











Honesty and Reflection Disruption and Resilience Inquiry and Evidence Hope and Action



2019–2020 ANNUAL REPORT MIT Sloan Sustainability Initiative





Sustainability is not just about the environment. Our systems are interconnected, which is why we believe a sustainable planet is also a just planet. The Sustainability Initiative was founded with the goal to create a world where humans and nature can thrive for generations to come. Since our inception, we have tried to drive a fundamental shift in how the world defines and solves sustainability problems. And still, there is more to do. Systemic racism and injustices continue to put vulnerable lives and our planet at risk, yet are often seen as outside the scope of "sustainability". We believe sustainability cannot be achieved without addressing these problems.

The events of the past year remind us how much work we have to do to create a world where all can thrive. Similar to the climate crisis, the public health crisis ignited by the pandemic has brought the inequities, injustices, and failures of our systems into vivid relief. Enduring racial inequalities, in wealth and in health, are reflected in the virus's death toll, and in the national movement for racial justice in the United States. We are all in this together, but in many ways, we are still far apart.

"When it comes to achieving social progress, one of the greatest dangers is a false sense of accomplishment. Aim high, measure outcomes and intentions, and never be satisfied."

ROBERTO RIGOBON, THE SOCIETY OF SLOAN FELLOWS PROFESSOR OF MANAGEMENT AND PROFESSOR OF APPLIED ECONOMICS



Sustainable Change for All

Each member of our team cares deeply about these issues. But at times we might have focused too narrowly, forgetting to stress the essential interconnectedness. We are acutely aware that carrying the MIT name comes with a deep sense of responsibility. As such, we believe it is our duty to examine our own contributions to systems that uphold unjust treatment. To this end, we are questioning how we can most effectively leverage our influence, our platform, and our community to make lasting, sustainable change for all humankind.

As we strive to improve, we believe this is a time for honesty and reflection. Asking questions and humbly listening to the answers. Elevating the voices of those most harmed by unjust systems and those leaders making effective change. Taking action that aligns with the best science and helping others to do the same—because tackling global challenges together is what the Sustainability Initiative is built to do.

Please see page 23 for our Diversity, Equity, Inclusion and Justice Action Plan, and how you can collaborate with us.

COMMUNITY PROFILE

Browning the Green Space



Kerry Bowie, SB '94, MBA '06, Co-founder and Managing Partner, Msaada Partners

Kerry Bowie is all about crossing sectors to solve big sustainability problems...for everyone. "I'm as comfortable in Nubian Square as I am in Kendall Square," says Kerry. "I can talk to governors and church leaders. With everyone, I always seek to find a bridge." This strategy has served Kerry well over his 25 years in environmental research, operations, and policy, across the private, public, and nonprofit sectors.

With a background in environmental engineering and more than a decade at Texas Instruments, Kerry was one of the few grads in his MBA class to go to work for the government. For nine years, he held a variety of roles in



the Commonwealth of Massachusetts Executive Office of Energy and Environmental Affairs and the Massachusetts Department of Environmental Protection (MassDEP).

During Kerry's time as associate commissioner, he led the state's Brownfields Program and MassDEP's Environmental Justice Strategies. He also represented the department on the Climate Change Adaptation Subcommittee, MA Food Policy Council, and Metropolitan Area Planning Council Executive Council. But over time, despite his successes, Kerry realized he could do better.

While mitigating climate change by reducing greenhouse gases or adapting to it through preparedness were important to many Massachusetts communities, they were not the most important issues to underserved communities. More pressing were jobs, education, housing, transportation, food insecurity, and public safety, to name a few. "As a person of color, a Black man, I got it," Kerry says. "But as a public servant and environmental official, I did not think that jobs, for instance, and climate change action were mutually exclusive."

Equity and Sustainability

In 2015, Kerry took what he learned in public service and set out to create a social impact consulting practice to support small businesses, entrepreneurs, and nonprofits working in underserved communities. The result was Msaada Partners. "We understand that change is not always easy," Kerry says of Msaada, which is Swahili for service. "Our mission is to empower social impact through consulting, coaching, and connecting. Our goal is to serve communities of color by providing technical assistance to promote entrepreneurship and innovation that leads to wealth creation and more sustainable communities."

Kerry and his partners have made a significant impact in five short years. Earlier this year, the Boston Business Journal named Msaada in its list of the 100 largest minority-owned firms (#57) in the city. But Kerry soon began to visualize another way to create impact, shifting his attention from entrepreneurs to investors.

"I wasn't seeing many entrepreneurs of color in the cleantech and environmental space," Kerry says. "And while technical assistance, consulting, business advising, and coaching is needed for entrepreneurs of color, the companies they support also lack access to capital." **Roughly 1% of venture capital funding goes to African-American founders,** he notes, and that percentage is even lower if you factor in gender, given that women bring in just under 3% of VC funding in total.

