
# Speaker Biographies

## Opening Remarks

**Liesl Eichler Clark** is President for the Michigan Energy Innovation Business Council, a trade association of over 115 businesses in Michigan with the mission is to grow Michigan's advanced energy economy by fostering opportunities for innovation and business growth and offering a unified voice in creating a business-friendly environment for the advanced energy industry in Michigan. Liesl is also a co-founder and partner of 5 Lakes Energy, a nationally recognized policy consulting firm offering services to the public and private sectors in clean energy policy development, research and analysis, and sustainability practices. Under Liesl's leadership, 5 Lakes provides client services in 30 states and the firm's capabilities and vision make it a trusted source for businesses, policymakers, and other stakeholders seeking to advance the transition to a clean energy economy.

Liesl serves on the boards of Agri-Valley Services, Thumb Cellular, Pigeon Telephone Company, and Agri-Valley Communications. Liesl holds a Master's degree in Public Administration from Michigan State University and a Bachelor of Arts degree in Political Economy from MSU's James Madison College. She has also completed the Great Lakes Leadership Academy, serves on the board of Advancing Women in Energy.

**Anna Stefanopoulou,** the William Clay Ford Professor of Manufacturing, is the Director of the University of Michigan Energy Institute. She joined the faculty of mechanical engineering at the college of engineering in 2000 and before that she taught at the University of California, Santa Barbara and developed control algorithms for experimental vehicles at Ford Motor Company. She served as the Director of the Automotive Research Center a multi-university U.S. Army Center of Excellence in Modeling and Simulation of Ground Vehicles led by the University of Michigan. She is an elected member of the Executive Committee of the ASME Dynamics Systems and Control Division and the Board of Governors of the IEEE Control Systems Society.

Anna has been a dedicated mentor and an inspiring educator training a generation of engineers in highly efficient and clean powertrains as highlighted by many prestigious awards. She has co-authored a book, 21 US patents, 280 publications (6 of which have received awards) on estimation and control of internal combustion engines and electrochemical processes such as fuel cells and batteries. Her innovation in powertrain control technology has been recognized by multiple awards. Anna was a member of the 2016 National Research Council (NRC) committee on fuel efficient technologies and their cost effectiveness in meeting the 2025 US national vehicle fuel economy standards. She is working now with an NRC committee on the "beyond-2025" fuel economy standards.

## Panel 1: Disruptive Technologies

**Adam Dorr** is an environmental social scientist and technology theorist whose current research with the independent think tank RethinkX is focused on the disruption of the global energy sector by new energy generation and storage technologies, and the intersection of those disruptions with similar ones set to

unfold in the transportation and food sectors. The RethinkX team uses the Seba Technology Disruption Framework and systems dynamics to model these disruptions. Adam completed his MS at the University of Michigan's School of Natural Resources and Environment (SNRE, now SEAS) and his PhD at UCLA's Luskin School of Public Affairs where he studied the environmental politics, policy, and planning around disruptive technologies.

**Kristen Brown** is a member of the Technology Innovation team at Exelon. In this role, she advises Exelon's six regulated utilities on emerging technologies and facilitates new project design and implementation. Prior to this role, she served in a similar capacity at ComEd, focusing specifically on peer-to-peer markets, blockchain, and communications infrastructure. Kristen was also a Fellow at the Department of Energy's Advanced Research Projects Agency – Energy (ARPA-E), working with start-ups, national labs, universities, and large corporations to design moon-shot energy technologies.

