MIT engagement forum 2: Viewpoints from the MIT Community engaging on climate change: An all-of-MIT approach
April 1, 2021 · Speaker Biographies

Pervez S. Agwan

Pervez S. Agwan C/O '21 is currently the co-president of the MIT Energy Club, one of the largest student organizations on MIT's campus, and is a second year graduate student. The MIT Energy Club leads some of the largest energy focused events on MIT's campus every year, and is advancing fact-based discussion on the world's most pressing energy and climate challenges. Agwan's interests lie in large scale de-carbonization, and shifting his home state of Texas to a 100% carbon-free energy grid. Agwan has spent the last few years of his career consulting the world's many energy companies, and is now focused on America's energy transition, alongside the move to a net-zero economy. His book *Power Politics & Petro Profits: Grappling with Gridlock and Getting to Net-Zero* is due to publish by the end of 2021.

Megan Black

Megan Black is an associate professor of history at MIT, specializing in environmental history, U.S. and the world, and political economy. Her recent book, *The Global Interior: Mineral Frontiers and American Power* (Harvard University Press, 2018), received four top prizes in history, including the George Perkins Marsh Prize for environmental history and the Stuart L. Bernath Prize for international history. She previously taught at the London School of Economics. Her new research explores metals mining spurred on by the communications revolution in the 1970s, as well as key transnational anti-mining campaigns it inspired.

Diana Chapman Walsh

Diana Chapman Walsh, PhD is a life member emerita of the MIT Corporation and former member of its executive committee. She is president emerita of Wellesley College (president, 1993-2007). She was inaugural chair of the board of the Broad Institute of MIT and Harvard and on the boards of the Kaiser Family Foundation, the Institute for Healthcare Improvement, the Mind and Life Institute, the State Street Corporation and Amherst College. Chapman Walsh is a member of the American Academy of Arts and Sciences and a former professor and department chair at Harvard School of Public Health. She is co-founder of the Council on the Uncertain Human Future.

John E. Fernández

John E. Fernández ‘85 is the director the MIT Environmental Solutions Initiative and founder and director of the MIT Urban Metabolism Group. He is a professor of building technology in the Department of Architecture and a practicing architect. He is author of two books, numerous articles in scientific and design journals including *Science, the Journal of Industrial Ecology*, *Building and Environment*, *Energy Policy* and others, and author of nine book chapters. He is chair of Sustainable Urban Systems for the International Society of Industrial Ecology and associate editor of the journal *Sustainable Cities and Society*. Fernández served as director of the Building Technology Program in the Department of Architecture from 2010 to 2015 and as the director of the International Design Center at MIT from 2012 to 2015. He previously served as the director of research for Sustainable Energy Systems of the MIT Portugal Program.

Fernández is a member of the Board for New Ecology, Inc., and a member of the Board of Advisors for the Center for Sustainable Energy of the Fraunhofer Institute. At MIT, Fernández serves on the Committee on the Innovation Initiative, the Faculty Policy Committee, and the Institute Planning Committee, as well as the Campus Sustainability Task Force, the MIT Materials and Waste Management Working Group, and the Metropolitan Warehouse Advisory Group. Fernández is housemaster for MIT’s Baker House.

Gail Greenwald

Gail Greenwald ‘75 is an experienced senior executive with 25+ years’ experience in management of technology-based organizations. Since 2010, she has invested in more than 20 early-stage companies focused on renewable energy, sustainability, and energy efficiency. She serves on the board of three of her portfolio companies, is board chair of the Sierra Club Foundation, a board member at the Woodwell Climate Research Center, a member of the investor advisory board of NYSERDA, the MIT Climate Action Advisory Committee, and the investment advisory group at Mass CEC. Greenwald holds a SB from MIT and a PhD from UC Berkeley.

Megan Guenther

Megan Guenther is an undergraduate at MIT. She will receive an SB in Earth, Atmospheric and Planetary Science in May 2021 with a minor in environment and sustainability. Guenther has focused her academic studies on geoscience, and has extensive research experience in experimental petrology, lunar science, and tectonics. Outside of academia, Guenther has worked as a geologist in the mining industry, which inspired her to pursue her current work with MIT’s Environment and Sustainability Initiative in the Metals and Mining group. She hopes to work towards creating more sustainable mining practices for a low carbon future.

Timothy Gutowski

Timothy Gutowski is from Chicago, Illinois. He attended college in Wisconsin (BS mathematics, 1967), Illinois (MS theoretical and applied mechanics, 1968) and Massachusetts (MIT, PhD mechanical engineering, 1981). He has worked at Wiss, Janney, and Elstner as a structural engineer, and at Bolt, Berank and Newman as a noise and acoustics consultant, and has taught mechanical engineering at the Escuela Politécnica Nacional in Quito, Ecuador, while he was in the Peace Corps.

He is currently a professor of Mechanical Engineering at MIT, where he has been on the faculty since 1981. From 1994 to 2004 he was the director of the Laboratory for Manufacturing and Productivity at MIT, and from 2001 to 2005 he was the associate head of the Department of Mechanical Engineering. From 1999 to 2001 he served as the chairman of the DOE/NSF international panel on Environmentally Benign Manufacturing. His research interests have ranged from polymer processing, to advanced composites manufacturing, to manufacturing systems design, to his current area of study - manufacturing and the environment.