Cleantech for Good

Kerry's new brainchild is <u>Browning the Green Space</u> (BGS). "People of color often times experience more than their fair share of 'environmental bads', like Brownfields, pollution, and asthma," Kerry says, "while they receive less than their fair share of 'environmental goods', like cleantech jobs in energy efficiency, renewable energy, water, and urban farming."

The COVID-19 pandemic notwithstanding, climate change and the persistent wealth gap are two of the most important issues facing our society, Kerry notes. If current trends continue, the world is likely to pass the 1.5 degrees Celsius mark for global temperature rise between 2030 and 2052, unless we find a way to reach net zero emissions (IPCC 2018). And locally, the Federal Reserve Bank of Boston's 2015 "Color of Wealth" report estimates the average net worth of Black households in Boston to be \$8 vs. \$247,500 for White households.

BGS has the potential to address many of these problems at once—ideal for a self-proclaimed 'efficiency geek' like Kerry.

As he stated in his presentation to this year's Sustainability Initiative Renewable Energy Finance roundtable,

People of color often times experience more than their fair share of 'environmental bads'... while they receive less than their fair share of 'environmental goods' like cleantech jobs."

"Supporting underrepresented professionals in the energy efficiency and renewable energy space with coaching, contracts, and capital will not only create jobs and careers that provide pathways out of poverty, but also begin to close the wealth gap—all while addressing climate change."

Clean Energy Coalition

Since Kerry launched BGS as a nonprofit in September, it has quickly become a vital coalition of leaders and organizations in clean energy in the Northeast—more than 65 and counting, including the Sustainability Initiative. The organization plans to target underrepresented customers, educate prospective employees, help employers recruit people of color, and give a broader swath of entrepreneurs and investors access to new opportunities in the clean energy space. As an Initiative, we're thrilled to support this exciting endeavor. DISRUPTION AND RESILIENCE

We do not have all the answers, but we are smart enough to know we are smarter together.



In early March, MIT President L. Rafael Reif instructed students to pack "as if you do not expect to return here until the fall semester." Within days, the Sustainability Initiative had to re-envision how to deliver on its mission and goals. In short order, our team adopted remote technology, revised curricula, reframed Sustainable Business Lab (S-Lab) projects, and embarked on COVID-related research that provided guidance to policy leaders everywhere. When faced with **disruption** our community responded with **resilience**.



Jason Jay

Virtual S-Lab

S-Lab went fully remote by March 12, five days before required to do so. Students canceled travel plans, revised project scopes, and switched to remote technology. Despite it all, hosts and students alike remained committed to completing important sustainability projects.

Jason Jay, director of the Sustainability Initiative, is thinking ahead to how remote technology could offer new dimensions to S-Lab and Action learning in general in the future. "I am really enjoying the chance to fluidly incorporate outside guests into the Zoom classroom."

"This project was so valuable because the team provided actionable recommendations, which we are currently working on implementing...We can't wait to see what our energy savings look like!"

NEHA SINGH, FORMER SENIOR DIRECTOR OF OPERATIONS, GIRL SCOUTS OF THE USA

Family-Owned Impact

During this tumultuous year, many family-owned enterprises and foundations—from the Mars company to Walmart to the Ford Foundation and others—were inspired to re-examine how their values align with their investments. Many are seeking to better integrate sustainability, equity, and social responsibility into their portfolios. Jason Jay, in collaboration with fellow MIT Sloan senior lecturer John Davis, is developing tools and materials to help. John is a globally recognized pioneer and authority on issues related to the family enterprise, family wealth, and the family office. He and Jason worked together to create a social impact component for John's executive education courses on family enterprise. This fall, the Initiative is offering tools and webinars to help family-owned enterprises and foundations of all sizes create a positive legacy for their families and society.



Capstone Pivot to COVID-19

On March 30—the day that 265 million Americans were being urged to stay home—the 48 students in the Sustainability Certificate capstone class "met" for the first time. But instead of exploring corporate responsibility through an industry deep-dive on the role pharmaceutical companies might have played in the opioid epidemic (as the course last year did), this year's course pivoted to examine the responsible business response to the pandemic. As we suspected, companies dedicated to treating their employees well, divesting from fossil fuels, and securing their supply chains have fared better during the crisis.

As many students grappled with the pandemic's impact on their lives and careers, the Capstone community remained a constant. As in years past, the course explored the complex set of circumstances and choices leaders face in light of uncertain environmental and social consequences. But in less than a month, the Sustainability Initiative team, led by Associate Director Bethany Patten, acted swiftly to revise the syllabus and readings, switch to the Zoom platform, and secure remote guest lecturers. Speakers covered topics from supply chain security to treatment of workers to systemic inequality to the purpose of the corporation and the role leaders and organizations play in responsibly leading us through the pandemic.