**Mark Tholke** is the Chief Development Officer for Advanced Microgrid Solutions. He is responsible for all project development and implementation, including siting, permitting, interconnection, design engineering and negotiations for battery module and balance of system. Prior to joining AMS, Mark served as Vice President for EDF Renewable Energy's West Region, the only firm in the industry simultaneously developing utility-scale wind and solar PV projects in California. Under his leadership, EDF RE West region grew from 3 to 22 employees and developed/built 490 megawatts (MW) wind and 144 MW solar, with another 102 MW under construction, all from greenfield. Prior to joining EDF RE (formerly enXco), Mark held roles with Eurus, GE Wind Energy, Green Mountain Energy and a research affiliate of the Heinz Foundation. Mark holds a joint MBA/MS in Environmental Science from University of Michigan and Bachelor Degrees in Environmental Science & Economics from UC Santa Cruz.

*Moderator:* **Peter Adriaens** is Professor of Civil and Environmental Engineering, and Professor of Entrepreneurship and Strategy in the Ross School of Business, where he is affiliated with the Zell Lurie Institute for Entrepreneurial Studies. He is past-President of the Association of Environmental Science and Engineering Professors, a member-by-eminence of the American Academy of Environmental Engineering (AAEE), and Member of the Belgian Royal Academy of Applied Sciences, where he was recognized for bridging engineering and business entrepreneurship in academia and practice. Most recently, he was awarded a Finnish Distinguished Professorship, focused on portfolio financing models for CleanTech. Following a 20-year career in environmental technology development and validation, his current work focuses on financial innovation and risk analytics for industrial renewal and green growth.

## Panel 2: Big Tech

**Don Wingate** is Vice President of Sales – Utility and Microgrid Solutions for Schneider Electric. Mr. Wingate leads the Utility and Energy segments focused on Grid and behind the meter solutions. Mr. Wingate assisted in the architecture and launch of the Schneider Electric Microgrid Competency Center and is the executive sponsor for Microgrid Solution development for channel partners and unregulated utilities. Prior to joining Schneider Electric Mr. Wingate held executive and management positions at Logica Inc, Capgemini, Oracle and General Electric.

**Lonny Blumenthal** manages product localization for the Opower Energy Efficiency product suite at Oracle Utilities. His team is responsible for adapting Opower's products for new markets and languages and delivering energy efficiency solutions to millions of households worldwide. He joined Opower in 2013 and has helped launch numerous international programs, as well as multilingual programs in North America and Asia. Lonny is passionate about achieving a clean energy future and prior to joining Opower, he worked on the global development of the LEED green building rating system at the U.S. Green Building Council. Lonny received his B.A. in Earth and Environmental Science from Wesleyan University.

**Liang Downey** works for IBM as the Distributed Energy Resource Solution Lead for IBM's Energy, Utility and Environment Global Industry. She advocates emerging technologies such as Blockchain, IoT and Machine Learning to optimize energy applications. Her professional expertise spans over 20 years in the mobile, telematics, connected vehicles space, including working at a Detroit energy start-up. Liang is on the boards of several IEEE technology organizations.

**Alex Keros** is Maven's Smart City Chief. In his role, he regularly works with city planners and officials as well as community stakeholders to co-create urban solutions needed to decrease congestion, cut down on emissions and build a blueprint for how people will get from place to place. Alex and his team focus on building the infrastructure needed to create new vehicles and the technology behind them work in each city, and provide long-lasting value for the people living there. Alex earned a B.S. in Natural Resource Management and a Master's in Business Administration from the University of Michigan in Ann Arbor.

*Moderator:* **Thomas F. Catania**, Jr., EAB member and former Erb Executive in Residence, is the retired Vice President of Government Relations at Whirlpool Corporation. He currently serves on the Analysis Technical Review Panel for the National Renewable Energy Laboratory, and is a Member of the External Advisory Board of a Wayne State University project on Real-Time Energy Impact Monitors for Residential, Industrial and Policy Use at Wayne State University. Tom, a leader in identifying and implementing solutions to public policy problems, has spent his career operating in the complex intersection of business, government, nongovernmental organizations and public policy. Before joining Whirlpool, Tom was Special Assistant Attorney General for the Antitrust and Consumer Protection Divisions of the Minnesota Attorney General's Office.

