Capital” by Daniel Green and Benjamin Roth, Working Paper.
- “The ESG-Innovation Disconnect: Evidence from Green Patenting” by Lauren Cohen, Umit Gurun and Quoc Nguyen, National Bureau of Economic Research Working Paper 27990.
- “Updating the Balanced Scorecard for Triple Bottom Line Strategies” by Robert Kaplan and David McMillan, HBS Working Paper 21-028.
- “Voluntary, Self-Regulatory, and Mandatory Disclosure of Oil and Gas Company Payments to Foreign Government” by Paul Healy and George Serafeim, *Accounting Horizons*.

In the News

- “Companies and Investors Heed the Call to Action” feature of Vikram Gandhi by Leslie Norton, Barron’s.
- “Coronavirus Pandemic Could Elevate ESG Factors” feature of George Serafeim by Kristin Broughton and Maitane Sardon, *Wall Street Journal*.
- “DOL’S ESG proposal would hurt retirement accounts” feature of Vikram Gandhi, *Investment News*.
- “ESG Investing Shines in Market Turmoil, With Help From Big Tech” feature of George Serafeim by Caitlin McCabe, *Wall Street Journal*.
- “ESG investors get their heads around social risks” feature of George Serafeim, *The Economist*.
- “Five ESG Implications from COVID-19” feature of George Serafeim by Casey Clark, *Wealth Management*.
- “How to Build an ESG Portfolio – And Why You Should” feature of Vikram Gandhi by Debbie Carlson, *US News & World Report*.
- “How Wrong Was Milton Friedman? Harvard Team Quantifies the Ways” feature of George Serafeim by Saijel Kishan, *Bloomberg*.
- “Market Investors Pay More for Resilient Companies” by Kristen Senz, *Working Knowledge*.

- “Q&A: Harvard impact investing expert on proposed ESG rule” feature of Vikram Gandhi by Liz Skinner, *ESG Clarity*.
- “Sustainability Investors Shift Their Focus to Social Issues” feature of Vikram Gandhi by Maitane Sardon, *Wall Street Journal*.
- “US election: What it means for climate change and ESG” feature of Vikram Gandhi by Gillian Tett, Billy Nauman, Patrick Temple-West, Alex Newman and Oliver Telling, *Financial Times*.

PART 2: IMPACT INVESTING

Course Material

- “Blue Haven Initiative: The PEGAfrica Investment” by Vikram Gandhi (supplement, 321-701).
- “Blue Haven Initiative: The PEGAfrica Investment” by Vikram Gandhi, Caitlin Reimers Brumme, and Amram Migdal (teaching plan, 321-007).
- “CSL Capital Management: Patriot Proppants (A)” by Victoria Ivashina and Yury Kapko (case, 220-094).
- “Generation Investment Management” by Vikram Gandhi and Sarah Mehta (case, 820-033).
- “Generation Investment Management” by Vikram Gandhi and Sarah Mehta (teaching note, 820-112).
- “Mike McCreless – Root Capital” by Shawn Cole (supplement, 221-702).
- “Mission Related Investments at the Ford Foundation (A)” by Shawn Cole, Michael Norris, and Robert Zochowski (case 220-026).
- “Mission Related Investments at the Ford Foundation (B)” by Shawn Cole, Michael Norris, and Robert Zochowski (supplement, 220-027).
- “Nancy Pfund DBL Partners” by Shawn Cole (supplement, 221-701).
- “Prime Coalition: Catalytic Capital for Climate Innovation” by Ramana Nanda, Benjamin Roth, and Olivia Hull (case, 820-007).
- “SK Group: Social Progress Credits” by George Serafeim, Ethan Rouen, and David Freiberg (case, 120-071).
- “SK Group: Social Progress Credits” by George Serafeim, Ethan Rouen, and David Freiberg (teaching plan, 120-112).
- “Sustainable Investing in Private Markets at TIFF” by Luis Viceira and Victoria Sienczewski (case, 221-005).
- “Wilderness Safaris: Impact Investing and Ecotourism Conservation in Africa” by James Austin, Megan Epler Wood, and Herman "Dutch" Leonard (case, 321-020).

Courses

- “Investing - Risk, Return, and Impact” EC Course taught by Professor Shawn Cole and Professor Vikram Gandhi.