Zoom Certificate Graduation

Students enthusiastic about sustainability are among our world's greatest assets. This year's cohort of <u>Sustainability</u> <u>Certificate</u> students showed grit and grace in a disrupted semester and uncertain world. Their commitment to sustainability, even through crisis, left us feeling inspired and hopeful.

Family and friends who wouldn't usually be able to attend the graduation ceremony showed up in droves in May via Zoom. Special thanks to Patrick Flynn, MBA '12, vice president sustainability, Salesforce; and MIT Sloan's *John C Head III Dean* David C. Schmittlein for their words of encouragement and guidance.

63	Certificate Graduates (a record number!)
19	EMBAs (also record number!)
352	total Certificate Graduates since program inception

You are about to join one team. We work for humankind. We work for planet Earth. And that's one of the most inspiring parts of what you are about to embark on."

PATRICK FLYNN, MBA '12, VICE PRESIDENT SUSTAINABILITY, SALESFORCE



COMMUNITY PROFILE

Solar Disruption

Sandhya Murali, MBA '15, Sustainability Certificate Co-Founder & COO, Solstice

Solar Disruption

Rooftop solar panels are a triple-threat. They allow people to save money on electricity, invest in renewable energy, and help combat the climate crisis. Unfortunately, the majority of Americans—80% in fact—cannot install a rooftop system. Sandhya Murali is changing that.

Sandhya and her co-founder, Steph Speirs, MBA '17, explicitly created a social enterprise to dismantle this system of inequality in the clean energy industry. It's called <u>Solstice</u>.

Over the past five years, Sandhya and her colleagues have worked hard to put clean energy in the hands of ordinary Americans, regardless of their income, their home ownership status, and other markers of privilege. And it all started at MIT Sloan.

Homegrown at MIT Sloan

Sandhya was on track to graduate with her Sustainability Certificate when she got an email from Steph, then an incoming MIT Sloan MBA working to improve access to solar energy in Pakistan and India. Steph realized developing countries weren't the only ones struggling with energy inequalities. She reached out to the MIT Sloan community to see if anyone was interested in joining an early-stage solar social enterprise in the United States. Sandhya had interned at Buen Power Peru, a for-profit social enterprise that distributes inexpensive solar lamps to off-grid communities in the Andes, and worked on several sustainability projects through S-Lab and Sloan Entrepreneurs for International Development. These experiences piqued her

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Community solar is a huge, untapped market, but we're never going to scale and make the impact on climate change we need to make if we don't figure out how to make this form of solar work for everyone." interest in bringing renewable energy to those traditionally locked out. She was quick to reply to Steph...and eventually helped launch Solstice.

"We became an MIT startup," says Sandhya, who now manages the organization's internal operations. "As Steph began her MBA program, MIT adopted Solstice, and we've grown since then with support from the school." Among other early-stage supporters, <u>The Martin Trust Center for</u> <u>MIT Entrepreneurship</u> delta v accelerator program and the MIT Sandbox Innovation Fund helped bring Solstice to life. And while Sandhya worked to get the enterprise off the ground, the Sustainability Initiative hired her to help create and launch the <u>Renewable Energy Finance roundtable</u> in the fall of 2015.

Sharing the Power of the Sun

Many people are locked out of solar because they aren't allowed to put solar on their rooftops or can't afford the upfront costs, says Sandhya. As a result, families who need solar savings the most in this country are the least likely to get it. Solstice—the first social enterprise dedicated to expanding affordable solar power to everyone—offers a disruptive solution. The company enrolls households and community organizations in shared solar farms, creates financing innovations that expand access to underserved Americans, and provides frictionless subscriber management software for community solar projects.

"Community solar is a huge, untapped market," says Sandhya. "We're never going to scale the benefits of renewable energy and make the impact on climate change we need to make if we don't figure out how to democratize access to clean energy."

Energy Score

To get solar in the United States, you either have to be able to afford to put solar on your rooftop—which costs anywhere from \$10,000 to \$30,000—or you have to have the right FICO score. FICO is the credit score used by community solar developers to qualify customers, but it doesn't measure whether you pay your utility bills, cell phone bill or rent on time. With this in mind, Steph and Sandhya teamed up with data scientists from Stanford University and MIT, including Christopher Knittel, the George P. Shultz Professor at MIT Sloan, to create a new qualification metric called the EnergyScore. The new tool uses a machine learning system trained on data from over 800,000 consumer records, including things like utility payments, to predict payment



behavior in community solar contracts. Sandhya says it predicts future payment behavior more accurately than FICO and qualifies more low-to-moderate income Americans to participate in community solar.