## Keynote Address: *Energy is Life*, Sharon Beshouri

**Sharon Beshouri** is a native of Michigan. She attended Kalamazoo College for her undergraduate degree and spent a year of study abroad in Germany. Sharon graduated magna cum laude and Phi Beta Kappa as a chemistry major. She received her PhD in Chemistry from Purdue University in 1986, then accepted a two-year post-doctoral fellowship at the University of California at Berkeley and Lawrence Berkeley Laboratory.

Sharon began her career with Shell Development Company in 1989 as a Research Scientist at Westhollow Research Center in Houston, Texas. During the next 12 years she held a variety of roles including exploratory research in the New Chemical Technology group and in Product and Manufacturing Support for resins and polymers. Sharon moved to Shell Chemicals in 2002 and subsequently served in roles of increasing responsibility in Corporate Finance, Planning, Strategy and Commercial, including General Manager of Lower Olefins in the Americas and President Shell Chemical LP.

In August 2015 Sharon returned to the technology organization and is currently President Shell Global Solutions (US) Inc., Chief Engineer of the R&D Technical Function and Vice President – Catalyst, Analytical and Refining Technology based at Shell Technology Center - Houston. Sharon is married with two daughters. She serves on the Board of Trustees of Duchesne Academy of the Sacred Heart and volunteers her time to support STEM education for young women. In her free time, she enjoys reading, baseball and all things equestrian.

## Panel 3: Future of Traditional Energy Players

**David Harwood** is the Director of Renewable Energy for DTE Electric, the largest subsidiary of DTE Energy, a diversified energy company involved in the development and management of energy-related businesses and services nationwide. Harwood is currently responsible for Renewable Energy strategy,

project development, vendor agreements, regulatory compliance, purchase power contracts and renewable energy operations.

Mr. Harwood has been with DTE Energy since 1982. Prior to Renewable Energy, Harwood held lead positions in Fossil Generation Mergers & Acquisitions, Generation Optimization, Strategy & Planning, Nuclear Development, and Major Enterprise Projects. Within these roles Harwood was responsible for Integrated Resource Planning, Merchant Power Operations, Generation and Environmental Strategy, Wholesale Power Supply and Summer Reliability Planning, development of a Combined License for a new nuclear power plant, and oversight of DTE's Project Management Organization. He spent his early career in power plant engineering and operations. Mr. Harwood has a BS in Chemical Engineering from the University of Michigan and an MBA from Baker College. He is a member of the Engineering Society of Detroit, and a former member of the Nuclear Energy Institute's New Plant Working Group. Mr. Harwood was a four-year member of the Michigan Marching Band.

**Michael Delaney** is the Executive Director of Regulatory Affairs & Policy for Consumers Energy. In this role, he leads the development and successful advancement of the Company's positions on major regulatory filings and policy issues. Michael joined Consumers Energy in 2016. Before joining Consumers Energy, Michael worked at DTE Energy (2006-2016), serving in a range of roles in Corporate Strategy, Venture Capital, and Government Affairs. He was recognized as part of Crain Detroit Business' "40 under 40" class of 2010, is an alumnus of the Michigan Chamber of Commerce's Leadership Michigan Program and a former member of the Ann Arbor Energy Commission. Michael has a Bachelor's in Engineering Physics and a Master's in Public Policy from the University of Michigan as well as a master's in Nuclear Engineering from M.I.T.

**Andrew Burk** is currently the Stewardship & Analysis Manager for the ExxonMobil's IT organization. Andrew graduated with a dual Bachelor's degrees in Finance and Economics from Marshall University and an MBA in Finance and Strategy from the University of Michigan. He joined ExxonMobil in 2007 as a Business Analyst in the Upstream Production Company in Houston. From there he moved to an auditor position in the internal Audit group covering the Refining & Supply group before transitioning into his first supervisory position in the Exploration Company. He then took a short-term role in the Headquarters Financial Reporting group at ExxonMobil Headquarters in Irving, TX supporting the 10-K creation for 2012 results.

