

Ninth Annual U.S. C3E Women in Clean Energy Symposium and Awards Speaker Biographies

## Robert C. Armstrong

Professor Robert C. Armstrong directs the <u>MIT Energy Initiative</u>, an Institute-wide effort at MIT linking science, technology, and policy to transform the world's energy systems. A member of the MIT faculty since 1973, Armstrong served as head of the Department of Chemical Engineering from 1996 to 2007. His research interests include polymer fluid mechanics, rheology of complex materials, and energy.

Armstrong has been elected into the American Academy of Arts and Sciences (2020) and the National Academy of Engineering (2008). He received the Founders Award for Outstanding Contributions to the Field of Chemical Engineering (2020), Warren K. Lewis Award (2006), and the Professional Progress Award (1992), all from the American Institute of Chemical Engineers. He also received the 2006 Bingham Medal from the Society of Rheology, which is devoted to the study of the science of deformation and flow of matter,

Armstrong was a member of MIT's <u>Future of Natural Gas</u> and <u>Future of Solar Energy</u> study groups. He advised the teams that developed MITEI's most recent reports, <u>The Future of Nuclear Energy in a Carbon-Constrained World</u> (2018) and <u>Insights into Future Mobility</u> (2019), and is cochairing the new MITEI study, <u>The Future of Storage</u>. He co-edited <u>Game Changers</u>: <u>Energy on the Move with former U.S. Secretary of State George P. Shultz</u>.

## Inês Azevedo



Inês Azevedo is an Associate Professor in the Department of Energy Resources Engineering at Stanford University. Her research interests focus on how to transition to a sustainable, low-carbon, affordable, and equitable energy system. Her recent work focuses on understanding environmental justice and distributional effects related to energy issues. She has published 100+ peer-reviewed journal papers and has participated as an author and committee member in several U.S. National Academy of Sciences reports. She is currently participating in

the IPCC AR6, IPCC's sixth assessment report, as one of the lead authors for the Energy chapter. Azevedo has received the World Economic Forum's "Young Scientists under 40" award in 2014 and the C3E Women in Clean Energy Research Award in 2017.



## Shalanda H. Baker



Shalanda H. Baker is a Professor of Law, Public Policy, and Urban Affairs at Northeastern University. She has spent over a decade conducting research on the equity dimensions of the global transition away from fossil fuel energy to cleaner energy resources. She is the author of over a dozen articles, book chapters, and essays on renewable energy law, policy, and development. Her forthcoming book, *Revolutionary Power: An Activist's Guide to the Energy Transition*, argues that energy policy should be the next domain to advance civil rights. She is the Co-Founder and Co-Director of the Initiative for Energy Justice (www.iejusa.org), an

organization committed to providing technical law and policy support to communities on the front lines of climate change.

#### Carol Battershell



Carol Battershell recently retired from full-time employment and currently serves on three advisory boards: the Energy Policy Institute, Lean In Energy (an organization for women in energy), and the Clean Energy Education and Empowerment Initiative (C3E). She also has an energy consulting company, Battersea Energy LLC.

Prior to her retirement, Battershell served for ten years with the U.S. Department of Energy (2008–2018). She led multi-billion-dollar technical programs; ran the Energy Efficiency and Renewable Energy

field operations office, which at its peak was responsible for approximately \$7 billion of grants, research, and construction; and was a key contributor to two multi-agency energy policy reviews. Her last roles at the Department were Principal Deputy Director and Acting Director in the Office of Policy.

#### Martha Broad



Martha Broad is MITEI's executive director. As part of the leadership team, she works to link science, innovation and policy to transform the world's energy systems. She has a track record of successfully partnering with business, government and nonprofit stakeholders to support the clean energy transition. At MITEI, she works closely with member companies who collaborate with MIT researchers on a spectrum of topics, including the Low-Carbon Energy Centers.



In addition, she spearheads MITEI's collaboration with the U.S. Department of Energy to design, manage, and host the annual <u>Clean Energy Education and Empowerment</u> (C3E) Women in Clean Energy Symposium and serves as a C3E Ambassador.

Previously, as part of the senior management team of the Massachusetts Clean Energy Center (MassCEC), Broad led programs and studies that focused on the commercialization of clean energy technologies. By collaborating with universities and public and private partners, she helped facilitate the state's successful installation of hundreds of megawatts of wind and solar systems.