Solstice will be leveraging the EnergyScore in a series of community solar projects installed on the rooftops of public housing buildings in New York City, in partnership with the NYC Housing Authority.

"We think it's imperative that we figure out how to make this model of residential solar scale quickly," Sandhya says. "Community solar brings more distributed generation and clean energy to our grid, while enabling people who haven't been able to go solar to now get access to clean energy savings."

To date, Solstice has connected nearly 3,000 customers to community solar projects and generated demand for over 100 megawatts of clean energy across New York and Massachusetts. "Including a broader swath of American households in community solar projects isn't just the right thing to do," says Sandhya, "it's an essential part of combating the climate crisis."



Science matters. Rigorous evidence and research is crucial, now more than ever.



Our team of researchers played a key role in informing the global response to the pandemic, applying academic rigor to real-world problems. Their rapid **inquiry** led to just-in-time tools and **evidence**, as business and civic leaders hungry for guidance struggled to make effective decisions about public health, the economy, and climate.





Hazhir Rahmandad

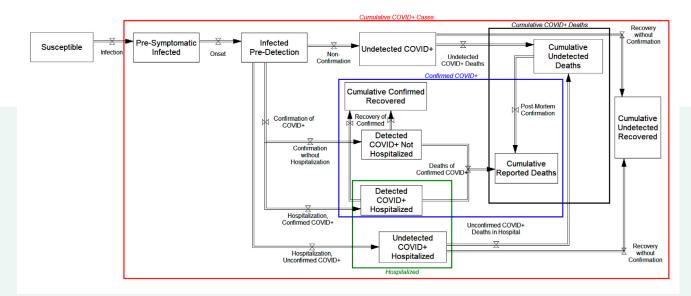


Pandemic Research

As COVID-19 spread, Hazhir Rahmandad, a system dynamics professor; Tse Yang Lim, PhD candidate; and John Sterman created a dynamic epidemiological model of the pandemic. Scientists and public health officials knew that the number of cases and deaths was underestimated. A critical question was by how much? The team used the model to estimate the likely true levels in every nation that reports sufficient data for the analysis-spanning nearly 5 billion people. Their July paper showed that global spread of the virus was vastly underreported–infections were likely 10.5 times higher and deaths 50% higher. The results have important implications for policies to limit the spread of COVID-19 and was widely reported.

"Millions of infections could have been prevented if governments had alerted the public and taken stronger action earlier. We can't change the past, but it's still possible to prevent millions more and save many lives, even before effective vaccines become available."

JOHN STERMAN, JAY W. FORRESTER PROFESSOR OF MANAGEMENT



Don't get it or don't spread it?

The COVID-19 pandemic threatens millions of lives, and an effective response will require individuals to take costly and difficult measures to slow the rate of transmission. Yet it is unclear how to best motivate preventive actions, which can be conceptualized as either selfinterested or cooperative efforts.



David Rand

Erez Yoel

Erez Yeoli and David Rand were quick to conduct <u>research</u> that became the basis for effective public health messaging campaigns across the country. Their findings suggested that **emphasizing the prosocial, public benefits of prevention efforts could be an effective pandemic response strategy**.



Roberto Rigobon Takes to YouTube

Shortly after MIT closed the campus to in-person activity, Roberto Rigobon reached out to the MIT Sloan and Sustainability Initiative community via YouTube. During the spring and summer, he delivered a series of lively talks and webinars about public health, economic impacts, supply chain resiliency amid recessions, and more.

"In emerging markets, you are making choices between death from COVID and death from poverty or reopening."

ROBERTO RIGOBON, THE SOCIETY OF SLOAN FELLOWS PROFESSOR OF MANAGEMENT AND PROFESSOR OF APPLIED ECONOMICS



Business How the 'Beer Game' Helps Retailers Solve Toilet Paper Crisis By Matthew Boyle

March 21, 2020, 7:00 AM EDT

John Sterman featured on Bloomberg.com

The Beer Game he's taught at MIT Sloan for over 40 years simulates supply-chain volatility, helping people understand the boom-or-bust conditions for hoarding products from disinfectant wipes to canned goods to toilet paper.

Bloomberg

Here's the good news: if we approach these conversations in an authentic and compassionate way, we can strengthen our relationships, reinforce new norms we need to fight the pandemic, and maybe even invent new solutions useful long after this crisis is over."

JASON JAY, PSYCHOLOGY TODAY, APRIL 6



We're putting data and tools in policymakers' handsacross the political spectrum-advancing solutions that work for people, business, and nature.