Following this, he completed Senior Advisors roles in the Upstream supporting new operations in Malaysia and Indonesia as well as financing structures in Nigeria and Angola. He then moved to the role of Senior Planning Advisor in 2015 developing Earnings, Cash flow, and Capex forecasts for the Upstream, before assuming his current position in May, 2017. Andrew is married. He enjoys travel, specifically exploring the food and street art of place around the world.

**Joule Bergerson** is an Assistant Professor in the Chemical and Petroleum Engineering Department and the Centre for Environmental Engineering Research and Education in the Schulich School of Engineering at the University of Calgary. Her primary research interests are systems-level analysis for policy and decision making of energy system investment and management. The focus of Joule's work is developing tools and frameworks for the assessment of prospective technology options and their policy implications from a life cycle perspective. To date, her work has addressed fossil fuel derived electricity, oil sands development, carbon capture and storage renewable energy and energy storage technologies. Project researchers on her team work with scientists, engineers and members of the business community who are developing new energy technologies, to develop and refine techniques for prospective life cycle assessment. These techniques help prioritize research and development activities, by identifying technologies – or optimal combinations of technologies – that would provide particularly large life cycle benefits.

*Moderator:* **Andrew Hoffman** is the Holcim (US) Professor of Sustainable Enterprise at the University of Michigan; a position that holds joint appointments in the Management & Organizations department at the Stephen M. Ross School of Business and the Sustainable Systems group at the School of Environment and Sustainability. Professor Hoffman's research uses organizational behavior models and theories to understand the cultural and institutional aspects of environmental issues for organizations. He has published over 100 articles/book chapters, as well as 14 books, which have been translated into five languages. He was awarded the 2003 Faculty Pioneer/Rising Star award from the World Resources Institute and the Aspen Institute. His book, From Heresy to Dogma, was awarded the 2001 Rachel Carson Prize from the Society for Social Studies of Science.

Dr. Hoffman holds a Ph.D. from the Massachusetts Institute of Technology, awarded jointly by the Sloan School of Management and the Department of Civil and Environmental Engineering. Prior to academics, Andy worked for the US Environmental Protection Agency (Region 1), Metcalf & Eddy Environmental Consultants, T&T Construction & Design and the Amoco Corporation. Dr. Hoffman serves on advisory boards of the Oakwood Healthcare System, University of Michigan Museum of Art, Earth Portal, Center for Environmental Innovation, and Canopy Partnership, as well as the editorial board of Organization & Environment.

## Panel 4: Cleantech Investment & Entrepreneurship

**Manish Hebbar** is a Director with CohnReznick Capital and is primarily focused on M&A buy-side advisory and raising, structuring, and negotiating tax equity and debt investments. He has a core focus on utility-scale wind and solar projects; serving as financial advisor or investor on more than 25 structured equity and lease transaction closings of over $6 billion in capital in the renewable energy industry. Manish has twelve years of investment banking experience with past positions at Bank of America Merrill Lynch and Citigroup. Before he began a career in banking, Manish served as a Lieutenant in the U.S. Navy. Manish has an MBA from the University of North Carolina and a BS in Mechanical Engineering from Duke University.

**Sean Reed** is the founder and executive director of Clean Energy Coalition. In this role, Mr.Reed has developed over $90M in diverse, cutting-edge clean energy projects in the building and transportation sectors. He holds Master's degrees from the University of Michigan in Urban Planning and Social Work.