## Jill Bunting



Jill Bunting is the Deputy Director of the Coalition for Green Capital (CGC). She leads green bank development projects in states across the U.S. In partnership with local leaders, Bunting has developed green banks in states such as Colorado, Maryland, Nevada, and Ohio. This work includes market gap identification, stakeholder engagement, and capital raising for new clean energy finance institutions. She is also active in developing a National Climate Bank, which would create a pipeline of capital for local clean energy projects. Bunting graduated cum laude from Harvard College with a BA in Social Studies and

received an MBA from Columbia Business School.

# **Judy Dorsey**



Judy Dorsey is a pioneering engineer, entrepreneur, and sustainability business leader with 26 years of executive expertise in innovation, strategy, and risk management. Judy currently serves as the founding president and principal engineer of Brendle Group, an impact-driven, people-centered firm focused on meeting environmental and social demands through strategic business growth. A natural team-builder, she has led the completion of more than 300 sustainability projects for over 150 clients across 30 states and is co-founder of the Colorado Clean Energy Cluster and International Cleantech Network. She has

coached numerous business leaders and public policy makers in managing the risks and opportunities posed by climate change, energy system transitions, and other socio-economic challenges. Through natural curiosity and engineering problem-solving, Dorsey distills complex technical problems into policy and strategy actions that solve for both the long and the short term. She is a valued collaborator known for her skilled facilitation in engaging diverse groups of stakeholders seeking to align and execute around a shared purpose.



# Johanna Doyle



Johanna Doyle is passionate about championing technologies that can get us to net-zero carbon emissions as efficiently as possible. As Head of Commercial Delivery at Reactive Technologies, Doyle works with transmission and distribution system operators across the world to deploy ground-breaking grid data and measurement services. These services give system operators tools they need to manage low-inertia, low-carbon grids. Doyle believes strongly that deploying a coalition of technologies is the foundation for transforming how we generate, consume, and distribute energy. Prior to Reactive, Doyle developed

renewable energy projects at RES, a leading independent developer of wind, solar and storage assets internationally. Driven by a desire to be part of the drive to a more sustainable future, Doyle has an MSc in Renewable Energy Systems Technology from Loughborough University and a BA in Earth Sciences from Harvard University.

#### Yana Garcia



Yana Garcia was appointed by Governor Gavin Newsom in August 2019 to serve as Deputy Secretary for Environmental Justice, Tribal Affairs, and Border Relations at the California Environmental Protection Agency (CalEPA). Prior to her most recent appointment, she served two years at CalEPA as Assistant Secretary for Environmental Justice and Tribal Affairs.

Before joining CalEPA, Yana was an associate attorney at Earthjustice, in the California regional office, in San Francisco. Yana was also a staff

attorney at Communities for a Better Environment, serving in Huntington Park and Oakland. Her legal practice areas have focused on environmental justice issues, civil rights, land use, toxics and chemical disclosure, oil and gas extraction, and crude transport. Between 2011 and 2012, Garcia served as a legal research attorney at the San Francisco Superior Court's Civil Division, Office of the Presiding Judge.

Garcia holds a degree in Politics from the University of California, Santa Cruz and a law degree from Northeastern University School of Law.



### Kate Gordon



Kate Gordon was appointed Director of the Governor's Office of Planning and Research and Senior Advisor to the Governor on Climate by Governor Gavin Newsom on January 7, 2019. Prior to her appointment, Gordon was the founding director of the Risky Business Project, which focused on quantifying the economic impacts of climate change on U.S. energy demand, crop yields, and coastal infrastructure as well as on human health and mortality. As part of this work, Gordon consulted numerous investors and corporations on strategies to reduce climate risks across investments and assets, and served as a co-author

on the Fourth National Climate Assessment's chapter on "Reducing Risks Through Adaptation Actions." Prior to her work on Risky Business, Gordon served in senior leadership positions at several nonpartisan think tanks including the Henry M. Paulson Institute, the Center for the Next Generation, the Center for American Progress, and as a nonresident Fellow at the Center on Global Energy Policy at Columbia University. Gordon got her start on energy and climate issues, working to craft progressive policies at the intersection of labor, business, community, and environmental interests at the national Apollo Alliance, where she ultimately served as co-Executive Director until the merger with the Blue-Green Alliance in 2011. Gordon earned a JD and a Master's in City and Regional Planning from the University of California-Berkeley, and an undergraduate degree from Wesleyan University. Along with her role in state government, Gordon regularly co-teaches a course at Stanford Law School entitled "Climate: Politics, Finance, and Infrastructure."