A more sustainable and just future is ours to lose, unless we take **action**, in real ways with urgency and resolve. A crisis can provide the opportunity and the **hope** needed to forge a better society, but the crisis itself does not do the work. We can offer data and evidence, we can offer tools and education, but the action is up to all of us.

"What I like about En-ROADS is how it can support a really thoughtful conversation."

REP. JOHN CURTIS, U.S. HOUSE OF REPRESENTATIVES (R-UTAH)

Climate Pathways Project

The urgency to act on climate is real, and it is incumbent on institutions like MIT to provide the best possible scenarios for a safe future where humans and nature can thrive. Grounded in the latest research, and with the support of high-level influencers in our extended MIT community, Climate Interactive's C-ROADS and En-ROADS climate simulations are fast becoming the go-to tools for leaders in policy, business, and civil society.

With the help of our alumni, including Sustainability Initiative advisory board members **Michael W. Sonnenfeldt**, **SB '77, SM '78; Keishin Sasaki, SM '89; Cecilia Melin, SM '89**; we shared En-ROADS with:

- **100+ elected officials and 145 staff members**, including one-on-one briefings with U.S. senators, representatives, governors, and state legislators, and group presentations to caucuses, committees, and coalitions, both Republicans and Democrats.
- 700+ business leaders, including individual briefings with C-level executives, and group briefings to boards of directors, investor groups, members of trade organizations, and at industry conferences.
- Hundreds of leaders at nonprofits, think tanks and foundations



In the last 10 years:

60,000 participants in 85 countries have used the En-ROADS simulation

15 civic leaders endorsed En-ROADS, including the Democratic Governors Association and the U.S. Chamber of Commerce.

Read Joann de Zegher's paper on Crowd Sourcing Market Information from Competitors

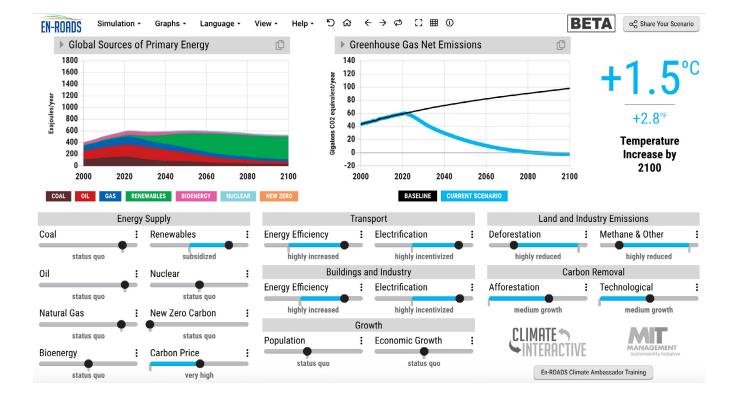
Joann de Zegher



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En-ROADS is quite simply a climate crisis game-changer for policymakers and people across the country."

JOHN KERRY, U.S. CLIMATE ENVOY, FORMER SECRETARY OF STATE 2013-2017



Aggregate Confusion Project Launch

The Sustainability Initiative launched the <u>Aggregate Con-</u> <u>fusion Project</u> this year to improve the quality of Environmental, Social, and Governance (ESG) measurement, in collaboration with the financial sector. <u>The Massachusetts</u> <u>Pension Reserves Investment Management (PRIM) Board</u> <u>joined the project</u> this fall as a founding member. Thanks to our Advisory Board member **Mike Even, SM '84**, who also sits on the PRIM Board, for helping us build that promising relationship.

Mass PRIM manages the \$75 billion Pension Reserves Investment Trust (PRIT) Fund, a pooled investment fund that invests the pension assets of the Massachusetts Teachers' and State Employees' Retirement Systems, among others. "We hope that this project will reinvigorate the debate on how to improve [ESG] ratings, and we're looking forward to being a part of the membership council, which will collaborate on implementation strategies," says Michael Trotsky, executive director and chief investment officer at Mass PRIM.

Building on initial research conducted by Florian and Roberto, the project is now charting a course toward more rigorous, coherent methods for ESG integration, with four key goals:

- Reduce the level of noise in measuring specific ESG categories like labor treatment, carbon emissions, and product safety;
- Understand the effect of ESG-driven investment flows on stock price and firm behavior;
- Develop smarter ways to aggregate ESG factors into composite indices;
- Reliably assess investor preferences to enable ESG indices to be more customized and tuned to investors' values.

Each of these workstreams has relevance for asset owners and managers, as well as for regulators working to ensure transparency, consistency, and impact of ESG investment. Firms who join will be at the vanguard of a rigorous, more robust approach to sustainable investing. New members are welcome to apply. To learn more about membership, please contact Jason Jay at jjay@mit.edu



"If businesses, consumers, governments, and investors want to make decisions based on ESG, we need to provide them with unified guidance. This is the purpose of the Aggregate Confusion Project."

