

C O N F E R E N C E P R O G R A M

MARCH 26, 27 & 28, 2018 • MARRIOTT MARQUIS HOTEL
NEW YORK CITY

THE FUTURE OF ENERGY IS HERE



The Premier New York State Advanced Energy Conference

WELCOME TO ADVANCED ENERGY CONFERENCE 2018



Emerging technologies and cutting-edge research. Microgrids and smart buildings. Offshore wind and geothermal power. Modern utility grids and alternative fuel vehicles. Today, entrepreneurs, researchers, and engineers are developing bold new advances in energy that will change the industry, and the world, forever. After decades of research and development in renewables, batteries, and other new technologies, the drive toward the development and adoption of cleaner, more sustainable energy is rapidly accelerating – not a moment too soon.



The devastation wreaked by Mother Nature across the United States this past year has had a tremendous impact on human lives, the economy, and the environment. From the destruction caused by flooding in Texas to Hurricanes Irma and Maria ravaging Florida and Puerto Rico, these disasters exposed the sweeping changes the energy industry must make to address aging energy infrastructures. The need to rebuild – not just using existing technology, but with state-of-the-art advancements – was never more critical than now.



The Future of Energy is Here. This isn't simply the theme of AEC 2018, it's a declaration brought on by worldwide demand coupled with the emergence of promising new technologies. Over the next two days, we will celebrate our industry's progress with diversity, learn about advancements in new areas of power generation, witness promising new entrepreneurship and research, and meet the industry and policy leaders who are shaping the future of global energy. Our conference will be highlighted by exciting plenary sessions featuring the energy industry's most esteemed and influential executives and scientists, along with 35 informational breakout sessions addressing critical and timely topics across the advanced energy spectrum.



We are also excited to have a Keynote Panel of domestic and international utility executives, moderated by SUNY Chancellor Dr. Kristina Johnson, that will focus on what the utility of the future may look like and discuss energy source predications, consumer energy profiles, the importance of energy affordability, incorporation of renewables, and much more.

AEC 2018 is North America's premier energy conference, and there's no better location for our conference than New York State. New York has recently made unparalleled advances in energy-related research and business. Starting with the Reforming the Energy Vision (REV) initiative to build a clean, resilient, and more affordable energy system, New York has made significant progress already in the growth of solar energy, released the nation's first Offshore Wind Master Plan, launched an effort to create the world's first fully digital utility, and stands poised to launch a major new market for advanced energy storage.

We must also recognize our major conference sponsors for their generous support and unwavering commitment to advancing energy technologies. Particularly, we would like to thank our **Host Sponsor**: New York State Energy Research and Development Authority (NYSERDA); our **Platinum Sponsors**: Essense Partners, National Grid, New York Power Authority, New York State Smart Grid Consortium, NextEra Energy Resources, PSEG Long Island, and Stony Brook University; our **Gold Sponsors**: Brookhaven National Laboratory, Deepwater Wind, NYU Tandon School of Engineering, and SMM Advertising; and our **Silver Sponsors**: Empire State Development, FuzeHub, Hydro Québec, Long Island Power Authority, NYSTAR, PETRO Home Services, Statoil and West Monroe Partners.

AEC 2018, organized by the Advanced Energy Research & Technology Center (AERTC), a designated New York State Center of Excellence at Stony Brook University, wishes to recognize the distinguished members of the AERTC Advisory Board, as well as the conference Scientific Advisory Committee, for their wisdom and guidance. Our thanks to Governor Andrew M. Cuomo for his visionary leadership in New York's push for expanding clean energy and renewable resources. Additionally, neither the AERTC nor the Advanced Energy Conference would exist without the continued support of the New York State Legislature. We wish to express our appreciation to New York State's Senate Majority Leader, John J. Flanagan; Speaker of the Assembly, Carl E. Heastie; and Chairman of the Senate Committee on Higher Education, Senator Kenneth P. LaValle.

The future of energy is here. Welcome, as we continue our journey toward that advanced energy future.

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GOVERNOR

March 27, 2018

Dear Friends:

It is my pleasure to welcome you to the 2018 Advanced Energy Conference.

New York is proud to host this cutting edge conference to harness the power of new technologies and pave a path to a cleaner, more prosperous future. This future is being built by public and private partnerships among industry, academia, government, and community organizations, many represented here at this conference, with the common goal of finding solutions to fight the harmful effects of a changing climate.

There is no more fitting place to hold “The Future of Energy is Here” conference than New York State. As the federal government continues to ignore the challenges of climate change, New York is leading the renewable energy revolution and growing the industries of tomorrow, from battery technologies to solar power. The State’s Reforming the Energy Vision strategy is a bold initiative to provide a cleaner, more resilient and affordable energy system for all New Yorkers. We have made unprecedented commitments to expand renewable energy sources and energy efficiency, and we are creating an energy ecosystem that is integrating new and emerging clean energy technologies into our infrastructure.

These clean energy investments are driving economic growth and jobs across the state, from Buffalo to Long Island. And all New Yorkers are benefiting from a cleaner and healthier environment. While challenges still lay ahead, I know the work we have done together is already making a difference in communities across the state, and I look forward to seeing what more we can achieve together.

On behalf of all New Yorkers, best wishes for a successful conference and an enjoyable time in New York.

Sincerely,

A handwritten signature in blue ink that reads "Andrew M. Cuomo".

ANDREW M. CUOMO

WE WORK FOR THE PEOPLE
PERFORMANCE * INTEGRITY * PRIDE

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A MESSAGE FROM OUR HOST SPONSOR



Welcome to the 2018 Advanced Energy Conference. The New York State Energy Research and Development Authority (NYSERDA) is proud to once again support one of the leading clean energy conferences in the country. This conference brings together some of the most innovative thought leaders in the energy field who are leading the conversations in the nation and around the world to advance clean energy solutions. In New York, Governor Cuomo is leading the fight against climate change, investing in emerging technologies, supporting the growth of clean energy markets, and creating a rapidly growing clean energy workforce. We welcome you and your ideas at the conference as we work together to build a clean energy future for our planet.

– **Alicia Barton**
President and CEO
NYSERDA



A MESSAGE FROM OUR PLATINUM SPONSORS



We, at Stony Brook University, stand firmly behind the Advanced Energy Conference 2018, the premiere New York State energy conference, in its mission to better our planet. Now, more than ever, we are driven to discover and advocate for new ways to harness life-sustaining energy.

I would like to thank the conference committees, exhibitors and supporting organizations who have gathered such a multi-faceted group of global energy and government leaders to share their passions and expertise for this cause. Together, we are shaping a more promising world by pooling our powerful knowledge to drive innovation.

At Stony Brook, we continue to make a difference through hard work, strong convictions and pioneering research. We are improving the latest technologies and keeping an eye on the ultimate goal – to bring new hope to an increasingly challenged world and share what we learn to advance the cause of clean and sustainable energy – now.

– **Samuel L. Stanley Jr., MD**
President
Stony Brook University



The New York State Smart Grid Consortium is proud to join as a partner of Advanced Energy Conference 2018 in New York City, hosting this year's edition of the premier forum for sharing innovative ideas and the latest approaches for addressing our most significant energy challenges. The Consortium is a public-private partnership formed to enable and facilitate the development and commercialization of advanced Smart Grid technologies, platforms and systems. It brings together academic and research institutions, global technology developers, energy providers and utilities, R&D sponsors, and new technology commercialization organizations. The NYSSGC is excited to support efforts both within New York and across the world to accelerate the adoption of more resilient, cleaner, and affordable power grids, and to help share the best thinking on how to make this vision a reality.

– **Robert B. Catell**
Chairman
NYS Smart Grid Consortium



The New York Power Authority is excited to be a part of the Advanced Energy Conference 2018. We hope to share experience and lessons learned from our efforts to become the nation's first end-to-end digital utility. Driven by Governor Andrew M. Cuomo's Reforming the Energy Vision initiative and our Vision 2020 Strategic Plan, NYPA recently opened its cutting-edge Integrated Smart Operations Center (iSOC) in our White Plains Office. The iSOC monitors 24,000-plus near-real time data points generated by our power plants and transmission assets, our communications infrastructure, and energy data from the over 11,000 buildings on our New York Energy Manager platform. We are also excited to discuss more about the innovative approaches that we, along with our sister utilities and external partners, are taking to make sure that our State's electricity system is cleaner, more resilient, and more affordable for all New Yorkers.

– **Gil C. Quiniones**
President & CEO
New York Power Authority



A MESSAGE FROM OUR PLATINUM SPONSORS



While National Grid continues to convert customers to clean natural gas at near record levels, we have received even more requests in the past two years to connect solar solutions to our system than new gas services. We recently connected the first major offshore wind installation in the US to our electric grid and just this past summer, more than half of the power delivered to customers by our UK electric business was from low-carbon sources.

Make no mistake. The future of energy is here – and National Grid is playing a vital role in the transition to this clean energy future – and we are actively driving renewable energy projects that progress New York’s REV agenda.

Through a combination of strategic partnerships, smart infrastructure investments, innovative technologies, continued environmental stewardship, and progressive rate making, National Grid is committed to building a new energy delivery model that meets customers’ needs in the 21st century.

– **Kenneth D. Daly**
President
National Grid New York



The Advanced Energy Conference is a key gathering of energy professionals in New York. This is an excellent forum to exchange ideas and learn about current energy issues and opportunities in the state. This is a unique opportunity for our company and we are proud to support the conference.

– **Ross D. Groffman**
Executive Director
NextEra Energy Resources, LLC



PSEG Long Island is excited to provide our customers on Long Island and in the Rockaways with outstanding reliability and storm response, strong involvement in the communities we serve, and an exceptional customer experience that incorporates new technology and smarter energy use. Supporting the Advanced Energy Conference gives us the opportunity to share our vision, interact with other leaders and visionaries, and learn how best to forge a responsible energy future on Long Island, in our state and across the nation.

– **Daniel Eichhorn**
President and COO
PSEG Long Island

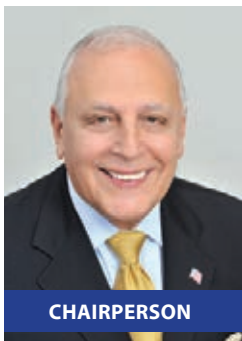


This year’s conference topic, “The Future of Energy is Here,” is spot on for several reasons. First, it shifts the onus on us to take action now, rather than passively wait for the future to unfold. Second, it speaks to the increasing pace of change that surrounds our sector today. At Essence Partners, we provide market research, branding and strategic marketing services exclusively within the evolving energy sector, and we have witnessed unprecedented and irreversible shifts in customer sentiment. For large organizations, energy has now become a strategic consideration, up from being a purely operational one in the past. For consumers, energy is more visible today, as it takes the physical form factor of solar panels, smart thermostats and more. This growing prominence of energy has exciting R&D and value proposition implications for developers of new energy solutions.

– **Mei Shibata**
CEO
Essence Partners



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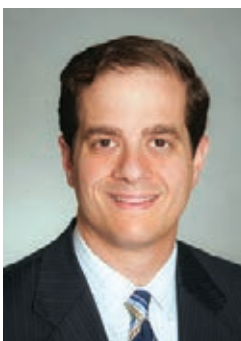
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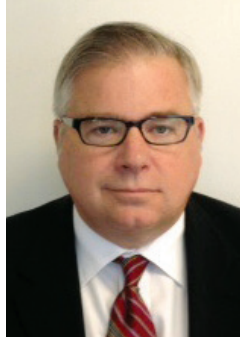
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SPECIAL THANKS

While many hard working staff and volunteers have crafted and executed this year's Advanced Energy Conference, several individuals deserve our special thanks for truly going above and beyond. This group has had the vision and foresight to understand the benefits of a strong, collaborative and united community of researchers, academics, municipal policymakers and utility partners working in concert with both the established corporate energy giants as well as emerging technology energy companies from around the world.