## Sheila Hayter



Sheila Hayter is the NREL laboratory program manager for the U.S. Department of Energy Federal Energy Management Program (FEMP). In this role, she leads NREL's portfolio of activities focused on helping U.S. federal agencies identify, implement, and evaluate opportunities related to energy/water resilience and security, facility and fleet optimization, and energy and project procurement.

Since joining NREL in 1992, Hayter's roles have included line management, partnership development, project management, and research. Prior to assuming the FEMP laboratory program manager role, she was a line manager within the Integrated Application Center leading a team of technical and policy experts who support international, federal, state, and local entities on energy efficiency and renewable energy topics with the goal of making significant reductions in non-renewable energy consumption though optimized use of energy efficiency strategies and renewable energy technologies. During this time, Hayter also led partnership development activities and managed work addressing technical challenges to identifying, evaluating, and implementing clean energy solutions.



In addition to her NREL work, Hayter served as the 2018-2019 ASHRAE President and has held many other ASHRAE leadership roles throughout her career.

Hayter is a registered Professional Engineer in the State of Colorado.

### Colette D. Honorable

The Honorable Colette D. Honorable is a highly regarded policy maker in domestic and international energy sectors. For over a decade, Honorable has been a leader in utility regulation at the state and federal level. Honorable is a Partner in Reed Smith LLP's Energy and Natural Resources Group, where she leads the energy regulatory practice.

Honorable is a senior fellow with the Bipartisan Policy Center, an Ambassador with DOE's Clean Energy Education and Empowerment

program, and serves on the global advisory board for the Energy Futures Initiative. Honorable is an Independent Director for Southern Company and sits on its Finance and Business Security and Resilience Committees.

Prior to joining Reed Smith, Honorable served our nation as a Commissioner at the Federal Energy Regulatory Commission (FERC). She was nominated by President Barack Obama in August 2014, and unanimously confirmed by the U.S. Senate, serving from January 2015 to June 30, 2017. At FERC, Honorable focused on reliability oversight of the bulk power system, cyber and physical security, oversight of wholesale markets, transmission planning and cost allocation in regional transmission organizations, gas-electric coordination, renewables integration, energy storage integration and valuation, rate making, infrastructure development, and enforcement matters. Honorable joined the FERC from the Arkansas Public Service Commission, where she served for over seven years as Commissioner, Interim Chairman, and Chairman from January 2011 to January 2015. Honorable is also past president of the National Association of Regulatory Utility Commissioners. She has testified before Congress on multiple occasions on a range of energy issues.



## Alice K. Jackson



Alice K. Jackson is President of Xcel Energy–Colorado, a company serving 1.4 million electric customers and 1.3 million natural gas customers. The company is a recognized industry leader in delivering affordable and reliable service, providing clean energy choices, and in reducing carbon and other emissions. Since joining Xcel Energy in 2011, Jackson has held various positions of increasing responsibility. Most recently, Jackson was Vice President of Strategic Revenue Initiatives, where she built a team to generate new revenues through exploring and integrating new technologies and economic development

initiatives, in addition to looking at new options for Xcel Energy's unregulated businesses. Prior to her corporate strategic role, Jackson held the lead regulatory position with Xcel Energy—Texas/New Mexico and then with Xcel Energy—Colorado.

Before her time with Xcel Energy, Jackson spent close to 10 years with Occidental Petroleum Corporation (Oxy) managing the energy needs of this large consumer across the country. Through her involvement in the federal and state electric markets, multiple rate cases, and interaction with customers large and small, Jackson developed a unique respect for utilities and their contributions to society.

Because having a full-time career, being married to her high school sweetheart, and having four sons is not enough of an adventure in life, Jackson recently took on the challenge of advancing her business acumen. In 2017, Jackson completed the Program for Leadership Development at Harvard University. Before her professional experience, Jackson obtained a Bachelor's degree in Business Administration with a concentration in Management Information Systems from Texas A&M University.