**Les Alexander** is currently the senior executive responsible for mobilizing Inmatech to develop and commercialize super capacitors for emerging power and energy markets. Mr. Alexander over the last twenty-five years has held executive positions both domestically and internationally in finance and accounting, business development, operations and procurement. Mr. Alexander is a retired Commander, U.S. Naval Logistics Officer who served in the Persian Gulf War. He has managed large military budgets and programs for aircraft carriers and military bases. He served as Chief Operating Officer of T/J Technologies a lithium battery start up that was sold to A123 Systems in 2006. He retained his position at A123 and post A123's successful IPO, Mr. Alexander became the General Manager of A123 Government Solutions Group. This group managed over $500M in government programs for A123 Systems. Mr. Alexander recently joined Inmatech after two years as General Manager of Navitas Advanced Solutions Group. Mr. Alexander earned a B.A. in Economics (Finance / Management) from University of Pittsburgh and M.S. in Management (Government Contracting) Naval Postgraduate School.

**Adria Wilson** is the Entrepreneurial Program Lead with Chain Reaction Innovations, an energy startup accelerator based at Argonne National Lab. After earning her PhD in chemistry from Duke University, Adria served as an energy and environment legislative fellow in the Office of Senator Bernie Sanders through the AAAS Congressional Fellowship program, and then served as a program manager in the Fuel

Cell Technologies Office at the US Department of Energy. While there she was also actively engaged in several EERE technology-to-market efforts, including the Energy I-Corps and SBIR programs, and developed several programs to increase the development of promising R&D into high impact commercial products, including one program to teach early-career researchers lean startup principles in a low-risk environment. Adria is passionate about clean energy innovation and finding ways to increase the prevalence of funding resources available to promising cleantech startups.

*Moderator:* **Lauren Bigelow** is a finance lecturer at the Ross School of Business. Lauren has served as the CEO of the Growth Capital Network since 2010. Lauren's team manages programs for the philanthropic, health care and innovation community providing strategic, project management, research, analytic, and evaluative services. Lauren has spent 17 years in the non-profit and technology space – bringing a strategic perspective with exceptional execution skills on all organizational levels. Prior to GCN and before its '09 acquisition by Bloomberg, Lauren was the North American Commercial Director for New Energy Finance, the leading independent provider of data and research in the clean energy markets. From 2004–08, Lauren was the Managing Director of the Cleantech Group where she oversaw the firm's technology and innovation pipelines. She is currently on the investment advisory boards of the Zell Lurie Fund, Social Capital Fund and Belle Capital Michigan. She is the Board Chair of the Energy Innovation Business Council and Institute for Energy Innovation as well as on the board of the Alliance for the Great Lakes. Lauren participates on the advisory board of the Erb Institute, the Great Lakes Leaders Council and the Michigan council for the Environmental Law and Policy Center. She has a BA in Economics from the University of Michigan and MA and PhD in anthropology from Northwestern University.

## Closing Remarks

**Jim Adams** serves as Director of Utilities at the University of Michigan. In this role, Jim oversees the production and distribution of steam, electricity and potable water to all campus buildings. This includes directing the activities of the Central Power Plant which supplies steam, electricity, domestic hot water and compressed air to central campus and steam, domestic hot water and compressed air to the medical campus. Jim's area of responsibility includes the North Campus Research Complex central energy facility which supplies steam and chilled water to that complex. Jim also directs the operation and maintenance of the infrastructure that delivers utilities to campus buildings including steam , electricity, domestic hot water, compressed air, potable water and sanitary and storm sewer collection. Utilities also directs the procurement of natural gas and electricity for the entire campus. Jim's area of responsibility also includes the maintenance of all campus outlying boilers.

Prior to joining the university in 2014, Jim was at Cornell University for 25 years holding the positions of Plant Engineer, Plant Manager and Director of Utilities and Energy Management. Prior to Cornell Jim worked in the electric generation industry for New York State Electric and Gas Corporation with a focus on power plant renewal. Jim is a licensed Professional Engineer in New York and holds a BSME from Syracuse University and a BS in Forest Engineering from the New Your State College of Environmental Science and Forestry. Jim is also a Certified Energy Manager and currently serves as secretary/treasurer on the board of the International District Energy Association.