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INDUSTRY



KEYNOTE SPEAKERS



Dr. Ami Appelbaum – *Ministry of Economy and Industry; Israel Innovation Authority (IIA)*

Dr. Ami Appelbaum is the Chief Scientist and the Chairman of the Board of Israel Innovation Authority (IIA). Dr. Appelbaum has more than 36 years' experience in research, development and senior level management in the field of the Semiconductor. Prior to the current job as Chief Scientist, Dr. Appelbaum served for 22 years at numerous executive positions at KLA Tencor, \$15.6B Market Cap and world leader in the business of capital equipment for the semiconductor industry based in the Silicon Valley, CA.

Dr. Ami Appelbaum's recent job was Corporate Senior Vice President and President of KLA Tencor Israel. Dr. Appelbaum also held jobs as General Manager of a startup by the name Gallium Arsenide Diodes (GAD), in Israel. VP Operations and Program Manager at Semiconductor Devices (SCD) in Israel, manager of semiconductor lasers and detector development at Rockwell International in Richardson, Texas and Newbury Park, California and Member of Technical Staff (MTS) at AT&T Bell Lab in Murray Hill, New Jersey (US).

Dr. Appelbaum received his Doctorate and Master degrees from the Technion, Israel Institute of Technology in Haifa in the years 1983 and 1980, respectively and his Engineering degree from Ben Gurion University in Beer Sheba in 1977, all in the field of materials engineering. Dr. Appelbaum is the author and co-author of more than 50 scientific and technical publications, and holds 7 patents in the field of semiconductor equipment and processing.



Tim Cawley – *Consolidated Edison Company of New York*

Timothy Cawley is president of Consolidated Edison Company of New York, Inc., with responsibility for the safety, construction, planning, design, and reliability of Con Edison's energy systems serving more than 9 million New Yorkers. With an emphasis on operational excellence and improving the customer experience, the company provides electricity across New York City's five boroughs and to most of Westchester County. Con Edison also supplies natural gas service in Manhattan, the Bronx, and parts of Queens and Westchester, as well as steam service in Manhattan.

Mr. Cawley's portfolio includes an electric system undergoing transformative change. Renewable resources, technological innovation, and infrastructure improvements supporting greater energy efficiency and enhanced customer information are enabling customers to make smarter energy choices. This transformation includes the five-year implementation of the company's smart meter program.

Mr. Cawley previously served as president and chief executive officer for Orange and Rockland Utilities, Inc. (O&R), Consolidated Edison Inc.'s other regulated subsidiary, which operates in suburban New York and New Jersey. Before becoming president and CEO of O&R, Mr. Cawley served in a series of positions of increasing responsibility at both regulated companies, including in roles at Con Edison as SVP of central operations; as VP of substation operations; and as VP of Bronx and Westchester electric operations. He originally joined Con Edison in 1987.

Mr. Cawley holds a Master of Business Administration (MBA) from New York University and a bachelor's degree in electrical engineering from Union College.



Kenneth D. Daly – *National Grid New York*

Kenneth D. Daly, CFA, is the President & Chief Operating Officer of the New York business of National Grid, which serves 4 million natural gas and electric customers in Brooklyn, Queens, Staten Island, Long Island, and Upstate New York.

Mr. Daly joined National Grid's predecessor, Brooklyn Union, which later became KeySpan, in 1988 as a Management Trainee in the Customer Relations Department. Ken was previously based in London, serving for 2 years as Global Financial Controller, previously served as CFO of the US and UK gas distribution businesses, and has held numerous positions in Finance, Human Resources and Customer Relations throughout his 29 year career. Mr. Daly graduated from St. Francis College with a BA in English and has earned both an MBA in Finance from St. John's University and an MS in Human Resource Management from New York University. He achieved the distinguished Chartered Financial Analyst (CFA) designation in 2002 and recently completed the Harvard University Advanced Management Program in 2014.

KEYNOTE SPEAKERS

Kenneth D. Daly (cont'd) – *National Grid New York*

Mr. Daly is a member of the (SFC) Saint Francis College Board of Trustees and has been an adjunct professor at SFC, teaching human resource, business and finance courses for 25 years. He has been the Director of the St. John's University Executive-in-Residence Program since 1992. He is the past Chairman of the Kingsborough Community College Board of Directors and a former member of Junior Achievement Board of Directors and United Way Campaign Co-Chair. Mr. Daly is also a member of the David Rockefeller 'Fellows Program,' the Long Island Energiea Partnership, The NYC Partnership, Ridgewood Savings Bank, the Advanced Energy Research and Technology Center Board (AERTC), the Business Council of New York State Board, and the New York State Energy Research and Development Authority (NYSERDA) Board.

Mr. Daly lives in New York with his wife, Laurie, and their four children.



Steve Demers – *Hydro-Québec*

Steve Demers was appointed Vice President, Business Development on January 12, 2017. Up until this appointment, he had been Vice President, Business Development, Acquisitions & Strategy, since December 1, 2015. Prior to this, he was Vice President, Wholesale Markets, for a year, and Senior Director, Energy Trading Floor – Wholesale Markets, for three years.

Before joining Hydro-Québec, Mr. Demers was with the National Bank of Canada: from 2004 to 2011, as Senior Director and Treasurer (Montreal); from 2002 to 2004, as General Manager of the London (England) branch; and from 1998 to 2002, as Foreign Exchange Director at the bank's headquarters in Montreal. In 1997 and 1998, Steve was the Portfolio Manager for State Street Bank and Trust Company.

Mr. Demers holds a Master's Degree in Management Sciences with a specialization in Finance from HEC Montréal, as well as a Bachelor's Degree in Business Administration from Laurentian University. He also holds a Diploma from the Association Cambiste Internationale (ACI).



Daniel Eichhorn – *PSEG Long Island*

Dan Eichhorn was named President and Chief Operating Officer of PSEG Long Island in October 2017. PSEG Long Island operates the Long Island Power Authority's transmission and distribution system under a 12-year contract. PSEG Long Island is a subsidiary of Public Service Enterprise Group Incorporated, a publicly traded diversified energy company with annual revenues of \$9.1 billion.

Previously, Mr. Eichhorn served as PSEG Long Island's Vice President – Customer Services, an organization that he developed when PSEG Long Island was selected by the Long Island Power Authority (LIPA) to manage LIPA's electric transmission and distribution system. As Vice President, Mr. Eichhorn was responsible for customer satisfaction, marketing and marketing strategy, customer contact, meter-to-cash functions, and solar and energy efficiency programs.

Prior to this role, Mr. Eichhorn served as Director – Customer Contact and Technology for Public Service Electric and Gas Company (PSE&G), where he was responsible for assessing and implementing new customer technology, oversight of all call center operations, and oversight of the company's 16 customer service centers.

A veteran of PSE&G for 25 years, Mr. Eichhorn led the implementation of the company's new SAP-based customer information system. He has a broad background in electric and gas operations, customer operations and the appliance service business.

Mr. Eichhorn earned a Bachelor of Science in electrical engineering and a Master of Business Administration in finance from Drexel University. He attended numerous leadership development programs, including The Center for Creative Leadership, Darden School of Business and the Balanced Scorecard Management System.

KEYNOTE SPEAKERS



Brad Gammons – *IBM Energy, Environment & Utility Industry*

Brad is currently serving as Global Managing Director of IBM's Energy, Environment and Utility Industry. He is also responsible for IBM's Global Green Horizon initiative focused on improving sustainability and environmental outcomes.

Before joining IBM, Brad served as a Captain in the United States Air Force. There he held positions in Strategy and Planning, Weapons Development and as a Flight Crew member on the B-52. Brad is a member of the IBM Growth and Transformation Team and the IBM Industry Academy. Brad has testified in front of the US Congress on Energy issues and has been featured in articles in Forbes, Business Week and numerous industry and business periodicals. Brad is also a frequent speaker and panelist at industry conferences and forums.



Katherine Hamilton – *38 North Solutions*

Katherine Hamilton is Chair of 38 North Solutions, a public policy consultancy specializing in clean energy and innovation. Her firm also manages a non-profit organization, Project for Clean Energy and Innovation. Previously, she ran the GridWise Alliance, was policy director to the Energy Storage Association, and served as an advisor for Good Energies, a private equity company with a clean energy portfolio. Katherine directed American Bioenergy Association, developing renewable portfolio standards in states' legislatures, including Maryland and New Jersey. At the National Renewable Energy Laboratory (NREL), Katherine worked in buildings research and government relations. Katherine spent a decade at an investor-owned utility, designing electrical systems for commercial and residential developments. Katherine holds degrees from Cornell University and the Sorbonne. She was appointed an Ambassador to the Secretary of Energy's C3E Program under the Clean Energy Ministerial; is a co-host of The Energy Gang podcast through Greentech Media; serves as President of the Board of GRID Alternatives Mid-Atlantic; and is Co-Chair of the World Economic Forum's Global Future Council on the Future of Energy.



Danielle Merfeld, PhD – *GE Renewable Energy*

Danielle is the Chief Technology Officer of GE Renewable Energy, reporting to the CEO. In this role, she leads technical efforts to develop differentiated products and services across the broadest renewable energy portfolio in the industry, including on-shore wind, off-shore wind, solar PV, batteries, and hydro. Danielle is also currently the co-leader of the GE Women's Network, a global organization focused on the recruiting, retention, development and promotion of talented women across GE.

Prior to her role at GE Renewable Energy, Danielle was the Vice President & General Manager at GE Global Research. Danielle received her B.S. degree in Electrical Engineering from the University of Notre Dame, and PhD in Electrical Engineering from Northwestern University. She has authored or co-authored over 70 papers in refereed technical journals and has given presentations at conferences and symposiums around the world. Danielle is a member of several technical associations and is a Trustee at the University of Notre Dame.



Minister Pierre Moreau – *Energy and Natural Resources, Québec*

Before being elected for the first time in 2003, Pierre Moreau worked as a lawyer specializing in the field of municipal law for over 20 years. As well as being an elected member of Québec's National Assembly for more than 10 years, Minister Moreau has held numerous offices: Chief Government Whip, Minister responsible for Intergovernmental Affairs, Minister of Transport, Minister of Municipal Affairs, Acting Minister of Public Security, Minister of Education, Minister of Finance and President of the Treasury Board. On October 11th 2017, he became Québec's 30th Minister of Energy and Natural Resources.

Québec is fortunate in that it can rely on green, diversified and abundant energy resources. This guarantees a great quality of life for its citizens and creates business opportunities for Québécois around the world. It also enables the Québec government to pursue its strong commitment to combating climate change and set ambitious objectives moving towards a greener economy. In Minister Moreau's mind, the way forward is clear: we must change our ways of doing things and innovation and solidarity are key.

KEYNOTE SPEAKERS



Peter Oleksiak – *DTE Energy*

Peter B. Oleksiak is senior vice president and chief financial officer for DTE Energy (NYSE:DTE), a Detroit-based diversified energy company involved in the development and management of energy-related businesses and services nationwide. Its operating units include an electric utility serving 2.2 million customers in Southeastern Michigan and a natural gas utility serving 1.3 million customers in Michigan. The DTE Energy portfolio includes non-utility energy businesses focused on power and industrial projects, natural gas pipelines, gathering and storage, and energy marketing and trading. As one of Michigan's leading corporate citizens, DTE Energy is a force for growth and prosperity in the 450 Michigan communities it serves in a variety of ways, including philanthropy, volunteerism and economic progress. Oleksiak joined DTE Energy in 1998. He worked in a number of increasingly responsible financial positions until becoming assistant controller and then controller in 2005. He became vice president of Controller & Investor Relations in 2009.

Prior to DTE Energy, Oleksiak held a variety of financial analyst and supervisory positions at Chrysler Corp. Oleksiak earned a bachelor of science degree in finance and business economics from Wayne State University, and an MBA from the Wharton School of Business, University of Pennsylvania.