ROBERTO RIGOBON, THE SOCIETY OF SLOAN FELLOWS PROFESSOR OF MANAGEMENT AND PROFESSOR OF APPLIED ECONOMICS

Influencing ESG Policy

The demand for investor-grade environmental data and a streamlined, universally accepted disclosure methodology is increasing. There are over 100 sustainability rankings and ratings systems in the world, each with its own methodology and insufficient synergies between them. Roberto Rigobon and Florian Berg revealed these discrepancies in their latest research, and ignited an international debate.

This summer, the AMF (the French regulator) released their proposal for ESG regulation. Regarding ESG rating agencies they followed all of Florian's suggestions. The agency even sent him an email saying that he "strongly" influenced their opinion. Media outlets featuring the research include, CIO magazine, Boston Business Journal Bloomberg, Forbes, The Financial Times, The Irish Times, The Wall Street Journal, and Frankfurter Allgemeine Zeitung. The Global Research Alliance for Sustainable Finance and Investing awarded Florian Berg, Julian Koelbel, and Roberto Rigobon the Best Paper Prize for 2020.

COMMUNITY PROFILE

Sustainability Superpowers



Patrick Flynn, MBA '12, Sustainability Certificate Vice President Sustainability, Salesforce

The best sustainability strategies start by recognizing what it is you do well, where you have influence, and how you can use your core strengths to drive positive change. Or in other words, as Patrick Flynn says: What's your sustainability superpower?

Patrick is a mechanical engineer by trade. His very first job was designing HVAC systems for high-rise buildings. "It showed me up close the failures in the building and

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This is an all-of-the-above moment in the climate emergency...we need all helpful actions executed in parallel, as fast as the highest levels of impact will allow." construction sector to design for the long term—the misaligned incentives and miscommunication—and it gave me this deep sense of responsibility to try to fix things." Patrick felt that even if everyone didn't know exactly how a building worked, those who did had a responsibility to design holistically. "With our global built environment contributing to 30% to 40% of global emissions, it naturally drew me into climate change."

This concern for the climate led Patrick to become an investor in a cleantech venture capital firm, where he focused on green building technologies and software-driven energy efficiency. Soon after, he took a job at IO, a leading global co-location data center provider, where he led sustainability strategy.

The MIT Sloan Advantage

When Patrick was considering an MBA program, his priorities were to build a solid business foundation and be part of a vibrant community. "I loved the diversity," he says of the MIT Sloan community. "That's what struck me first. It seemed like a program where I could gain a really broad amount of perspectives while contributing my own point of view. From the large number of international students, to the diversity of professional backgrounds and professional goals—I felt it right away."

And then there was the sustainability program and action learning. "I felt like I could really hone my skills as an aspiring change-maker with the combination of those two." As a student, Patrick was co-chair of the Dean's Student Advisory Council, captain of the soccer team, founder of the MIT Water Club, and organizer of a student trip to Asia to study organizations tackling water challenges and opportunities.

Carbon Accounting

By the time Patrick joined <u>Salesforce</u> in 2015, he was well-prepared to apply his newfound knowledge and experience to the challenge at hand—modernizing an incredibly intricate carbon accounting process. In line with his philosophy about sustainability superpowers, Patrick helped Salesforce on its journey toward two significant commitments—to support all operations with 100% renewable energy, and to offset all operational and product-related emissions. Way ahead of schedule, Salesforce has already basically achieved both.

"Renewable Energy we will hit next year," says Patrick, "only from new renewable energy that we have helped bring to the grid. With everything, quality is of the utmost importance. We have moved as fast as high-quality action allows."

With these successes under his belt, Patrick knew he and his team could accomplish even more. Today, the company has aligned long-term commitments to a 1.5 degree Celsius future with a Science Based Target. "The world needs longterm alignment and near-term action," says Patrick. "That's why our commitment to nature-based solutions is also vital." Salesforce supports the trillion trees initiative via 1t.org and set its own 100 million tree goal. "This is an all-of-the-above moment in the climate emergency," Patrick says. "We need all helpful actions executed in parallel, as fast as the highest levels of impact will allow."



The Sustainability Cloud

With high impact in mind, Salesforce has launched its most comprehensive product yet, <u>Salesforce Sustainability Cloud</u>. Rolled out in 2019, this platform is best understood as a carbon accounting solution that enables organizations to more quickly audit their carbon emissions and take action. Customers across all geographies and a huge number of industries are already using it to quickly track, analyze, and report reliable environmental data that helps them reduce their carbon emissions.