Practitioner-Oriented Materials

- “Making Impact Investing Work” by Brian Trelstad, *Project Syndicate*.

Scholarly Research

- “Accounting for Product Impact in the Airlines Industry” by George Serafeim and Katie Trinh, HBS Working Paper 21-066.
- “Accounting for Product Impact in the Consumer Finance Industry” by George Serafeim and Katie Trinh, HBS Working Paper 21-061.
- “Accounting for Product Impact in the Consumer-Packaged Foods Industry” by Amanda Rischbieth, George Serafeim, and Katie Trinh, HBS Working Paper 21-051.
- “A Framework for Product Impact-Weighted Accounts” by George Serafeim and Katie Trinh, HBS Working Paper 20-076.
- “Anchors Aweigh: Analysis of Anchor Limited Partner Investors in Impact Investment Funds” by Shawn Cole, Rob Zochowski, Fanele Mashwama, and Heather McPherson, Working Paper.
- “Impact Investing: A Theory of Financing Social Entrepreneurship” by Benjamin Roth, HBS Working Paper 20-078.
- “Long-run Returns to Impact Investing in Emerging Markets and Developing Economies” by Shawn Cole, Martin Melecky, Florian Mölders and Tristan Reed, NBER Working Paper Series 27870.
- “Mutually Compatible, Yet Different: A Theoretical Framework for Reconciling Different Impact Monetization Methodologies and Frameworks” by Jeremy Nicholls and Robert Zochowski, Working Paper.
- “The Project on Impact Investments' Impact Investment Database” by Diane Burton, Shawn Cole, Abhishek Dev, Christina Jarymowycz, Leslie Jeng, Josh Lerner, Fanele Mashwama, Yue (Cynthia) Xu and Robert Zochowski, HBS Working Paper 20-117.

In the News

- “Crisis offers a chance to rewrite accounting to include impact” feature of George Serafeim by Ronald Cohen, *Financial Times*.
- “Harvard endowment to go greenhouse gas-neutral by 2050” feature of Rebecca Henderson by Colleen Walsh, *Harvard Gazette*.
- “How can managers avoid greenwashing?” feature of Vikram Gandhi by Vicki Meek, *Infrastructure Investor*.
- “How Social Entrepreneurs Can Increase Their Investment Impact” by Rachel Layne, *Working Knowledge*.
- “Impact Briefing” feature of Vikram Gandhi, *Impact Alpha* podcast.
- “Impact Investing Won’t Save Capitalism” by Alan Schwartz and Reuben Finighan, *Harvard Business Review*.
- “Risk, Reward, and Impact” feature of Vikram Gandhi, *InvestESG.eu*.
- “Special Report on Impact Investing” featuring Vikram Gandhi, *Private Equity International*.
- “The Investment Banker Turned Teacher” feature of Vikram Gandhi by Alexandra Court, *Invest for Good*.

- “The University of Chicago Booth School of Business, Harvard Business School, and University of Pennsylvania’s Wharton School Collaborate on Impact Investing Data Collection” feature of Shawn Cole, *HBS Newsroom*.
- “Q&A Roundtable: The Future of Impact Finance” feature of Shawn Cole by Megan Kashner, *Stanford Social Innovation Review*
- “Roles Foundations Play in Shaping Impact Investing” feature of Brian Trelstad by David Wood, *Stanford Social Innovation Review*.

PART 3: FINANCE & INNOVATION

Books

- Financing 'Tough Tech' Innovation” by Ramana Nanda, *Global Innovation Index 2020: Who will Finance Innovation?* (chapter).

Courses

- “Entrepreneurial Finance” EC Course taught by Professor Shai Bernstein, Professor Jim Matheson, and Professor Paul Gompers.
- “Entrepreneurial Solutions to the World's Problems” EC Course taught by Professor William Sahlman.
- “Social Entrepreneurship and Innovation” EC course taught by Professor Asim Khwaja, Professor Kasturi Rangan, and Professor Brian Trelstad.

Scholarly Research

- “Venture Capital's Role in Financing Innovation: What We Know and How Much We Still Need to Learn” by Josh Lerner and Ramana Nanda, *Journal of Economic Perspectives*.