Oleksiak serves on the board of directors and is treasurer of Forgotten Harvest, a Michigan-based food recovery non-profit organization. He also serves on the Wayne State University School of Business Administration's Board of Visitors, the board of the Detroit Institute of Arts and chairs their Audit Committee, the board of the National Association of Manufacturers, and the board of the Michigan Opera Theatre.



Gil C. Quiniones – *New York Power Authority (NYPA)*

Gil C. Quiniones has served as President and Chief Executive Officer of the New York Power Authority (NYPA), the nation's largest state-owned electric utility, since 2011. He is responsible for developing and implementing the statewide utility's strategic vision and mission and for supervising its operations, legal and financial matters and relationships with external stakeholders. Under his leadership, NYPA is currently playing a key role in the Governor's Reforming the Energy Vision initiative to use market forces and new technology to empower customers and encourage the growth of clean renewable energy and energy efficiency.

Quiniones is co-chair of the Board of Directors of the Alliance to Save Energy and serves on the boards of the New York State Energy Research and Development Authority and the Large Public Power Council. He is the Power Authority's principal representative to the American Public Power Association, from which he received the Alex Radin Distinguished Service Award in 2017. Quiniones was also named as the 2017 Smart Electric Power Alliance Power Player of the Year, an award that recognizes those on the front lines of energy transformation in the United States.

Quiniones was co-chairman of the New York Energy Highway Task Force, which helped carry out Governor Andrew M. Cuomo's vision for reimagining New York State's energy system through partnerships between the public and private sectors. In 2015, he also served as chairman of the Board of Directors of the Electric Power Research Institute, the electric power industry's international research and development organization.

Before joining NYPA in 2007 as executive vice president of Energy Marketing and Corporate Affairs, Quiniones served in several positions in the administration of New York City Mayor Michael R. Bloomberg, including more than four years as senior vice president of Energy and Telecommunications. He previously worked for Con Edison for 16 years and was one of four co-founders of Con Edison Solutions, the utility's unregulated energy services company.

KEYNOTE SPEAKERS



John B. Rhodes – *New York State Department of Public Service*

On June 21, 2017, Governor Andrew M. Cuomo designated John B. Rhodes as Chair of the Public Service Commission and Chief Executive Officer of the Department of Public Service. His term began on June 21, 2017 and runs through February 1, 2021.

Prior to starting with the Commission, Mr. Rhodes served as President and CEO of the New York State Energy Research and Development Authority (NYSERDA). While leading NYSERDA, Mr. Rhodes was instrumental in developing innovative clean energy policies and initiatives to support Governor Andrew M. Cuomo's nation-leading strategies to combat climate change including the Clean Energy Standard for 50 percent of electricity to come from renewable energy sources by 2030 and Reforming the Energy Vision (REV), the state's strategy to build a cleaner more resilient and affordable energy system and grow New York's economy. He also oversaw the \$5 billion Clean Energy Fund focused on stimulating investment in clean technologies such as solar, wind, and energy efficiency as it supports the creation of thousands of jobs in manufacturing, engineering, and other clean tech sectors.

Mr. Rhodes brings more than 30 years of experience in business with a focus on the financial and energy industries having lived and worked internationally, including India, Germany, Brazil, and Argentina.

Prior to his appointment at NYSERDA, Mr. Rhodes served as the Director for the Center for Market Innovation at the Natural Resources Defense Council (NRDC), an international environmental advocacy organization. As a member of the senior management team, he worked to channel private capital towards environmentally beneficial investments, with a focus on energy efficiency, renewable energy, green infrastructure, and sustainable food and agriculture.

Mr. Rhodes was a partner at Booz Allen Hamilton where he provided strategic consulting for clients across technology-intensive industries including energy, aerospace, chemicals and pharmaceuticals.

Additionally, Mr. Rhodes serves on the boards of the New York Institute for Special Education and the American Federation for Aging Research.

Mr. Rhodes holds a bachelor's degree in history from Princeton University and a master's degree in management from the Yale School of Management. Mr. Rhodes currently resides in New York City.



Hongguang Wang, PhD – *Chinese Academy of Science and Technology for Development (CASTED)*

CASTED was renamed on December 28, 2007, directly under the MOST, the predecessor is National Research Center for Science and Technology for Development and it was set up in the 1992 State Council. The function of CASTED is to further transform the government functions, and to improve the capability of macro-management and decision making relating science and technology.

Dr. Wang is co-author of 19 books published in China, such as Chinese Biotechnological Economy, The Competitive Ability of Chinese Pharm Industry, Chinese Food Safety, Chinese Agriculture: Issues, Potential, Roads and Strategies, etc. He has published more than 100 scientific articles regarding the economy forecast, science and technology foresight, biotechnology and agriculture in China.

His many research achievements have been adopted by Chinese central government, such as, the potential productivity of the service industry in China by 2020 is about 2000 billion Chinese yuan, and the health industry is about 800 billion and sport industry is 150 billion, etc. In the year 2000, he promoted the idea that biotechnology would initiate the new technology and bio-economy should be the fourth wave of industry revolution, and medicine technology is going to the fourth revolution and agriculture industry is going into the 2nd green revolution. As Secretary-General, Dr. Wang organized "The first International Conference of Agricultural Science and Technology", "The first International Conference for Bio-economy", "Health Technology Summit" and other large-scale international conferences.

Dr. Wang was involved extensively in international exchange and collaborations with Maryland University, Minnesota University, Wageningen University of Netherlands, etc.. Dr. Wang obtained his PhD in Agricultural Economics from Beijing Agriculture University.

PLENARY SPEAKERS



Alicia Barton – *NYSERDA*

Alicia Barton was appointed president and CEO of the New York State Energy Research and Development Authority (NYSERDA) on June 26, 2017. NYSERDA is a public benefit corporation that advances innovative energy solutions to improve New York State's economy and environment.

Ms. Barton has held public and private sector leadership roles advancing clean energy projects and companies for over a decade. Immediately prior to her appointment, Ms. Barton served as co-chair of the Energy and Cleantech Practice at Foley Hoag, LLP, a global law firm based in Boston, where her practice focused on representation of clean energy companies in emerging market areas such as offshore wind and energy storage. Ms. Barton's other private sector work included serving as chief of operations of the Global Utility business unit at SunEdison, where she led teams working on utility-scale wind and solar projects.

Prior to her work in the private sector, Barton served as chief executive officer of the Massachusetts Clean Energy Center (MassCEC), a publicly supported agency that funds and accelerates the development of the clean energy sector. As CEO, Ms. Barton led all of MassCEC's investments, project finance, partnerships, and commercial operations across a range of clean energy technologies, and helped make the state a national leader in energy efficiency, renewable energy, and deployment of clean technologies.

Prior to serving as CEO of MassCEC, Ms. Barton was the Deputy Commissioner for Policy and Planning for the Massachusetts Department of Environmental Protection (MassDEP); Assistant Secretary for Environmental Review and Director of the Massachusetts Environmental Policy Act (MEPA) office; and Deputy General Counsel at the Executive Office of Energy and Environmental Affairs (EEA). She began her career at Foley Hoag as an associate in the firm's environmental practice.

Ms. Barton currently serves on boards of several organizations, including Greentown Labs, the Environmental League of Massachusetts, Efficiency Forward, and the Advisory Board for the New England Women in Energy and Environment (NEWIEE).

Ms. Barton earned a bachelor's degree in Natural Resources from The Ohio State University and a juris doctor degree from Boston College Law School.



Robert B. Catell – *Advanced Energy Research and Technology Center (AERTC) at Stony Brook University*

Mr. Catell was formerly the Chairman and Chief Executive Officer of KeySpan Corporation and KeySpan Energy Delivery, the former Brooklyn Union Gas. His career with Brooklyn Union Gas started in 1958. Following National Grid's acquisition of KeySpan Corporation, Mr. Catell became Chairman of National Grid, U.S. and Deputy Chairman of National Grid plc.

He currently serves as Chairman of the Board of the Advanced Energy Research and Technology Center (AERTC) at Stony Brook University, New York State Smart Grid Consortium, Cristo Rey Brooklyn High School, and Futures in Education Endowment Fund.

Mr. Catell serves on the Board of the following not for profit organizations: Colin Powell School for Civic and Global Leadership, Department of Education; Diocese of Rockville Centre, Feinstein Institute for Medical Research, St. Francis Hospital Foundation, and the New York City Police Foundation.

He also serves on the Board of the following business organizations: A+Technologies, Applied DNA Sciences Inc., BioRestorative Therapies, Long Island Angel Network (LIAN), Long Island Association (LIA), National Petroleum Council, ThermoLift Inc., and the Water Company, LLC.

He Chairs the Advisory Board for Applied DNA Sciences Inc., and serves on the Advisory Board for: Advanced Power North America (APNA), CAI Investments, the Center for Urban Sciences & Progress (CUSP), EC Infosystems, Gold Coast Bank, Our Energy Policy Foundation, Posillico Inc., the President's Advisory Council at Adelphi University, VNG.CO, and the Winthrop Hospital Board of Regents.

Mr. Catell is an Executive in Residence at Hofstra University and was named the first "John J. Phelan, Jr. Fellow" of the Robert B. Willumstad School of Business at Adelphi University.

PLENARY SPEAKERS

Mr. Catell is a former Chairman of the American Gas Association, Brooklyn Chamber of Commerce, KEYERA Energy Management Ltd., Long Island Association, Partnership for New York City, Inc., U.S. Energy Association (USEA), Business Council of NYS, the Advisory Board of the City College of New York's School of Engineering, and the Downtown Brooklyn Partnership.

Mr. Catell is a former board member of: the Brooklyn Public Library Foundation, City College of New York 21st Century Foundation, Edison Electric Institute (EEl), Energy Association of NYS, Long Island Foreign Affairs Forum, National Grid Foundation, New York Academy of Sciences, New York State Economic Development Power Allocation Board (EDPAB), New York State Energy Research & Development Authority (NYSERDA), Tomorrow's Hope Foundation, the advisory board of HeartShare for Human Services, and the Brooklyn Law School (Member Emeritus).

Mr. Catell is a member of the Association of Energy Engineers, CUNY Business Leadership Council, National Society of Professional Engineers, NYS Society of Professional Engineers, and the Society of Gas Lighting. Mr. Catell received both his Bachelor's and Master's degrees in Mechanical Engineering from the City College of New York and is a registered Professional Engineer. He has attended Columbia University's Executive Development Program, and the Advanced Management Program at the Harvard Business School.



Dr. Chris Fall – *Advanced Research Projects Agency-Energy (ARPA-E)*

Dr. Chris Fall currently serves as the Principal Deputy Director at the Advanced Research Projects Agency-Energy (ARPA-E). In this role, he is responsible for oversight of the agency and all technology issues relating to ARPA-E programs.

Prior to joining ARPA-E, Fall served as Acting Chief Scientist and Lead for the Research Division at the Office of Naval Research (ONR). Before that, he served in the White House Office of Science and Technology Policy as Assistant Director for Defense Programs and Acting Lead for the National Security and International Affairs Division. Before government service, Fall was a faculty member at the University of Illinois at Chicago in the Bioengineering and Anatomy and Cell Biology Departments.

Fall earned a PhD in Neuroscience and a BS in Mechanical Engineering from the University of Virginia. He also holds an MBA from Northwestern University's Kellogg School of Management.



Dr. Thierry Godart – *Intel Corporation*

Dr. Thierry Godart is the General Manager of Industrial Solutions Business Development with the Internet of Things Group of Intel Corporation. The vision of Industrial Solutions is to transform the industrial infrastructure to improve our world. The portfolio of Industrial Solutions includes microprocessors, embedded hardware, and IoT platforms for automation systems in Manufacturing, Energy, Logistics and Buildings.