"Climate change, to me, is the biggest macro-shift ahead for businesses of every sector, size, and geography," says Patrick. "It will transform energy, agriculture, transportation, financial services, insurance, you name it! So for Salesforce to be there, with our technology platform, to help our customers to take advantage of the opportunities that will come from this shift is really inspiring to me. Our technology in their hands is us using our superpower for climate. And the beautiful thing is—when a customer uses it, the product helps them find their own superpower for climate too."

Climate Action

One initiative Patrick is particularly excited about is using Salesforce Sustainability Cloud to go deeper upstream in his own company's supply chain. Salesforce has its own goal that suppliers representing 60% of its Scope 3 emissions will set Science Based Targets of their own by 2024. "We're already using our own product internally to help us achieve that goal and I expect that same functionality will end up in our customers' hands, too, before too long."

All throughout his career, Patrick has turned to the Sustainability Initiative as a source of inspiration. Call it his superhero sidekick, of sorts. He has stayed in close contact with many faculty members. This past spring, he spoke to the graduating class of Sustainability Certificate holders via Zoom.

"I love seeing how many world-changing leaders and ideas keep coming out of the program," he says. "And, I find myself getting back to so many lessons learned, including Jason Jay's Howard Thurman quote: 'Don't ask what the world needs. Ask what makes you come alive, and go do it. Because what the world needs is people who have come alive.' Only addendum I'd make is 'and if you're unsure, pick climate action.'" Let's not go back to normal. Let's go forward to better. There are many ways to get involved with us. Host a project or intern. Hire our certificate graduates. Become an En-ROADS Ambassador. Make a financial investment in our work.

Sind out how you can get involved

Diversity, Equity, Inclusion, and Justice Action Plan

The Sustainability Initiative stands with the leadership of MIT and the comprehensive actions the Institute is taking on diversity, equity, and racial justice. Like the Institute, we value creativity, hard work, transparency, and accountability. Our team is committed to continuing to learn, sharing our progress, increasing transparency, and generating ideas to build a better MIT. We see our contributions to these efforts in phases.

Phase 0: Over the past few months, we have been looking inward, thinking deeply, and engaging in conversation about diversity, equity, inclusion, and justice (DEIJ). Drawing on the insights and experience of our diverse community, we're committing our time and resources to embed this into the fabric of our mission.

Phase 1: As a team, we have committed to some initial actions we can take or amplify in the short term. In the coming months, we will share our progress and long-term goals so we can be held accountable. We invite you to be in dialogue with us, challenge us, and hope you will join us.

Provide the Best Education

- Seek targeted feedback from alumni and students on our programs and progress
- Ensure diverse representation and topics in our co-curricular programming
- Include DEIJ topics in MIT Sloan Executive
 Education courses
- Further integrate DEIJ topics in our Capstone course

Apply Academic Rigor to Real-World Problems

- Expand our climate models and research to include environmental justice implications of climate change and policies to address it
- Integrate existing and new research on multi-solving into the way we present and use En-ROADS and our other climate models

Empower Leaders Everywhere to Take Action

- Expand access to and diversity of roundtable and networking events, such as the Renewable Energy Finance roundtable (REF)
- Apply a DEIJ lens to S-Lab host recruitment and projects
- Apply a DEIJ lens to all Initiative marketing and communications

Phase 2: We will set concrete goals that align to the Institute-level goals for Composition, Inclusion, Engagement, and Achievement. We will plan 2021-22 DEIJ activities that align to those objectives.

Phase 3: We will continue to hold ourselves accountable via our Advisory Board and student/alumni engagement, for progress on our strategy.

Sustainability Initiative DEIJ Action Plan



MIT's Strategic Action Plan for Diversity, Equity, and Inclusion deiactionplan.mit.edu

Sustainability Initiative Advisory Board 2019-2020

Bob Ackerley, SB '80 Co-Founder and Director Smith and Smith Associates

Thippaporn Ahriyavraromp Group CEO, DT Group of Companies

Nina (Yue) Chen, SM '02, PhD '05 Sustainability and Climate Initiatives Director, New York State Department of Financial Services

Carolyn duPont, MBA '16 Growth and Partnership Lead Upstream Tech

Michael Even, SM '84 Director of Strategy and Investment Research, FaithInvest

Ed Fish, MBA '12 Vice President and General Manager, Bay State Milling Company

William Hilliard, SM '84 Operating Partner Generate Capital

John Mazzarino, SM '77 Founder and Managing Principal, Cherokee Fund

Cecilia Melin, SM '89 Managing Partner Asian Technology Advisors

Ajay Mehta, EMBA '13 General Manager, New Energies Research and Technology Shell Oil Company

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David Miller, SB '90, SM '91, PhD '07 Investment Manager

Cherie Nursalim Vice Chairman, GITI Group

Liesbet Peeters, MBA '05 Founding and Managing Partner, VOLTA Capital

Keishin Sasaki, SM '89 President, Representative Director, e-solutions

Serge Schoen, MBA '96 Founding Partner, Ambrosia Investments, Eightsone

Liesel Pritzker Simmons, Co-Founder and Principal Blue Haven Initiative

Michael W. Sonnenfeldt, SB '77, SM '78 Founder, Chairman MUUS & Company, Tiger21

Raymond Wood, SM '90 Managing Director, Group Head Power, Renewables and Energy Infrastructure, Bank of America Merrill Lynch



The Advisory Board managed to meet in person to discuss strategic planning in Aspen, Colorado, before the the virus shut down travel.