PART 4: CLIMATE CHANGE & FINANCE

Course Materials

- “Divesting Harvard's Endowment” by Daniel Green, Luis Viceira, and Holly Fetter (case 221-009).
- “Fossil Fuel Divestment (Abridged)” by Michael Toffel and Sarah Gulick (case, 620-093).
- “Fossil Fuel Divestment” by Michael Toffel and Sarah Gulick (teaching note, 620-125).
- “Middlebury College: Energy2028” by Brian Trelstad, Michael Norris, and John McKinley (case, 320-029).

Practitioner-Oriented Materials

- “Managing Climate Risk in the U.S. Financial System” by Rostin Behnam, David Gillers, Bob Litterman, Leonardo Martinez-Diaz, Jesse M. Keenan, and Stephen Moch, *U.S. Commodity Futures Trading Commission*.

Scholarly Research

- “Decarbonizing Everything: Climate Data, Industry Returns, and Portfolio Construction” by Alex Cheema-Fox, Bridget R. LaPerla, George Serafeim, David Turkington, and Hui (Stacie) Wang, Working Paper.
- “Financing the Response to Climate Change: The Pricing and Ownership of U.S. Green Bonds” by Malcolm Baker, Daniel Bergstresser, George Serafeim and Jeffrey Wurgler, NBER Working Paper Series 25194.

In the News

- “HBS Business & Environment Alumni Conference” by Lynn Schenk, *HBS SEI Blog*.
- “How Investors Are Sizing Up Climate Change’s Risks—and Opportunities” by Danielle Kost, *Working Knowledge*.

PART 5: CONSERVATION

Practitioner-Oriented Materials

- “Our impact on the environment” by George Serafeim, *LinkedIn*.

Scholarly Research

- “Two Case Studies on the Financing of Forest Conservation” by Andrew Baxter, Connor Cash, Josh Lerner, and Ratnika Prasad, Harvard Business School Working Paper, No. 20-137.

FOOD AND AGRICULTURE

Food and agriculture is the second largest sector contributing to climate change after energy generation. This sector is particularly vulnerable to climate change as higher temperatures require shifts in agricultural practices and supply chains are increasingly disrupted by more frequent and severe storms. At the same time, consumer demand for organic and sustainably sourced food is growing. This changing landscape is creating opportunities for companies that can recognize emerging trends, innovate, and evolve strategies quickly. The following list includes select notable accomplishments of the year.

Course Material

- “Bayer Crop Science” by David Bell, Michael Norris, and Mel Martin (teaching note, 520-067).
- “C16 Biosciences: Lab-Grown Palm Oil” by Jeffrey Bussgang, Olivia Hull, and Mel Martin (teaching plan, 820-071).
- “Clover Food Lab in 2016 (B)” by Lena Goldberg and Michael Kaufman (supplement, 320-085).
- “Danone: Changing the Food System” by David Bell, Federica Gabrieli, Daniela Beyersdorfer, Amy Klopfenstein, and Aldo Sesia (teaching note, 520-066).
- “Indigo Agriculture: Harnessing Nature” by Michael Toffel and James Barnett (supplement, 620-110).
- “Indigo Agriculture: Harnessing Nature” by Michael Toffel and James Barnett (teaching note, 620-075).
- “Just Like Mom's Contemplates Plant-based Meat” by Lena Goldberg, Michael Kaufman, and Joseph Paul (case, 320-062).
- “Rumo: Infrastructure for a Healthier Economy” by Forest Reinhardt, Mariana Cal, Ruth Costas, and Natalie Kindred (case, 720-008).
- “WH Group and Smithfield Foods: Global Leadership During a Difficult Environment of Trade, Disease, and Sustainability” by Ray Goldberg and Rachel Lee (case, 920-304).

Courses

- “Agribusiness Seminar” Executive Education course.
- “Food and Agribusiness” EC course taught by Professor Forest Reinhardt.

Events

- “Virtual EarthFest: The Future of Food: Helping the World One Bite at a Time” HBS Webinar.

In the News

- “How Leaders Are Fighting Food Insecurity on Three Continents” by Howard Stevenson and Shirley Spence, *Working Knowledge*.
- “How to Launch a New Biosciences Product: Start Small or Dive in?” interview of Jeffrey Bussgang, *Cold Call* podcast.

GOVERNANCE AND 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.