# Kristina M. Johnson



Dr. Kristina M. Johnson is the 16th president of The Ohio State University.

An engineer, inventor and entrepreneur, Johnson has more than 30 years of experience and leadership in the academic, business, and public policy sectors. Prior to her role at Ohio State, she was chancellor of the State University System of New York. She also founded and led several successful science and technology companies, served as

undersecretary of energy at the U.S. Department of Energy, and held numerous leadership and academic roles at universities across the nation.



Throughout her career in higher education, she has consistently worked to advance student success, build partnerships with industries and communities, and create inclusive opportunities for those traditionally underrepresented among the ranks of university students, faculty, and staff.

The author of nearly 150 referenced papers and proceedings, Johnson holds more than 100 U.S. and international patents. Her pioneering work in microdisplays and color-polarizing technology earned her recognition from the National Inventors Hall of Fame as well as the John Fritz Medal—among the most prestigious honors in engineering, whose past awardees include George Westinghouse, Thomas Edison, and Orville Wright.

Johnson earned her BS, MS, and PhD in Electrical Engineering at Stanford University, where she was a varsity athlete in field hockey and founded the club varsity lacrosse team.

### Jodie L. Lutkenhaus



Jodie L. Lutkenhaus is holder of the Axalta Chair and Professor in the Artie McFerrin Department of Chemical Engineering at Texas A&M University. Lutkenhaus received her BS in Chemical Engineering in 2002 from The University of Texas at Austin and her PhD in Chemical Engineering in 2007 from the Massachusetts Institute of Technology. Current research areas include polyelectrolytes, redox-active polymers, energy storage, and composites. She has received recognitions including World Economic Forum Young Scientist, Kavli Fellow, NSF CAREER, U.S. Air Force Office of Scientific Research Young Investigator

Research Program (AFOSR YIP) Award, and 3M Nontenured Faculty Award. She is the Chair of the AICHE Materials Engineering and Sciences Division. Lutkenhaus is the Deputy Editor of ACS *Applied Polymer Materials* and a member of the U.S. National Academies Board of Chemical Sciences and Technology.

### Jennifer McFarlane



Jennifer McFarlane is currently a board member of BioGill, a venture-backed water company, where she chairs the Compensation Committee and of Blue Planet Ltd, a private carbon sequestration company. She is also the founder of Asterra Partners, which is developing an innovative financing structure for new clean technology companies, and an advisor to a nanotech company, Nelumbo.

McFarlane has had a long career as a C-level executive in both public and venture-backed companies and as an international investment



banker. As an executive, McFarlane has successfully developed financially robust business strategies, transformed financial performance and generated rapid growth through technology commercialization and global expansion through strategic partnerships.

Most recently, McFarlane was CFO of NEXTracker, an affiliate of Flex (NASDAQ: FLEX) and the global leader in solar trackers. During her tenure, she supported its rapid international expansion resulting in revenues over \$600M, and significantly strengthened its finance team and reporting systems. Prior executive positions included CFO of LanzaTech, a global leader in biochemicals, and CEO Astia, an accelerator for women-led businesses. At Astia, she successfully turned around the organization, implementing a disciplined strategic plan that improved financial and operational results. Earlier in her career, McFarlane was an Executive Director of Southern Pacific Petroleum NL in Australia, a NASDAQ quoted company, where she developed a 10-year strategic plan as well as the company's sustainability strategy.

### Marcene Dianne Mitchell



As Global Head, Marcene Mitchell joined the Climate Department to help mainstream IFC's climate business. During her tenure, climate volume has grown from 12% of annual investments to the current 30%. She currently manages a group of Industry Specialists who provide technical expertise to Operations and create upstream programs such as in Offshore Wind, Energy Storage, and Marine Plastics. She is one of the founders and the current program manager for the EDGE Green Building Program. She is also the co-host of ClimateBiz, a podcast that explores the challenges and opportunities facing the private sector

from climate change.

Mitchell joined IFC as an Investment Officer in the Infrastructure and Natural Resources group, where she specialized in Power and Oil and Gas. She did a development assignment in Corporate Strategy department where she authored the Corporation's Strategic Directions report. She then went to the field where she was the Country Manager for the Andean Region. She returned to HQ as the Manager of the Chemicals division before returning to the Infrastructure Department and ultimately to the Climate Business Department.