Thierry is working with the ecosystem of device makers, software vendors and system integrators, as well as energy companies, industrial manufacturers, and building managers to develop and deploy ubiquitous connected devices, IoT edge platforms and cloud architectures for operational excellence and sustainable businesses addressing the challenges of the 21st century, in particular the Industry 4.0 revolution and climate change.

Thierry has 25+ years of experience providing advanced solutions to the global industry. At Schneider Electric, he was responsible for selling the complete set of Schneider offerings to electric utilities worldwide. Prior to his tenure at Schneider, Thierry led the Smart Grid and Rail Electrification Division of Siemens in North America. He has also held leadership positions at Areva T&D, ABB and GE.

Thierry holds a PhD in Electrical Engineering and Master's degrees in Applied Mathematics and Electrical Engineering, all from Georgia Tech (Atlanta, GA). He is a SUPELEC (Paris, France) Engineer.

Thierry is married with two children and lives in Scottsdale, Arizona.

PLENARY SPEAKERS



Chancellor Kristina M. Johnson, PhD – *The State University of New York*

Dr. Kristina M. Johnson joined The State University of New York as its 13th chancellor in September 2017. Immediately prior to joining SUNY, Dr. Johnson was co-founder and CEO of Cube Hydro Partners, LLC, a clean-energy infrastructure company focused on building and operating hydropower plants in North America. She also previously served as Under Secretary of Energy at the U.S. Department of Energy.

Dr. Johnson served as provost and senior vice president for Academic Affairs at Johns Hopkins University from 2007 to 2009, and as dean of the Pratt School of Engineering at Duke University from 1999 to 2007.

Dr. Johnson received her BS, MS, and PhD in electrical engineering from Stanford University. After a NATO post-doctoral fellowship at Trinity College in Dublin, Ireland, she joined the University of Colorado-Boulder's faculty in 1985 as an assistant professor and, later, full professor.

Among her many awards and distinctions, Dr. Johnson received the Dennis Gabor Prize for creativity and innovation in modern optics (1993) and the John Fritz Medal (2008), widely considered the highest award in engineering. Dr. Johnson is a member of the National Academy of Engineering, the National Academy of Inventors, and the National Inventors Hall of Fame. She holds 118 U.S. and international patents and has five honorary degrees.



Richard Kauffman – *Office of New York Gov. Andrew Cuomo*

Richard Kauffman joined the office of Gov. Andrew Cuomo as the state's first Chairman of Energy and Finance for New York, or 'energy czar,' in January 2013. On behalf of Governor Cuomo, Mr. Kauffman leads New York State's comprehensive energy policy effort, known as Reforming the Energy Vision (REV).

REV includes regulatory reform to modernize the energy and utility industry, a ten-year commitment to support renewable energy and efficiency markets through the \$5 billion Clean Energy Fund, and initiatives including the NY-Sun solar program and NY Green Bank. Through REV, New York State has enacted a Clean Energy Standard mandating that 50 percent of the state's electricity must come from renewable sources by 2030. These efforts will help enable statewide greenhouse gas emission reductions of 40 percent by 2030.

Mr. Kauffman oversees and manages the state's portfolio of energy agencies and authorities, comprised of the Department of Public Service (DPS), the New York Power Authority (NYPA), the Long Island Power Authority (LIPA), and the New York State Energy Research and Development Authority (NYSERDA). He was appointed chair of NYSERDA's board in June 2013.

As the state's most senior energy official, Mr. Kauffman was New York's lead delegate in Paris at the 2015 United Nations Climate Change Conference, or COP21. Mr. Kauffman was named by Fortune Magazine as one of the World's Top 25 Eco-Innovators, and has received the Solar Champion Award from the Solar Energy Industries Association (SEIA) and Smart Electric Power Alliance (SEPA), the U.S. Green Building Council's Galvin Award for environmental leadership, and the Intersolar 2017 Champion of Change Award.

Prior to joining the Cuomo administration, Mr. Kauffman served as Senior Advisor to Secretary Steven Chu at the U.S. Department of Energy. In his private sector career, he was CEO of Good Energies, Inc., a leading investor in clean energy technologies, a partner of Goldman Sachs where he chaired the Global Financing Group, and vice chairman of Morgan Stanley's Institutional Securities Business and co-head of its Banking Department.

Mr. Kauffman has served as Chairman of the Board of Levi Strauss & Co., on the boards of the Brookings Institution and the Wildlife Conservation Society, and is a member of the Council on Foreign Relations. Mr. Kauffman received a bachelor's degree from Stanford University, a master's degree in international relations from Yale University, and a master's in public and private management from the Yale School of Management.

PLENARY SPEAKERS



Dr. Yacov Shamash – *Stony Brook University*

As the Vice President for Economic Development at Stony Brook University, Dr. Shamash supervises the University's four incubators, three NYS Centers for Advanced Technology, two NYS Centers of Excellence, the Small Business Development Center, and the workforce development programs of the Center for Emerging Technologies.

In 1995, Dr. Shamash led SUNY's colleges of engineering to create the statewide Strategic Partnership for Industrial Resurgence (SPIR) program. Stony Brook's cumulative results include more than 3,100 projects completed with more than 490 companies, helping company partners win more than \$105.9 million in competitive federal awards.

During the period from 1992 to 2015 Dr. Shamash served as Dean of the College of Engineering and Applied Sciences at Stony Brook University. Under his leadership, the College expanded from 1,500 to over 5,000 students with average SAT scores of entering undergraduate students increasing from 1,150 to 1,343, and external research expenditures increasing six fold to more than \$30 million per year.

Prior to joining SUNY Stony Brook in 1992, Dr. Shamash served as the Director of the School of Electrical Engineering and Computer Science at Washington State University where he established the National Science Foundation Industry/University Center for the Design of Analog/Digital Integrated Circuits.

Dr. Shamash has also held faculty positions at Florida Atlantic University, the University of Pennsylvania and Tel Aviv University. He received his undergraduate and graduate degrees from Imperial College of Science and Technology in London, England. He has authored more than 130 publications and is a Fellow of the IEEE.



Samuel L. Stanley Jr., MD – *Stony Brook University*

Samuel L. Stanley Jr., MD became the fifth president of Stony Brook University on July 1, 2009, taking the helm of one of the nation's most prestigious research institutions.

A highly distinguished biomedical researcher, Dr. Stanley was one of the nation's highest recipients of support from the National Institutes of Health (NIH) for his research focusing on enhanced defense against emerging infectious diseases. He is an expert in the biological mechanisms that cells employ when responding to infectious agents such as parasites, bacteria, and viruses, a process commonly called the inflammatory response.

A Seattle native, Dr. Stanley has a Bachelor of Arts degree in biological sciences (Phi Beta Kappa) from the University of Chicago. After earning his medical degree from Harvard Medical School in 1980, he completed his resident-physician training at Massachusetts General Hospital. In 1983 he began a fellowship in infectious diseases at Washington University School of Medicine, became a professor of medicine in 1999, and in 2004 was appointed a professor in the Department of Molecular Microbiology in recognition of the collaborative nature of his research.

Dr. Stanley serves on the SUNY Strategic Planning Steering Committee, which plays a pivotal role in shaping the development of SUNY's new Strategic Plan that will guide SUNY for the next five years and the University for the next ten. As chair of Brookhaven Science Associates, which co-manages Brookhaven National Laboratory with Battelle Memorial Institute, Dr. Stanley joins the leaders of a select group of prestigious academic institutions, including Princeton, Stanford, the University of California-Berkeley, and the University of Chicago, in co-managing and collaborating with a national laboratory. He also serves on the boards of the SUNY Research Foundation, Cold Spring Harbor Laboratory, Goodwill Industries of Greater NY and NJ, and the Long Island Association. He was a member of the National Advisory Allergy and Infectious Diseases Council at the NIH, and was a member of the NIH Directors Blue Ribbon Panel on the National Emerging Infectious Diseases Laboratories. Dr. Stanley serves as an ambassador for the Paul G. Rogers Society for Global Health Research. Dr. Stanley has received an Honorary Doctorate Degree in Science from Konkuk University in Korea.

Dr. Stanley is a champion of academic and industry collaborations, knowing the enormous economic potential of successful university and corporate partnerships. With his extensive experience as a researcher, a patent holder and a former leader of technology transfer, Dr. Stanley brings an invaluable perspective to the emerging field of translational research. He also continues to work as a strong advocate for federal funding of basic research, working through organizations such as the AAU and The Science Coalition, to promote the critical role of University research in innovation and discovery.

PLENARY SPEAKERS



Dr. Esther Takeuchi – *Stony Brook University*

Dr. Esther S. Takeuchi is a SUNY Distinguished Professor and holds the William and Jane Knapp Chair in Energy and the Environment in the Departments of Materials Science and Chemical Engineering and Chemistry at Stony Brook University. She also has a joint appointment at Brookhaven National Laboratory as Chief Scientist in the Energy Sciences Directorate.

Prior to her academic appointment, she was employed at Greatbatch, Inc., where her research focused on lithium battery research for implantable applications. Her work was instrumental in the success of the lithium/silver vanadium oxide (Li/SVO) battery which is the power source of life-saving implantable cardiac defibrillators (ICDs) enabling the widespread adoption of ICDs with more than 300,000 devices implanted per year. Dr. Takeuchi is inventor of over 150 patents.

Dr. Takeuchi is a member of National Academy of Engineering, was awarded the National Medal of Technology and Innovation, was inducted into the National Inventors Hall of Fame and was elected as a Charter Member of the National Academy of Innovation. She received the E. V Murphree Award and Astellas Award from the American Chemical Society and the Electrochemical Society Battery Division Technology award. She is a Fellow of the Electrochemical Society (ECS) and the American Institute of Medical and Biological Engineering (AIMBE).

Dr. Takeuchi received a bachelor's degree from the University of Pennsylvania with a double major in chemistry and history and completed a PhD in chemistry at the Ohio State University.



Casey Walsh Cady – *California Department of Food and Agriculture (CDFA)*

Casey Walsh Cady is a Senior Environmental Scientist with the California Department of Food and Agriculture (CDFA). She is lead technical staff on CDFA's Dairy Digester Research and Development team where CDFA is investing over \$100 million on implementing anaerobic digesters on dairies to reduce methane emissions, produce bioenergy and provide other co-benefits.

Casey has a 20+ year career with CDFA administering programs that improve the environmental performance of California agriculture, including nutrient management, habitat restoration and water supply.

Casey holds a Bachelor's Degree in Agricultural and Resource Economics from the University of Massachusetts, Amherst and a Master's Degree from the University of California, Davis in International Agricultural Development.