Courses

“Making Corporate Boards More Effective” Executive Education Course taught by Professor Lynn Paine and Professor Suraj Srinivasan.

Course Material

- “Governing PG&E” by Lynn Paine and Will Hurwitz (case, 320-024).
- “PG&E and the First Climate Change Bankruptcy” by Stuart Gilson and Sarah Abbott (case, 221-057).

Scholarly Research

- “Nonprofit Boards: It Is time to Lift Your Gaze and See the System” by Shamal Dass, Kristy Muir and V. Kasturi Rangan, HBS Working Paper 21-058.
- “The European Commission’s Sustainable Corporate Governance Report: A Critique” by Mark Roe, Holger Spamann, Jesse Fried and Charles Wang, HBS Working Paper 21-056.

In the News

- “Capitol Ideas to Combat Climate Change” feature of BEI event, *HBS Alumni Stories*.
- “Democratizing work for the people and the planet” feature of Julie Battilana by Nora Delaney, *Harvard Gazette*.

REIMAGINING CAPITALISM

Reimagining capitalism asserts that for companies to deliver value over the long-term, their leaders have a responsibility to society as well as to shareholders. Through teaching, research, and engagement, faculty are exploring when and how companies pursue opportunities to act as change agents within the larger system, addressing public goods challenges like environmental degradation and income inequality.

Book

- “Reimagining Capitalism in a World on Fire” by Rebecca Henderson, *New York: PublicAffairs*.

Course Materials

- “Shorefast: A Strange and Familiar Way to Reimagine Capitalism” by Brian Trelstad, Wendy Smith, Natalie Slawinski (case, 320-098).
- “What is the Purpose of the Corporation?” by Rebecca Henderson, Nien-he Hsieh, and Erik Snowberg (background note, 320-070).

Courses

- “Reimagining Capitalism: Business and Big Problems” EC Course taught by Professor Ethan Rouen and Professor George Serafeim.

Events

- “Reimagining Capitalism: A Conversation with Dean Nitin Nohria and Professor Rebecca Henderson” HBS Webinar.

Practitioner-Oriented Materials

- “Reimagining Capitalism in the Shadow of the Pandemic” by Rebecca Henderson, *Harvard Business Review*.

Scholarly Research

- “Big Structural Change” feature of Rebecca Henderson by Mark Kramer, *Stanford Social Innovation Review*.
- “Climate in the Boardroom: Struggling to Reconcile Business as Usual and the End of the World as We Know It” by Rebecca Henderson, *Daedalus*.
- “Innovation in the 21st Century: Architectural Change, Purpose, and the Challenges of Our Time” by Rebeca Henderson, *Management Science*.
- “Tackling Climate Change Requires Organizational Purpose” by Rebecca Henderson and George Serafeim, *AEA Papers and Proceedings*.

In the News

- “6 experts on how capitalism will emerge after COVID-19” feature of Rebecca Henderson by Talib Visram, *Fast Company*.
- “A Harvard Professor Calling for Us to ‘Reimagine Capitalism’ Says COVID-19 Has Revealed 3 Fault Lines in Our Economy” feature of Rebecca Henderson by Richard Feloni, *Just Capital*.
- “Bonus Episode: Reimagining Capitalism (with Rebecca Henderson)” feature of Rebecca Henderson, *After Hours* podcast.
- “Business Book of the Year Award 2020 — the longlist” feature of Rebecca Henderson by Andrew Hill, *Financial Times*.
- “Capitalism Is More at Risk Than Ever” feature of Joseph Bower, Herman Leonard, and Lynn Paine by Martha Lagace, *Working Knowledge*.
- “CEOs Increasingly See Sustainability as Path to Profitability” feature of Rebecca Henderson by Dieter Holger and Olivia Bugault, *Wall Street Journal*.
- “Episode 218: What's next for sustainability careers, capitalism in a 'world on fire'” feature of Rebecca Henderson by Heather Clancy, Joel Makower, and Deonna Anderson, *GreenBiz 350* podcast.
- “Fighting Climate Change Requires a New Capitalism” feature of Rebecca Henderson by Danielle Kost, *Working Knowledge*.
- “How businesses can make positive change during the pandemic” feature of Rebecca Henderson by Adele Peters, *Fast Company*.
- “‘I believe that climate change is potentially a catastrophic risk to our entire economy’ Harvard Professor” feature of Rebecca Henderson, *yahoo!finance*.
- “In Fashion, Social Impact Is the New Black” feature of Rebecca Henderson by Tara Donaldson, *Sourcing Journal*.
- “Investors line up for the post-pandemic green recovery” feature of Rebecca Henderson by Siddarth Shrikanth, *Financial Times*.
- “‘It doesn’t have to be quite so destructive’: A Harvard Business School professor reimagines capitalism” feature of Rebecca Henderson by Katherine Dunn, *Fortune*.
- “Managing Through Crisis: Who Needs Capitalism Anyway?” feature of Rebecca Henderson, *Managing Through Crisis* webcast
- “One Last Chance to Fix Capitalism” feature of Rebecca Henderson by Scott LaPierre, *Harvard Business Review*.
- “Organizational responses to COVID-19 and climate change: A conversation with Rebecca Henderson” feature of Rebecca Henderson, *Environmental Insights* podcast.
- “Profits and Purpose” feature of Rebecca Henderson and George Serafeim by Jen McFarland Flint, *HBS Alumni Stories*.