Mitchell holds an MBA from Stanford University Graduate School of Business and a BA in International Relations from Brown University.



## Valentini A. Pappa



Valentini A. Pappa is the Assistant Director for Education at Texas A&M Energy Institute, where she manages the Master of Science in Energy and the Certificate in Energy. Over the last 15 years, she gained academic experience from four different universities and collaborated with 20 different countries around the globe. The work includes development of curriculum, sponsored research projects focusing on education, workforce development courses, and women empowerment. At the Energy Institute, Pappa leads the 10-month Master of Science in Energy program, composed of 35 courses and 55

instructors. To date, 120 students have graduated from the program. She is teaching one of the courses on Global Energy Future.

Pappa also works on research projects focusing on energy education, circular economy, waterenergy-food nexus, and food security. She is experienced in leading, managing, and conducting project-based research, both in Europe and the U.S.

She leads the Clean Energy, Education, and Empowerment (C3E) Initiative for Texas A&M University.

### Sue Reid



With two decades of experience as a solutions-oriented advocate and specialist regarding climate and clean energy policies, practices and investments, Sue Reid leads Mission2020's work to move the global finance sector into alignment with the Paris Agreement's objectives. Previously, Reid served as Vice President of Climate & Energy at Ceres, where she helped lead the development and implementation of Ceres' Commit to Climate initiative and Climate Action 100+—all geared toward mobilizing private sector action consistent with limiting global

temperature rise to no more than 1.5°C. Reid also worked to advance the Ceres Clean Trillion, a clean energy investment target intended to avoid the worst effects of climate change, requiring more than \$1 trillion additional investment in climate solutions each year while ratcheting down investment in fossil fuels.

Prior to joining Ceres, Reid served as Vice President and Massachusetts Advocacy Center Director at the Conservation Law Foundation, where she spearheaded efforts to secure some of the strongest climate and clean energy policies in the U.S., including groundbreaking science-based bioenergy carbon accounting standards, and led a litigation team that secured the shut-down of several coal plants. Reid also previously worked as an intellectual property litigation attorney in Silicon Valley and Boston.



## Angeliki Diane Rigos



Angeliki Diane Rigos is the Associate Director for Graduate Programs at MIT Energy Initiative and Program Manager for the DOE Center for Enhanced Nanofluidic Transport.

Rigos began her career as a Principal Scientist at Physical Sciences Inc. where she worked on defense and energy contracts. She transitioned to an academic position as Associate Professor of Chemistry and Biochemistry at Merrimack College where she taught courses in chemistry, women in science, and sustainable energy at the

undergraduate level and science and energy policy at the graduate level. Her areas of research have included corrosion studies of supercritical water oxidation reactors used to destroy military toxic waste, Brownian dynamics simulations of order-disorder transitions in sheared colloidal suspensions, modeling of diffusion controlled reactions, and conformational interconversion in protein crystals. For twelve years, she also worked as an energy consultant at Levitan & Associates, Inc. with a focus on power price forecasting, LNG, fuel cells, and renewable technologies including onshore / offshore wind and solar photovoltaics.

Rigos has volunteered in startup accelerators, as an industry mentor in Cleantech Open, and as an industry champion at MassChallenge. She is currently the President of the Massachusetts Chapter of the Association for Women in Science (AWIS) and has developed and launched a series of leadership workshops for AWIS members.

Rigos received a BA in Chemistry from Cornell University, a PhD in Physical Chemistry from the Massachusetts Institute of Technology, an MBA from Northeastern University. She is also an alumna of HERS Denver 2015.

## Ramya Swaminathan



Ramya Swaminathan led the spin-out of Malta Inc. from Google X and leads the Malta team today. She currently serves as a Clean Energy Education and Empowerment (C3E) Initiative Ambassador and was included in Business Insider's 2020 list of 21 Rising Stars in clean energy.

Before founding Malta as an independent company, Swaminathan was the CEO of Rye Development, a hydropower development firm that she

grew to be the leading developer of new hydropower projects in the United States. She was responsible for the expansion of Rye's platform into energy storage, with the addition of two sizable pumped storage hydro development projects in the U.S. Pacific Northwest. Prior to her work in the hydropower space, she was a public finance banker, most recently as a Director at



UBS where she focused on public power clients and senior managed more than \$10 billion in financings. She holds a Master's in Public Policy from the Harvard John F. Kennedy School of Government and a BA in Anthropology from Amherst College.