Richard K. Lester

Richard Lester is associate provost at MIT, where he oversees the international activities of the Institute. Lester is the Japan Steel Industry Professor of Nuclear Science and Engineering and the founder and faculty chair of the MIT Industrial Performance Center. He previously served as head of the Department of Nuclear Science and Engineering at MIT. He has been on the MIT faculty since 1979. Lester's research focuses on innovation, productivity and industrial competitiveness, and he has led several major studies of innovation and industry performance in the U.S. and around the world. He is also well known for his research on energy and climate policy and nuclear policy. Lester's most recent book, *Unlocking Energy Innovation*, with David M. Hart, outlines a strategy for mobilizing America's innovation resources in support of the transition to an affordable, reliable low-carbon global energy system. He is the author or co-author of seven other books, including *The Productive Edge—A New Strategy for Economic Growth*; *Innovation—The Missing Dimension* (with Michael Piore); *Making Technology Work–Applications in Energy and the Environment* (with John M. Deutch); *Made By Hong Kong* (with Suzanne Berger); and *Made in America: Regaining the Productive Edge* (with Michael Dertouzos and Robert Solow.) From 2015 to 2018 he served as chair of the U.S. National Academies' Board on Science, Technology, and Economic Policy. He currently serves as chair of the Global Council of Universities of the OECD Nuclear Energy Agency.

Lucy Milde

Lucy Milde graduated from MIT in 2020 with a degree in mechanical engineering and a minor in environment & sustainability. While on campus, she was a member of the MIT Climate Action Team, a dorm sustainability chair, and interned in the offshore wind department of an engineering consulting firm. After working for the MIT Environmental Solutions Initiative Rapid Response Group, she is now beginning her career as a structural engineer at a wind power start-up.

Desirée Plata

Desirée Plata's research seeks to maximize technology's benefit to society while minimizing environmental impacts in industrially important practices. Plata is the Gilbert W. Winslow Career Development Associate Professor of Civil and Environmental Engineering at MIT. Plata is an NSF CAREER Awardee, Odebrecht-Braskem Sustainable Innovation Awardee, National Academy of Engineers Frontiers of Engineering Fellow, National Academy of Sciences Kavli Frontiers of Science Fellow, Caltech Resnick Sustainability Fellow, and winner of MIT's Junior Bose Teaching Award. Her PhD is in chemical oceanography and environmental chemistry from the MIT/WHOI Joint Program and her bachelor's degree is in chemistry from Union College.

Kate Trimble

Kate Trimble is MIT's senior associate dean and director of the Office of Experiential Learning (OEL). Trimble works with a wide range of Institute stakeholders to connect MIT students to challenging hands-on experiences that complement—and constructively complicate—their learning in the classroom including UROPs, industry internships, public service projects, entrepreneurial ventures, and global studies.

From 2016-19, Trimble served as senior director of MIT's PKG Public Service Center. Prior to that, she was the deputy director of Brown University's public service center; a non-profit executive director and funder of neighborhood development initiatives in Pittsburgh; and a senior research analyst at the Brookings Institution.

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Kiara Wahnschafft

Kiara Wahnschafft is an MIT Junior studying economics and mechanical engineering. In her career, she aims to advance bold climate action through evidence-based policy. As a member of the Environmental Solutions Initiative's Rapid Response Group and a researcher with MIT Sloan's Climate Pathways Project, Wahnschafft strives to support policymakers in crafting solutions that will effectively decrease emissions at the rapid timescale necessary. Wahnschafft serves as the Undergraduate Association chief of staff, working collaboratively with the student body and MIT administration with the goal of further improving the student experience; supporting students in their efforts to strengthen MIT's climate action has been an integral part of her work.

Caroline White-Nockleby

Caroline White-Nockleby is a second-year PhD student in MIT's program in History, Anthropology, and Science, Technology, and Society (HASTS). Her research examines the intersections between legal frameworks, technological changes, and user experiences in the development and deployment of battery storage technology in the U.S. and Chile. At MIT, she is also involved in research and community engagement through the Environmental Solutions Initiative, including projects related to energy transitions in Western Pennsylvania and territorial rights in rural Colombia. White-Nockleby received a BA in geosciences and American studies from Williams College and an MPhil in social anthropology from the University of Cambridge.

Maria T. Zuber

Maria Zuber, MIT's Vice President for Research and E. A. Griswold Professor of Geophysics, is responsible for research administration and policy. She oversees MIT Lincoln Laboratory and more than a dozen interdisciplinary research laboratories and centers. She leads MIT's Plan for Action on Climate Change. Zuber is a member of the National Academy of Sciences and a fellow for the American Academy of Arts and Sciences. President Obama appointed Zuber to the National Science Board; she was reappointed by President Trump. In 2021, President Biden appointed Zuber to co-chair the President's Council of Advisors on Science and Technology (PCAST).