- “Rebecca Henderson Brings Urgent Outside Voice to Sourcing Journal Summit” feature of Rebecca Henderson by John Thorbeck, *Sourcing Journal*.
- “Rebecca Henderson: Does Capitalism Need to be Reimagined?” feature of Rebecca Henderson, *Ask a Harvard Professor* podcast.
- “Reimagining Capitalism for a Broken World” feature of Rebecca Henderson, *Exponential View with Azeem Azhar* podcast.
- “Taking the Plunge” feature of Rebecca Henderson, *Harvard Magazine*.
- “The Key to Powerful Social Change: Small Villages” feature of Rosabeth Moss Kanter by Dina Gerdeman, *Working Knowledge*.
- “The Pro-Business Case for Reimagining Capitalism (with Rebecca Henderson)” feature of Rebecca Henderson, *Pitchfork Economics* podcast.
- “To Save the Climate, We have to Reimagine Capitalism” feature of Rebecca Henderson, *TED*.

SUSTAINABLE CITIES AND INFRASTRUCTURE

The world is currently undergoing the largest wave of urban growth in human history. More than half of the global population is now concentrated in urban areas, a proportion that is expected to increase to nearly 70% by 2050. Cities provide opportunities to innovate to address development needs and to reduce greenhouse gases. Below are examples of faculty work in this critical area.

Books

- “Climate Change Is Going to Transform Where and How We Build” by John Macomber, *Climate Change: The Insights You Need from Harvard Business Review* (chapter).
- “Healthy Buildings: How Indoor Spaces Drive Performance and Productivity” by Joseph Allen and John Macomber, *Harvard University Press*.

Course Materials

- “A Tower for the People: 425 Park Avenue” by John Macomber, Joseph Allen, and Emily Jones (case, 220-065).
- “Rotoplas: Bringing More and Better Water” by John Macomber and Carla Larangeira (case, 220-064).
- “Sunset Limited or Full Speed Ahead? Amtrak Talks to Congress” by John Macomber (case, 220-052).

Courses

- “Sustainable Cities and Resilient Infrastructure” EC course taught by Professor John Macomber.

Practitioner-Oriented Materials

- “Healthy Buildings: What Will We Measure and How Will We Know?” by John Macomber, *New Cities*.
- “Tenants and Investors Will Be Looking for Healthy Buildings” by Joseph Allen and John Macomber, *UrbanLand*.
- “We spend 90% of our time inside—why don’t we care that indoor air is so polluted?” by Joseph Allen and John Macomber, *Fast Company*.

In the News

- “Is it safe? And three other questions to ask before you go back to the office” feature of John Macomber by Lila MacLellan, *World Economic Forum*.
- “Is Staying in Staying Safe?” feature of John Macomber by Jill Lepore, *New Yorker*.
- “Is the Healthiest Building in the World Worth the Rent?” feature of John Macomber, *Cold Call* podcast.