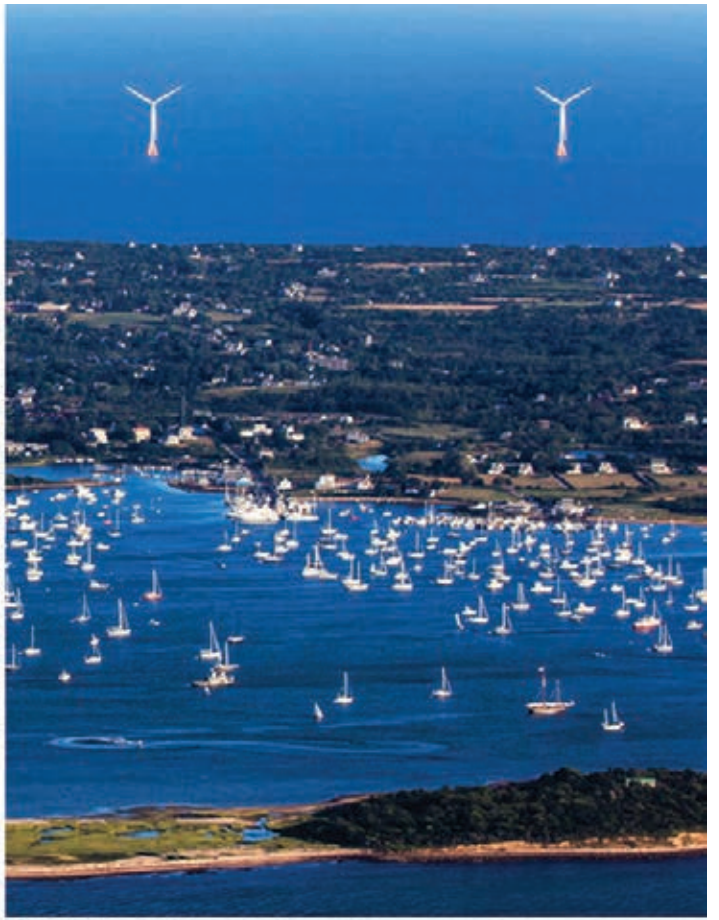
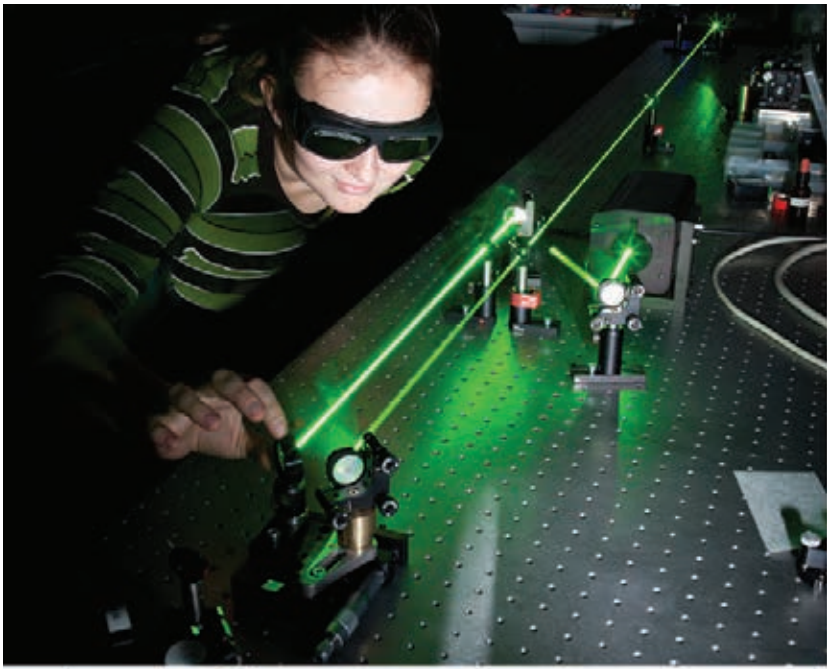
Tesla Science Center at Wardenclyffe



Nikola Tesla memorial located at Niagara Falls



Nikola Tesla



Leading the Charge: Evolving Roles of Women in Energy

PANEL ONE

Recruiting, Advancing and Retaining Women in the Energy Industry

Moderator



Sammy Chu
Chief Executive Officer
Edgewise Energy



Ellen Redmond
International
Representative
IBEW



Kimberly A. Harriman
Senior Vice President
of Public & Regulatory Affairs
New York Power Authority



Ed Murphy
Executive Director
Workforce
Development Institute



Paul Meyer
Senior Vice President
WSP USA

PANEL TWO

Addressing Implicit Bias Through Culture and Climate

Moderator



Pat Malone
Executive Director
Stony Brook Center for
Corporate Education



Alicia Barton
President and CEO
NYSERDA



Kenneth D. Daly
President &
Chief Operating Officer
of New York Business
National Grid



Dr. Doon Gibbs
Director
Brookhaven National
Laboratory



Danielle Merfeld, PhD
Chief Technology Officer
GE Renewable Energy



Kristine Pizzo
Senior Vice President
of Human Resources and
Enterprise Shared Services
New York Power Authority

Introduced by



Lisa Broughton
Suffolk County Energy Director
Suffolk County Economic
Development and Planning

How Should Emerging Energy Technologies Advance the State Energy Plan Goals?

**Panelists include representatives from NYSERDA,
Empire State Development, NYPA,
NYS Department of Transportation, and SUNY**

Representatives from the New York State Energy Research and Development Authority, Empire State Development, New York Power Authority, New York State Department of Transportation, and the State University of New York will provide perspectives regarding the value of energy policy in shaping program opportunities, and seek the insight from innovators, entrepreneurs, researchers and market participants on how to best shape state energy policy to develop and support successful ecosystems for advanced energy technologies in New York.

Join New York State representatives to discuss how emerging clean energy technologies and trends should be considered in developing New York's next State Energy Plan. Potential topics: current program approaches, prevailing challenges to commercialization, additional analysis needed to identify barriers and opportunities, and the role and coordination of market actors.



SESSION CHAIRPERSONS



Dr. Kathleen Araújo

Session F3 – Offshore Wind Policy Considerations in Industry & Port Development

Dr. Kathleen Araújo is an Assistant Professor of Energy-Environmental Systems and Policy at Stony Brook University, a Researcher with Brookhaven National Laboratory, and a Book Series Editor for Routledge's Studies in Energy Transitions. She specializes in strategic management and policy aspects of energy system change in the context of industrial development and innovation. Dr. Araújo has published work such as *Low Carbon Energy Transitions: Turning Points in National Policy and Innovation* (Oxford University Press, 2017). She consults for governmental/inter-governmental organizations and industry. Dr. Araújo earned her PhD at MIT, completing post-doctoral research at the Harvard Kennedy School on science, technology, and public policy.



Mark Austin

Session A4 – Early Stage & Growth Capital

Mark Austin is a Venture Partner with Bright Capital, a global venture capital firm focused on investments in new and alternative energy, energy and resource efficiency, advanced materials, energy storage, agtech, water, and green chemistry. Participating in the investment process from dealflow and due diligence, through investment and strategic growth, Mr. Austin has also served as a Board Director for venture-backed companies including QM Power, Agrivida, and Ener-G-Rotors. As Managing Director of Chandler Reed, he provided strategy and advisory services to funds, entrepreneurs, and CEOs of public and private technology-based companies. As a former serial tech entrepreneur, he founded or co-founded companies in electro-optics, medical lab devices, and advanced materials, received multiple international design awards, and has patents issued in 30 countries. Mr. Austin has also served as a consultant to UNDP's Sustainable Energy & Environment Division in their global technology program. He is an Entrepreneur-in-Resident with NYSERDA (the New York State Energy Research and Development Authority), has mentored entrepreneurs in Africa, and spoken at conferences in the US, Europe, Asia and Africa on venture investing, energy, strategy and entrepreneurship.



Dr. Edward A. Bogucz

Session C5 – Smart Buildings Solutions

Edward A. Bogucz is Executive Director of SyracuseCoE and Associate Professor of Mechanical and Aerospace Engineering at Syracuse University. SyracuseCoE was established in 2002 as New York State's Center of Excellence in Environmental and Energy Systems. Led by Syracuse University, SyracuseCoE engages partner companies and academic institutions to conduct research, development, demonstration (RD&D) projects that accelerate commercialization of innovations in clean and renewable energy, indoor environmental quality and building energy efficiency, and water resources. SyracuseCoE's 55,000-square-foot headquarters building serves as a unique whole-building testbed; its specialized RD&D facilities include the Willis H. Carrier Total Indoor Environmental Quality (TIEQ) Laboratory, which has been used to conduct pioneering research on impacts of air quality and ventilation on the cognitive function of office workers. Previously, Bogucz served more than eight years as Syracuse University's Dean of Engineering and Computer Science. He earned BS and PhD degrees in mechanical engineering from Lehigh University and an MS degree in heat transfer engineering from London's Imperial College.



Joseph Borowiec

Session C4 – Smart Buildings - Owners' Perspective

Joseph Borowiec is the Advanced Buildings Team Lead at NYSERDA. Joe and his team are focused on the advancement of building technologies to increase energy efficiency and reduce the GHG emission footprint of residential, commercial, and institutional buildings in New York. Current activities include the next generation of HVAC and smart building technologies. Prior to joining NYSERDA, Joe was employed for 21 years as a research engineer at GE's Global Research Center. Joe holds a BS in Electrical Engineering, an MS in Computer Science, and an MBA from Union College. He has 21 United States Patents.

SESSION CHAIRPERSONS



Laney Brown

Session B1 – Emerging Smart Grid Technologies

Laney Brown, Vice President, works with clients to provide guidance and strategy on the changing energy industry. In this role, she is supporting the development of REVConnect, a platform to support collaboration between NY utilities and innovative start-ups. In her previous roles she led Iberdrola USA's Future Utility strategy and represented the company in New York's Reforming the Energy Vision regulatory and stakeholder proceedings. As part of REV, she was responsible for development of its innovative demonstration projects designed to test new business models. Laney was also responsible for the delivery of a \$164M Smart Meter program. Because of this work, Laney was recognized as a top national Smart Grid Professional by Intelligent Utility Magazine, and a Smart Grid Pioneer by Smart Grid Today. Most recently Laney has been selected as a member of NY State Energy R&D Agency's Grid Modernization Advisory Committee and the US Department of Energy's Electricity Advisor Committee (EAC). Laney has a double MBA with a focus on the Global Energy Industry from the University of Strathclyde in Scotland and the Universidad Pontificas Comillas in Madrid, Spain.



Dr. Thomas A. Butcher

Session C1 – Department of Energy R&D

Dr. Thomas Butcher of Brookhaven National Laboratory is Deputy Chair of the Sustainable Energy Technologies Department and Head of the Energy Conversion Group. His long standing research interests include combustion and emissions, advanced concepts for building heating and cooling, and the application of conventional and biomass fuels in stationary combustion applications. Dr. Butcher is a Fellow of the American Society of Heating, Refrigeration, and Air Conditioning Engineers.



Christopher A. Cavanagh, PE

Session G3 – Technology to Market

Christopher Cavanagh is a Principal Program Manager in the New Energy Solutions team at National Grid and is responsible for developing programs to modernize National Grid's US natural gas distribution services. He was recently responsible for implementing a process for the development of new electric and gas technologies for customers to support National Grid's goals. Mr. Cavanagh has thirty years' experience in product development at National Grid and its predecessor companies. Mr. Cavanagh previously managed research programs in the areas of alternative fuel vehicles, advanced heating & cooling and distributed generation, including fuel cells. Mr. Cavanagh was a senior engineer with the New York architect-engineering firm, Gibbs & Hill. Mr. Cavanagh is a licensed professional engineer and a Member of the American Society of Heating Ventilating and Air Conditioning Engineers and has been a mentor and judge in the CleanTech Open and Powerbridge NY programs. He holds a Bachelor of Engineering degree from the Cooper Union, an MS from Polytechnic University (now NYU) and an MBA from Dowling College. Mr. Cavanagh is a member of the Advisory Board of the Clean Energy Business Incubator Program at Stony Brook University and also partnered with the Advanced Energy Research and Technology Center (AERTC) to create the new Institute of Gas Innovation and Technology at the AERTC.



Dr. Denis Cormier

Session E2 – Additive Manufacturing via Functional Printing

Session E3 – Additive Manufacturing for Aerospace Applications

Dr. Denis Cormier is the Earl W. Brinkman Professor at the Rochester Institute of Technology where he directs the New York State funded Additive Manufacturing and Multifunctional Printing (or AMPrint) Center. He has worked in the area of additive manufacturing for nearly 25 years. Much of his career has been dedicated to the development of metal additive manufacturing processes and materials in the defense and aerospace sectors. Dr. Cormier is a founding member of ASTM's F-42 additive manufacturing standards group, and he is a long time organizing committee member for the RAPID + TCT trade show and conference.