### Jessika Trancik



Jessika Trancik is an Associate Professor in the Institute for Data, Systems, and Society at the Massachusetts Institute of Technology. Her research examines and explains the dynamic costs and benefits of energy systems to inform climate policy and accelerate technology innovation. Her projects focus on all energy services including electricity, transportation, heating, and industrial processes. This work spans solar energy, wind energy, energy storage, low-carbon fuels, electric vehicles, and nuclear fission among other technologies. Trancik received her BS from Cornell University and her PhD from the

University of Oxford as a Rhodes Scholar. She is currently an external professor at the Santa Fe Institute, and was formerly at Columbia University's Earth Institute, and at WSP International/UNOPS (now Interpeace) in Geneva. Her work has been published in journals such as Nature Climate Change, Nature, Energy Policy, Proceedings of the National Academy of Sciences, and Environmental Science and Technology, and has been featured by news outlets such as the New York Times, Financial Times, Washington Post, and NPR.

## Maria T. Vargas



Maria T. Vargas has been involved in policy work on the issues of ozone depletion, global climate change, and related environmental and energy issues since 1985. Her current position is Senior Program Advisor at the U.S. Department of Energy's (DOE's) Office of Energy Efficiency and Renewable Energy, where she is Director of the Office's Better Buildings Initiative. Through Better Buildings, DOE works with leaders in the public and private sectors to make U.S. buildings at least 20% more efficient in the next decade. Hundreds of chief executive officers, university presidents, and state and local leaders are partnering with

DOE, upgrading buildings across their portfolios, and sharing innovative solutions and strategies as models for others to follow. Prior to her work at DOE, Vargas served at the U.S. Environmental Protection Agency as the Brand Manager for the ENERGY STAR program, a position she held for almost 20 years. She was also the Director of the Green Lights Partnership. In 2014, she was inducted into the Energy Efficiency Hall of Fame. Vargas received a BA from Swarthmore College in Political Science and Economics and a Master's in Public Affairs and Urban and Regional Planning from the University of Oregon.



### Nathalie Wallace



Nathalie Wallace heads ESG investment Strategy at State Street Global Advisors and works closely with clients to develop ESG and climate strategies that are aligned with their specific mandates, and adapted to clients' investment considerations. She coordinates with the ESG research and development, investment research and management teams to design ESG investment solutions tailored to clients' needs.

While at Ceres, Wallace worked with institutional asset owners to design and implement ESG principle statements and integration strategies, as well as engagement platforms such as Climate Actions 100+. She leverages her considerable experience in leading research and investment teams to allocate capital to public and private equity investment in emerging markets for global institutional clients, including sovereign wealth and institutional pension funds. She is a member of key global organizations on climate finance, such as One Planet Summit and as an advisor to the French Government and members of the French Congress, as well as a climate leader in her community as a member of the Cambridge (MA) Protection Action Committee.

Wallace holds a BBA from Institut Superieur de Gestion in Paris, France, and is a Certified International Investment Analyst (CIIA). She is a trade advisor to the French Government, nominated by the French prime minister, and a member of the Columbia Sustainable Finance Professionals Network (CSFPN). She is a member of the CFA Institute's ESG Technical Committee. She taught an Impact Investing class at Northeastern University in Boston, wrote several papers on sustainable economic development in emerging markets, and presented research at investment conferences.

### Milo Werner



Milo Werner is a Partner at Ajax Strategies, where she invests in and builds portfolio companies industrializing advanced technologies that reduce greenhouse gas emissions. Werner has significant experience taking products from initial prototype to mass production and building the operating systems critical to sustaining their growth. Before joining Ajax, Werner managed operations strategy for Khosla Ventures' hardware portfolio. Prior to that, she led engineering at Off-Grid Electric. Earlier, Werner launched four major products at Fitbit and

commissioned their first fully automated manufacturing line. Werner spent 2007-2015 building and leading the New Product Introduction group at Tesla Motors.



Werner has a BS in Geology and Civil & Environmental Engineering from the University of Vermont, as well as a MS in Civil Engineering and an MBA from the Massachusetts Institute of Technology.