- “Healthy Buildings as a Public Health Tool: A Q&A Webinar for ULI Members” feature of John Macomber by Trish Riggs, *UrbanLand*.
- “How to Build Workplaces That Protect Employee Health” feature of John Macomber, *HBR IdeaCast* podcast.
- “Leaders Who Make a Difference in the World...by 2030?” by Morgan Sheil and Raquel Schreiber, *The Harbus*.
- “Student Sustainability Efforts Pick up Steam” by Lauren Buchanan and Nicole Granet, *The Harbus*.
- “To Make a Building Healthier, Stop Sanitizing Everything” feature of John Macomber by Caroline Winter, *Bloomberg*.
- “Virus will change workspaces — and their emissions” feature of John Macomber by Corbin Hiar, *E&E News*.
- “Why COVID-19 Raises the Stakes for Healthy Buildings” feature of John Macomber by Kristen Senz, *Working Knowledge*.

SUSTAINABILITY STRATEGY

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 HBS has explored the conditions under which sustainability strategy can lead to superior performance.

Books

- “Capitalism at Risk: How Business Can Lead” by Joseph L. Bower, Dutch Leonard and Lynn S. Paine, *Harvard Business Review Press*.
- “Climate Change: The Insights You Need from Harvard Business Review” by Andrew Winston, Andrew McAfee, Dante Disparte, and Yvette Mucharraz y Cano, *Harvard Business Review*.
- “Luxury Tourism and Environmentalism” by Geoffrey G. Jones, *The Oxford Handbook of Luxury Business* (chapter).
- “Think Outside the Building: How Advanced Leaders Can Change the World One Smart Innovation at a Time” by Rosabeth Moss Kanter, New York: PublicAffairs.

Course Materials

- “Algramo” by Michael Chu, Monica Silva and Mariana Cal (case, 321-079).
- “Australia: Commodities, Competitiveness, Climate and China” by Richard Vietor and Laura Alfaro (case, 720-028).
- “Chesapeake Conservancy: Democratizing Data to Protect 30% of the Planet by 2030” by Lynda Applegate and Ankita Panda (case, 821-017).
- “Chesapeake Conservancy: Launching the Conservation Innovation Center” by Lynda Applegate and Ankita Panda (case, 820-077).
- “Climate Change in 2020: Implications for Business” by Rebecca Henderson, Sophus Reinert and Mariana Oseguera (background note, 320-087).
- “Sustainable Product Management at Solvay” by George Serafeim, Vincent Dessain, and Mette Fuglsang Hjortshoej (case, 120-081).

Courses

- “Business at the Base of the Pyramid” EC Course taught by Professor Michael Chu.
- “Grand Challenges for Entrepreneurs” EC Course taught by Professor Tarun Khanna.
- “HBS - Robert R Wilson Program on Strategic Management for Environmental Leaders” Executive Education Course.

- “Purpose & Profit” EC Course taught by Professor Mark Kramer.
- “Strategy for Entrepreneurs Intensive: Critical Choices in Creating a Successful Enterprise” EC Course taught by Professor John Wells.

Events

- “Virtual EarthFest: A Conversation with Bill Wehl: Mobilizing Companies to Address the Climate Problem” HBS Webinar.

Practitioner-Oriented Materials

- “Climate Change Exhibit Overview: From Business as Usual to Business as Vital” webinar of BEI exhibit.
- “Covid-19 pandemic shows why people and the environment should be at the heart of business” by Isabelle Ferreras and Julie Battilana, *South China Morning Post*.

In the News

- “A Social Impact Roadmap; Arts Leadership in a Pandemic; Amplifying Hispanic Contributions” *HBS Alumni Stories*.
- “Businesses Need a 'Catalyst' to Make CSR Practices Stick” feature of Robert Kaplan and George Serafeim by Michael Blanding, *Working Knowledge*.
- “COVID-19’s Hard Lessons Might Prepare Business for Climate Change” by Danielle Kost, *Working Knowledge*.
- “Global Ocean Trust: Protecting the Blue Planet in New Ways” feature of Rosabeth Moss Kanter, *Cold Call* podcast.
- “New committee to advise Bacow on sustainability goals” by Nate Herpich, *The Harvard Gazette*.
- “What Do People Really Believe About Climate Change?” by Gretchen Gavett, *Harvard Business Review*.
- “Your Company’s Next Leader on Climate Is...the CFO” by Laura Palmeiro and Delphine Gibassier, *Harvard Business Review*.

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