SESSION CHAIRPERSONS



Dr. Bob Currie

Session B5 – The DSO/DSP Transition

Bob is Chief Technology Officer and Co-Founder of Smarter Grid Solutions and leads the company's R&D division. SGS works with a number of utility companies in Europe, North America and beyond, providing Distributed Energy Resource Management Systems to support Grid Modernization and clean energy objectives. At present, SGS is managing around 300 MW of DER using its unique distributed real-time control technology. Bob participated in work streams of the UK Smart Grid Forum with a focus on the implementation of the RIIO regulatory framework. In New York, Bob was a member of the REV Market Design and Technology Platform working groups and more recently became a member of the NYSERDA Grid Modernization Committee. SGS was named a Bloomberg New Energy Pioneer in 2012 and a GreenTech Media Grid Edge Award winner in 2016. Bob received his Bachelors, Masters and PhD degrees from the University of Strathclyde, Scotland.



Kaumil Dalal

Session E4 – The Digital Utility

Kaumil Dalal is a Director within West Monroe Partners' Technology practice and a member of the Energy & Utilities Digital team. Kaumil has extensive experience helping organizations define technology strategy and deliver digital solutions spanning portals, mobile applications, systems integration and analytics. Kaumil brings a distinctive blend of business consulting and technology expertise, along with an understanding of best practices in strategy development, technology and business operations for utilities and energy companies. For the past year, Kaumil is leading delivery of a large employee intranet portal for a leading utility, aimed at forging a new digital future. This modern employee intranet portal establishes the digital platform that will engage utility employees, promote safety and provide information and tools to achieve operational excellence and provide customer experience.



Paul A. DeCotis

Session E5 – Big Data Analytics

Paul DeCotis is a senior director in West Monroe Partners, Energy & Utilities practice in New York where he leads the firm's East Coast practice and executive advisory and regulatory offerings. Prior to this, Paul was managing director of contract oversight, overseeing the PSEG Long Island operating services agreement and vice president of power markets at Long Island Power Authority. As vice president of power markets, Paul oversaw integrated resource planning, power generation and all power purchase agreements, project development including wind and renewable project offerings and FERC and RTO market policy. Paul served as energy secretary and chair of the state energy planning board for two New York Governors. Paul has a BS degree in International Business Management from SUNY College at Brockport, a Master of Arts degree in Economics from the University at Albany, and an MBA degree in Finance and Management Studies from The Sage Colleges Graduate School.



Jason Doling

Session D5 – Energy Storage Permitting Requirements

Jason Doling is Program Manager for Energy Storage at NYSERDA where the team is working to reduce market impediments to energy storage deployment in New York State. This includes reducing soft costs associated with storage systems by 25%+ per kWh by 2020, increasing the energy storage value proposition by bringing clarity to value stacking, and facilitating storage integration with renewable energy.



Scott Egbert

Session D4 – Meeting Peak Demand Through Energy Storage

Scott Egbert joined NYSERDA in June 2017 as Program Manager, Renewable Optimization and Energy Storage Innovation. Mr. Egbert is responsible for managing NYSERDA's investment portfolio in Renewable, DER, and Energy Storage Technology and Business Innovation. Mr. Egbert has over 20 years of experience in executive management, product delivery, product engineering, and business development. Previously, Mr. Egbert served as Manager, Business Development at GE Fuel Cells, Manager, New Product Development at GE Energy Storage, Managing Director, Plug Power Energy India, and Director of Engineering and Development at Plug Power Inc. Mr. Egbert holds a Bachelor of Science degree in Electrical Engineering from New Jersey Institute of Technology.

SESSION CHAIRPERSONS



Patrick Finch

Session C2 – Advanced Sensing for Smart Energy Management

Patrick Finch, a Lead Associate at Booz Allen Hamilton, is a management consultant with over 12 years of experience in the renewable energy, energy efficiency, and financial analysis markets. Throughout this time, he has delivered over 30 engagements on behalf of government, utility and non-governmental organization clients, and is currently engaged as a Technology-to-Market (T2M) advisor for the Advanced Research Projects Agency – Energy (ARPA-E). He has served in this capacity for several ARPA-E programs, including the new “Saving Energy Nationwide in Structures with Occupancy Recognition” (SENSOR) program. In this role, he is responsible for designing commercial milestones for a cohort of ARPA-E awardees, helping them manage towards these targets, and assisting them in developing go-to-market strategies for their emerging technologies. In his work for the utility sector, Patrick led the design and deployment of several innovative commercial real estate energy efficiency engagement programs on behalf of Pacific Gas & Electric (PG&E) Company, SoCal Edison, Eversource and National Grid, amongst others. He has a MA in International Trade and Investment Policy from the George Washington University, and is a LEED Accredited Professional.



Francisco Flores

Session B2 – MicroGrids

Francisco Flores is a techno-economic analyst at the U.S. Department of Energy’s National Renewable Energy Laboratory (NREL). Francisco has more than nine years of experience in energy, economic, and financial analysis. At NREL, he is currently working on assessing microgrid costs and developing cost mitigation strategies. He has also evaluated the potential generation and financial performance of solar PV and wind generation facilities for domestic and international clients, modeled the potential economic benefits of renewable energy deployment in several regions of the world, and worked on financial optimization models for hybrid energy systems and networked microgrids. In the past, Francisco worked at the Colorado Energy Office where he co-developed and managed a program to assist distributed generation project developers and owners in developing business plans and finding sources of capital. Francisco has an electrical engineering degree from the Monterrey Institute of Technology in Mexico, and master’s degree from the University of Colorado.



James T. Gallagher

Session B3 – Role of Utilities in Advancing Microgrids

Named Executive Director of the New York State Smart Grid Consortium (NYSSGC) in April 2013, James T. Gallagher brings over 40 years of energy policy and industry experience to his role. As Executive Director, Gallagher oversees the Consortium and its members as they work toward broad statewide implementation of a safe, secure, and reliable smart grid to modernize New York’s energy infrastructure. He is presently leading the Consortium’s efforts to assist Puerto Rico in developing a long-term grid roadmap following the devastation of Hurricane Maria. Prior to joining the NYSSGC, Gallagher served as Manager of Strategic Planning at the NYISO, and also Director of Energy Policy for the City of New York, and he was the lead energy advisor to the Office of Mayor Michael Bloomberg. Prior to working with the City, he was Director of the Office of Electricity and Environment for the New York Public Service Commission, where he enjoyed a 21-year career.



Donovan Gordon

Session G5 – Heat Pumps: Utilities, Emerging Business Models and Enabling R&D

Donovan Gordon is Director of Renewable Heating & Cooling for the New York State Energy Research and Development Authority (NYSERDA). He leads New York State’s efforts to develop markets that support clean, high-efficiency, renewable thermal systems, including solar cooling, heating and hot water; air and ground source heat pumps, and biomass heating systems. He is charged with conceptualizing, driving and implementing a portfolio of products to encourage and enable customers and partners to invest in low-carbon/renewable cooling and heating systems and also with advancing New York’s progress toward self-sustained markets. Donovan is a Leadership in Energy and Environmental Design (LEED) accredited Green Associate, and an International Ground Source Heat Pump Association (IGSHPA) accredited Geothermal Installer. He received a bachelor’s degree in Business Management from St. Francis College and a Master of Business Administration from NYU, Stern.

SESSION CHAIRPERSONS



Ross Gould

Session F4 – Offshore Wind Workforce

Ross Gould is the Energy Sector Program Manager for WDI. Ross is a lawyer and has worked in private, public and not for profit sectors focusing on energy, environment and workforce. In his role as program manager, he spends his time assessing the impacts energy policy, sector trends and emerging technologies have on the workforce and tracking areas of opportunity within the energy sector where new employment is likely and workforce development needs are anticipated. Ross travels throughout New York to obtain ground level intelligence about New York's energy workforce, the hiring demands of employers, and training programs. Before joining WDI, Ross worked as legislative director and counsel at the New York State Senate where he drafted legislation across a wide array of issue areas, including energy, environment, taxes, economic development, education, and local governments. Ross has also run the air and energy program for a statewide environmental not for profit, where his work focused on energy efficiency, renewable energy, state energy planning, siting of electricity generation and clean energy jobs. Ross is the author and co-author of several articles and reports that assess the workforce impacts of environmental and energy policies.



Dr. Robert Ivester

Session E1 – Advanced Manufacturing Policies and Practices

Dr. Robert Ivester currently serves as the Director of the Advanced Manufacturing Office (AMO) in the Office of Energy Efficiency and Renewable Energy (EERE) at the U.S. Department of Energy. Prior to this position, he served as the AMO Deputy Director for five years. During that time, AMO launched five Manufacturing USA Institutes, the Critical Materials Hub, and hundreds of smaller R&D and technical assistance projects across the Nation. He also worked at the National Institute of Standards and Technology for over 16 years, leading and performing research in advanced manufacturing. He has been an instructor for the Johns Hopkins University Engineering for Professionals program for graduate-level studies in manufacturing engineering since 2001. He is an SME Fellow and a Fellow of the American Society of Mechanical Engineers. He received his Doctorate in Engineering and Bachelor of Science degree in Mechanical Engineering and Master of Science degree in Manufacturing Engineering from the University of Massachusetts at Amherst.



Professor Devinder Mahajan

Session G1 – Sustainable Gas Systems - Public Policies

Dr. Devinder Mahajan is Professor and Graduate Program Director of Chemical & Molecular Engineering and serves as Director of the newly established Institute of Gas Innovation and Technology (I-GIT) in the R&D Park, Stony Brook University. His research includes monitoring energy policies and development of low-carbon technologies to address sustainability and climate change issues. He has published over 287 papers, delivered over 110 lectures, edited 8 special journal volumes, and holds 15 patents. Dr. Devinder Mahajan received his Ph. D. from the University of British Columbia, Canada and completed his post-doctoral training at Brookhaven National Laboratory (BNL), New York. He joined the staff at BNL in 1983 and moved to Stony Brook University in 2002 and concurrently held a joint Scientific staff appointment with BNL until 2015.



Patricia Malone

Session C3 – Built Environment Cybersecurity

Pat Malone is Executive Director of the Center for Corporate Education and The Advanced Energy Training Institute at Stony Brook University serving over 1000 professionals annually. In 2008, Pat created the global award winning "Wall Street and Beyond" certificate program in collaboration with the project Management Institute and the USGBC-LI to assist over 2000 dislocated professionals. She has conducted clean energy, manufacturing and aerospace labor market intelligence and development projects for the New York State Department of Labor, NYSERDA and the Governors' Regional Economic Development Councils Opportunity Agenda. She is a member of the Suffolk County Workforce Development Board, the REDC Workforce and Education Committee, founding chair of the Outreach, Engagement and Economic Development Network for the University Professional Continuing Education Association (UPCEA) and serves on the editorial board for UNBOUND. She holds a BA from the University of Dayton, a Master's Degree from Stony Brook University and co-edited the Jossey Bass publication "Enhancing Creativity in Adult and Continuing Education".

SESSION CHAIRPERSONS



John Markowitz, PE, CEM

Session A2 – Heavy Duty Vehicle Electrification and its Impact

John is the Lead Engineer in the Energy Services Product Development Group at the New York Power Authority (NYPA) where he is developing advanced technology programs including electric transportation, solar, energy storage, and load control. Before joining NYPA, John held engineering and marketing positions in transportation, telecommunications and energy efficiency. He is a member of the Association of Energy Engineers and the Society of Automotive Engineers. He holds a Bachelor's of Electrical Engineering from Manhattan College, and a Master of Business Administration from Pace University. He is a Licensed Professional Engineer and a Certified Energy Manager.