"Today's societal divides and socioeconomic challenges have been exacerbated by the global climate crisis and COVID-19 pandemic. They have had a disproportionate negative impact on disadvantaged communities around the world. The opportunity this offers for the impact community to rise to the occasion and put its capital to work to create positive societal and climate impact at a greater scale has never been greater than the present time."

LIESBET PEETERS, MBA '05 FOUNDING AND MANAGING PARTNER, VOLTA CAPITAL

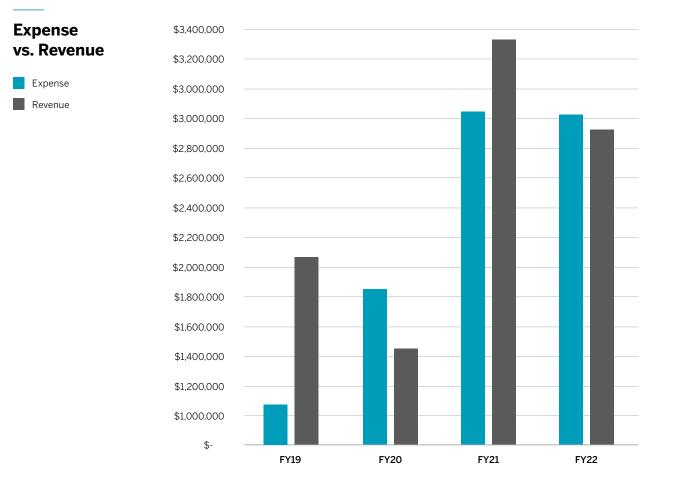


Our Donors

We are grateful to the following donors who have helped us work toward achieving our mission this year.

Robert Ackerley, SB '80	Dwight and Kirsten Poler
Michael Even, SM '84	Keishin Sasaki, SM '89
Dorothy and Robert King	Michael Sonnenfeldt '77, SM '78 and Katja Goldman Akira Sugano , SM '86
John A. Mazzarino, SM '77	
Mitch and Joleen Julis	
John D. SF '94 and Aedie McEvoy	Raymond S. Wood, SM '90 and Mary Anne J. Kim
Cecilia B. Melin, SM '89	





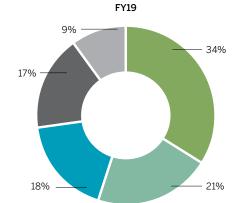
Expense Details

Outreach & Engagement Marketing & Communications

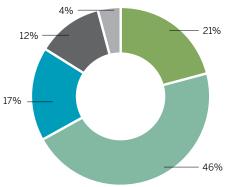
Education

G&A

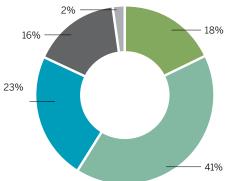
Research

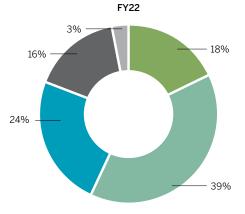






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Our Team

LEADERSHIP TEAM



Jason Jay Senior Lecturer, MIT Sloan; Director, MIT Sloan Sustainability Initiative



Bethany Patten Lecturer, MIT Sloan; Senior Associate Director, MIT Sloan Sustainability Initiative



Roberto Rigobon Society of Sloan Fellows, Professor of Management; Faculty Co-Director, MIT Sloan Sustainability Initiative

STAFF

Emma Caldwell Academic Program Manager

Dominic Farello Communications and Policy Coordinator

Tracey Palmer Communications Consultant



John Sterman

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

Read more about Our Team

FELLOWS AND TEACHING ASSISTANTS

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RESEARCHERS AND AFFILIATED FACULTY

Florian Berg Research Associate

Jasmina Burek Postdoctoral Associate

Erez Yoeli Research Scientist

Valerie Karplus Visiting Associate Professor Global Economics and Management

David Keith Assistant Professor, System Dynamics

David Rand Erwin H. Schell Professor, Associate Professor, Marketing

Joann de Zegher The Maurice F. Strong Career Development Professor, Assistant Professor of Operations Management

















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