Joe Martens

Session F2 – Developer's Round Table

Joe Martens is the Director of the New York Offshore Wind Alliance, a coalition of business, labor and environmental organizations committed to promoting the development of offshore wind energy off New York's coast. He served as Governor Andrew Cuomo's Commissioner of the Department of Environmental Conservation from March 2011 to July 2015. Mr. Martens led the agency in implementing its core statutory mission to protect public health and the environment. He guided the Administration's efforts to protect and expand access to the state's open spaces, boost environmental funding programs, and launch numerous initiatives to protect drinking water, improve air quality and reduce greenhouse gasses. Mr. Martens served Governor Mario Cuomo as Deputy Secretary for Energy and the Environment from 1992-94 and as Assistant Secretary from 1990-92. Mr. Martens studied resource economics at the University of Massachusetts at Amherst and received an M.S. in Resource Management from the State University of New York, College of Environmental Science and Forestry at Syracuse University.



Stephanie McClellan, PhD

Session F1 – New York Offshore Wind Master Plan

Stephanie McClellan is the Director of the Special Initiative on Offshore Wind, at the College of Earth, Ocean and Environment, University of Delaware. She has expertise in cutting-edge state/federal offshore wind issues, policy and advocacy, gained from her professional experience in state/local government and private industry. She previously served as the Director of Strategic Initiatives and Outreach for the Atlantic Wind Connection (AWC), a proposed 350-mile subsea transmission system to serve offshore wind farms. Stephanie entered the offshore wind industry after her immersion in the field as Policy Director for Governor Jack A. Markell. Prior to joining the Markell administration, she was an Assistant Professor at the University of Delaware in the School of Public Policy and Administration, and an elected member of the New Castle County Council. In both positions, she focused on environmental leadership and policy. McClellan holds a doctorate in Urban Affairs and Public Policy.



Houtan Moaveni

Session D2 – Challenges & Successes of Solar Adoption

Houtan Moaveni is currently serving the dual role of the Deputy Director of NY-Sun Initiative and New York State Distributed Generation Interconnection Ombudsman at New York State Energy Research and Development Authority (NYSERDA). Mr. Moaveni is an accomplished energy professional with over 14 years of experience in solar from design, analysis and operation to policy, planning, program design and implementation. He has a proven track record of successfully delivering a wide-range of solar initiatives, supporting the U.S. Department of Energy (DOE), states, utilities and public service commissioners which has resulted in receiving several awards over the years.



Matthew Palmer, PE

Session F5 – Offshore Wind Technologies to Reduce Costs

Matthew Palmer is a power industry professional skilled in acquisition, development, and management of power generation assets. He has over 30 years of experience spanning both renewable and conventional technologies, including wind, solar, natural gas, liquid fuel, and solid fuel. Matt's involvement with offshore wind in the US began 17 years ago with the first public hearing on the Cape Wind project. He became Project Manager for Engineering at Cape Wind and now manages the offshore wind business for WSP in the US.

SESSION CHAIRPERSONS



Keith Rooney

Session G2 – Sustainable Gas Systems - New Business Models

Keith is currently the Jurisdictional Director, Customer, Government Relations and Community Management. Keith is responsible for all major customer, government and community activities Downstate New York. This includes managing a team of Jurisdictional Managers in Staten Island, Brooklyn, Queens and Long Island. Keith has over 28 years' experience with National Grid and was most recently Manager of Gas Control for Long Island and Upstate New York. He managed twenty rotating shift operators, thirty plus power generators, gas compliance and ran the gas network for the state. He graduated from St. Joseph's College with a business degree and Executive MBA and is a former United States Marine. He served on the NGA Gas Control Managers board and also the Deer Park School board as Vice President. Recently Keith completed the United Way's Loaned Executive program in New York City. This role included customer management, marketing, project management, public speaking and driving a positive change in the communities we serve. He is married twenty five years with three children. Keith is currently enrolled in the David Rockefeller Fellows leadership Program in New York City. This is a yearlong program that is focused on Executive Leadership Skills.



David Sandbank

Session D3 – Transitioning from Net Metering

In 2014 David Sandbank joined NYSERDA to run NY State's \$1 billion NY-Sun initiative and has overseen the largest year-over-year growth of solar in New York State. In addition, Sandbank helped lead the design and launch of a Community Solar program to reduce the cost of solar in the State and enable access for all New Yorkers. Since Sandbank has taken the helm PV installed capacity has increased over 300% and costs have come down by 33%. Prior to joining NYSERDA, Sandbank worked as a solar developer, helping a start-up grow into a \$30 million company. Sandbank helped build a staff of more than 100 and oversaw company operations, marketing, engineering and installation teams. In November 2013, Sandbank was elected vice president of the New York Solar Energy Industries Association to actively work with government agencies, policy makers and utility companies to help advance the solar industry in New York.



Joah Sapphire

Session A3 – Energy Implications of Autonomous Vehicles

Joah Sapphire is Managing Partner of Axial + GDG. Axial is a transportation focused private equity firm and GDG is an Internet of Things consulting firm. Joah supports research for the "Automated Electric Vehicle Campus Demonstration" project funded by NYSERDA. Previously, he co-authored "Exploring Applications for Unmanned Aerial Systems and Unmanned Ground Systems in Enhanced Incident Management, Bridge Inspection and Other Transportation-related Operations" published June 2017 and contributed to NYSDOT's Connected Vehicle Pilot Proposal "Bringing the Internet of Things to Transportation" deemed acceptable by USDOT on September 14, 2015. Joah was a member of organizing committee for UTRC Region 2's Symposiums on Connected and Autonomous Vehicles in 2014-2016. Joah is adjunct professor for Columbia University's School of International and Public Affairs and a member of the Advisory Board of University at Buffalo's Institute for Sustainable Transportation and Logistics. He holds an MPA from Columbia University and BS from Cornell University.



Mei Shibata

Session D1 – Marketing & Branding as R&D Considerations

Mei is CEO of Essence Partners, a research, branding and marketing firm focused exclusively on the energy sector. Essence Partners works with technology companies, investor-owned, municipal and cooperative utilities across the U.S., and city/state agencies that run energy programs. An entrepreneur at heart, in 2008 Mei co-founded ThinkEco, an IoT developer of utility applications. Her leadership turned the ThinkEco modlet® into a consumer-friendly product, and she successfully launched the CoolNYC residential demand response program with strategic partner Con Edison. For her work at ThinkEco, Mei was recognized as New York's Top 10 Energy Entrepreneurs, and selected as an NYC Venture Fellow by the NYCEDC. Previously, Mei was Managing Director of Strategy and North American Executive Committee Member at advertising agency Havas Life, and Senior Director of Strategy with Interbrand. She also has strategy consulting and equity analyst experience in Boston and New York. Mei holds a bachelor's degree in physics from Harvard, a master's degree in medical engineering from the joint Harvard/MIT HST program, and an MBA from Harvard Business School.

SESSION CHAIRPERSONS



Jeff Smith

Session B4 – Advanced Distributed Simulation Tools

Jeff is Manager of EPRI's Distribution Operations and Planning Program and Power System Studies team at EPRI. This research program and team focuses on modernizing distribution planning and operational tools, methods, and analytics to advance distribution systems with new technologies in a cost-effective and reliable manner. For over 20 years, Jeff has been responsible for performing and leading various modeling and analysis related studies and research from distribution planning to transmission planning and generation procurement. In recent years, Jeff has also lead EPRI's distribution planning research area as well as the modeling and analysis research related to distributed energy resources. Prior to EPRI, Jeff was a Senior Engineer at Electrotek Concepts. Jeff received his BS and MS degrees from Mississippi State University in 1996 and 1998, respectively.



David South

Session G4 – Emerging Technologies

David South is a senior principal in the Energy & Utilities Practice at West Monroe Partners; he also leads its firm-wide Sustainability Practice. He has more than 35 years of power generation, distributed energy and emissions control technology and related market, strategic, policy and regulatory assessment experience. At West Monroe David delivers strategic, market and business transformation advisory services related to distributed energy and sustainability. Prior to West Monroe, David was President of Technology & Market Solutions, LLC, which provided analytic, strategic, economic, and regulatory advisory services on technology, market, and compliance issues involved with electricity generation and distribution, industrial boilers and processes, and mobile sources. Before joining the private sector David spent 15 years with Argonne National Laboratory conducting applied economic and market research on advanced energy and environmental technologies and related environmental programmatic issues for federal and state government clients.



Mark A. Sperry

Session A5 – Raising Capital: Lessons Learned

Mark is the President and CEO of Sperry Energy, a strategic advisory services company, and a founder and Managing Member of Combined Energies; a startup focused on the commercialization of specialized power electronics and related technologies. Additionally, Mark is an Innovation Advisor to the New York State Energy Research and Development Authority and consulting Chief Marketing Officer of Molecular Glasses. Most recently, Mark served as Interim CEO of MPOWERD, a provider of personal solar lighting for consumer markets. Mr. Sperry was President and CEO of H2Pump, a NY based startup that provided hydrogen-recycling services to industrial customers. Mr. Sperry joined H2Pump from Plug Power, where he held the position of Senior Vice President and General Manager of Plug Power's Continuous Power Division. Prior to joining Plug Power, Mr. Sperry spent 15 years at Xerox Corporation, where he served as Vice President and General Manager for the US Production Color Business.



Luke Tonachel

Session A1 – EVs, Utilities and the Electric Grid

Luke Tonachel is the Director of the Clean Vehicles and Fuels team at the Natural Resources Defense Council (NRDC). Since joining NRDC in 2004, his focus has been on reducing the environmental impacts of the world's transportation demands by advocating for policies that develop and commercialize cleaner, more efficient vehicles and non-petroleum fuels. Mr. Tonachel has authored and contributed to numerous nationally-recognized reports and analyses covering vehicle electrification, improved vehicle efficiency and other oil and pollution reduction opportunities. Mr. Tonachel holds a bachelor's degree in mechanical engineering from the University of Rochester and a Master's in Public Policy from the University of California, Berkeley. Prior to NRDC, he gained hands-on experience with energy systems and propulsion plants as an engineering officer while serving aboard a cruiser in the United States Navy and managed commercial software development.

2018 POSTER SESSION JUDGES



Dr. Eddy Rojas
Dean
School of Engineering



Prof. Marjaneh Issapour, MSEE, P.E.
Director, Renewable Energy
and Sustainability Center
Professor, Electrical and Computer
Engineering Technology

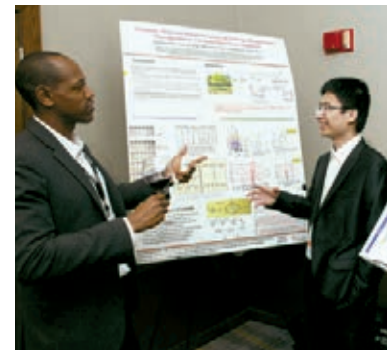
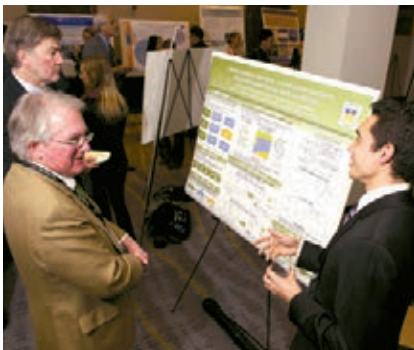
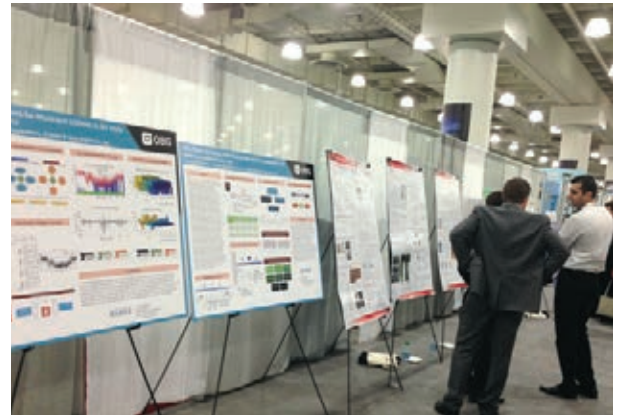
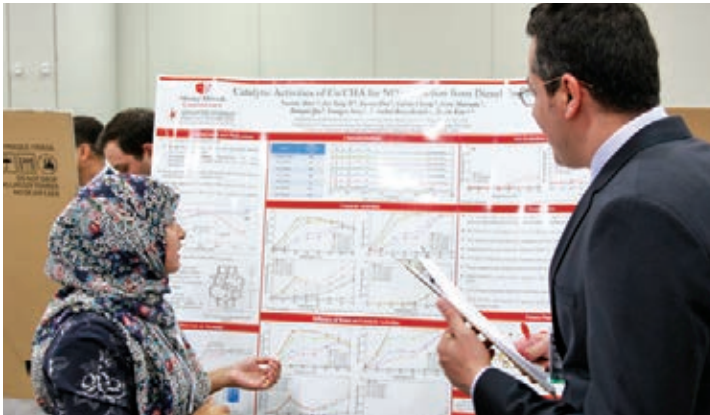


Dr. Serpil Guran
Director, Rutgers EcoComplex,
"Clean Energy Innovation Center"
RutgersX "Ecolignite: Clean Energy
Proof of Concept Center
& Accelerator" Program



LIST OF CATEGORIES:

- **Undergraduate College Student** (judged session)
- **Graduate College Student** (judged session)
- **Industry/Academic Representative**



EARLY REGISTRATION & PRE-CONFERENCE WORKSHOPS - MONDAY, MARCH 26

12:00pm -
5:00pm

Early Registration – Badge Pickup Open
12:00pm - 5:00pm Exhibitor Setup

PRE-CONFERENCE WORKSHOPS AGENDA – MONDAY, MARCH 26

2:00pm-
6:00pm

PRE-CONFERENCE WORKSHOP SERIES Open to All; No Cost to Attend – Advance Registration Required

Leading the Charge: Evolving Roles of Women in Energy

Introduced by: Lisa Broughton, Suffolk County

Panel 1 (2:00pm - 3:15pm):

Recruiting, Advancing and Retaining Women in the Energy Industry

2:00pm -
4:30pm

Moderator: Sammy Chu, Edgewise Energy

Panelists: Ellen Redmond, IBEW • Kimberly A. Harriman, New York Power Authority
Ed Murphy, Workforce Development Institute • Paul Meyer, WSP USA

Panel 2 (3:15pm - 4:30pm):

Addressing Implicit Bias through Culture and Climate

Moderator: Pat Malone, Stony Brook University Center for Corporate Education

Panelists: Alicia Barton, NYSERDA • Kenneth D. Daly, National Grid
Dr. Doon Gibbs, Brookhaven National Laboratory • Danielle Merfeld, PhD, GE Renewable Energy
Kristine Pizzo, NYPA

2:00pm -
3:30pm

How Should Emerging Energy Technologies Advance the State Energy Plan Goals?

Hosted By: NYSERDA

5:00pm -
6:00pm

Welcome Reception
(AEC2018 Registered Attendees)

6:00pm

ADJOURNED, REGISTRANTS ARE NOW FREE TO GO OUT TO A LOCAL RESTAURANT FOR DINNER



a New York State designated Center of Excellence

CONFERENCE AGENDA - TUESDAY, MARCH 27

7:00AM

Registration Open

8:00AM

Breakfast Begins in Exhibit Area - Open Networking

PLENARY SESSION

6th Floor,
Broadway
Ballroom

9:00am - 9:05am

Opening Remarks Robert B. Catell, AERTC

9:05am - 9:20am

Plenary Speaker Richard Kauffman, Office of New York Gov. Andrew Cuomo

9:20am - 9:35am

Keynote Speaker Gil C. Quiniones, President & CEO, NYPA

9:35am - 9:40am

Closing Logistics Robert B. Catell, AERTC

9:40AM - 10:15AM

NETWORKING BREAK, VISIT EXHIBITORS - 5TH FLOOR

TRACK A

EVs, Utilities and the Electric Grid

CHAIRPERSON:

Luke Tonachel, NRDC

John Shipman, *Con Edison*
Nancy Ryan, *Energy + Environmental Economics (E3)*
Scott Fisher, *Greenlots*
Karsten Barde, *National Grid*

TRACK B

Emerging Smart Grid Technologies

CHAIRPERSON:

Laney Brown,
Concentric Energy Advisors

Michael Oshetski,
Micatu Incorporated
Charles Murray, *Switched Source*
Dr. Bob Currie, *Smarter Grid Solutions*
Peter Lilienthal, PhD, *HOMER Energy*

TRACK C

Department of Energy R&D

CHAIRPERSON:

Dr. Thomas A. Butcher,
Brookhaven National Laboratory

Jon Longtin, PhD,
Stony Brook University
Dr. Sotirios Mamalis,
Stony Brook University
Paul Kalb,
Brookhaven National Laboratory
Eli Leland, PhD, *Voltaiq*

SESSION I

10:15am - 11:30am

7th Floor

11:30AM - 12:15PM

NETWORKING BREAK, VISIT EXHIBITORS - 5TH FLOOR

12:15PM

Lunch Begins & Exhibit Area Will Close

PLENARY SESSION

6th Floor,
Broadway
Ballroom

12:15pm - 12:20pm

Welcome Robert B. Catell, AERTC

12:20pm - 12:35pm

Plenary Speaker Alicia Barton, NYSERDA

12:50pm - 1:05pm

Plenary Speaker Dr. Esther Takeuchi, Stony Brook University

1:05pm - 1:20pm

Plenary Speaker Dr. Chris Fall, Advanced Research Projects Agency-Energy (ARPA-E)

1:20pm - 1:35pm

Keynote Speaker Danielle Merfeld, PhD, CTO, GE Renewable Energy

1:35pm - 1:50pm

Keynote Speaker Dr. Ami Appelbaum, Israel Innovation Authority

1:50PM - 2:30PM

NETWORKING BREAK, VISIT EXHIBITORS - 5TH FLOOR

Heavy Duty Vehicle Electrification and its Impact

CHAIRPERSON:

John Markowitz, NYPA

Danny Ilioiu, *MTA NYC Transit*
Bethany Whitaker, *VEIC*
Baskar Vairamohan, *EPRI*
Peter Rego, *The Lion Electric Co.*

MicroGrids

CHAIRPERSON:

Francisco Flores, NREL

Andrew Scobie, *The Faraday Grid*
Dr. Arindam Maitra, *EPRI*
Dr. Xianyong Feng, *UT-CEM*
Arunkumar Vedhathiri, *National Grid*

Advanced Sensing for Smart Energy Management

CHAIRPERSON:

Patrick Finch, *Booz Allen Hamilton*

Dr. Ya Wang, *Stony Brook University*
Dr. Michael Gouzman,
Stony Brook University
Daniel Rouse, *Energy Solutions Air*
Jose Castillo, *Jasmine Universe*
Rebecca Hughes, *NYPA*

SESSION II

2:30pm - 3:45pm

7th Floor

3:45PM - 4:15PM

NETWORKING BREAK, VISIT EXHIBITORS - 5TH FLOOR

Energy Implications of Autonomous Vehicles

CHAIRPERSON:

Joah Sapphire, *Axial + GDG*

Adam Jonas, *Morgan Stanley*
Brad Rutherford, *Local Motors*
Michael Brown,
Southwest Research Institute

Role of Utilities in Advancing Microgrids

CHAIRPERSON:

James T. Gallagher,
NYS Smart Grid Consortium

Bob Loughney, *Couch White LLP*
David Lovelady, *National Grid*
Andre Wellington, *Con Edison*
Don Mathew, *PSEG*

Built Environment Cybersecurity

CHAIRPERSON:

Pat Malone, *Stony Brook University*

Ernest Schirmer, *WSP USA*
Glen Carolo, *True Access Networks*
Joe Klotz, *Johnson Controls*
Wilson Lin, *NYCEDC Cybersecurity*
Kenneth Carnes, *NYPA*
Ignatius Grande, *Berkeley Research Group*

SESSION III

4:15pm - 5:30pm

7th Floor

5:30PM - 6:30PM

RECEPTION, EXHIBITS, JUDGED POSTER SESSION - 5TH FLOOR

6:30PM

ADJOURNED, REGISTRANTS ARE NOW FREE TO GO OUT TO A LOCAL RESTAURANT FOR DINNER

CONFERENCE AGENDA - TUESDAY, MARCH 27

Registration Open

7:00AM

Breakfast Begins in Exhibit Area - Open Networking

8:00AM

Opening Remarks Robert B. Catell, AERTC

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Plenary Speaker Richard Kauffman, Office of New York Gov. Andrew Cuomo

9:05am - 9:20am

Keynote Speaker Gil C. Quiniones, President & CEO, NYPA

9:20am - 9:35am

Closing Logistics Robert B. Catell, AERTC

9:35am - 9:40am

PLENARY SESSION

6th Floor,
Broadway
Ballroom

NETWORKING BREAK, VISIT EXHIBITORS - 5TH FLOOR

9:40AM - 10:15PM

TRACK D

Marketing & Branding as R&D Considerations

CHAIRPERSON:
Mei Shibata,
Essense Partners

Kiran Bhatraju, Arcadia Power
James Heath, Southern Company
David Bend, Nest Labs
Jane Parker, Interbrand Health

TRACK E

Advanced Manufacturing Policies and Practices

CHAIRPERSON:
Dr. Robert Ivester,
US DoE - Advanced
Manufacturing Office

Leonard Poveromo,
Composites Prototyping Center
T. Paul Chow, RPI
Daniel Ocorr, Kodak

TRACK F

New York Offshore Wind Master Plan

CHAIRPERSON:
Stephanie McClellan, PhD,
University of Delaware

Doreen Harris, NYSERDA
Greg Lampman, NYSERDA
Karen Chytalo, NYS DEC
Thomas Rienzo, NYS DPS
Michael Snyder, NYS DOS

TRACK G

Sustainable Gas Systems- Public Policies

CHAIRPERSON:
Dr. Devinder Mahajan,
Stony Brook University

Johannes Escudero, RNG Coalition
Donald Chahbazpour, National Grid
Ilissa Ocko, PhD, EDF
Kevin Neumaier,
Sustainable Dairy Technologies
Dan Dessanti, Northeast Gas Assoc.
Christopher Voell, US EPA

NETWORKING BREAK, VISIT EXHIBITORS - 5TH FLOOR

11:30AM - 12:15PM

Lunch Begins & Exhibit Area Will Close

12:15PM

Welcome Robert B. Catell, AERTC

12:15pm - 12:20pm

Plenary Speaker Alicia Barton, NYSERDA

12:20pm - 12:35pm

Plenary Speaker Dr. Esther Takeuchi, Stony Brook University

12:50pm - 1:05pm

Plenary Speaker Dr. Chris Fall, Advanced Research Projects Agency-Energy (ARPA-E)

1:05pm - 1:20pm

Keynote Speaker Danielle Merfeld, PhD, CTO, GE Renewable Energy

1:20pm - 1:35pm

Keynote Speaker Dr. Ami Appelbaum, Israel Innovation Authority

1:35pm - 1:50pm

PLENARY SESSION

6th Floor,
Broadway
Ballroom

NETWORKING BREAK, VISIT EXHIBITORS - 5TH FLOOR

1:50PM - 2:30PM

Challenges & Successes of Solar Adoption

CHAIRPERSON:
Houtan Moaveni, NYSERDA

Joe White,
Orange & Rockland Utilities, Inc.
Daniel Spitzer, Hodgson Russ LLP
Nick Baudouin, PowerMarket
Garrett Nilsen, US DoE

Additive Manufacturing via Functional Printing

CHAIRPERSON:
Dr. Denis Cormier,
Rochester Institute of Technology

Arkady Malakhov, Solid Cell
Sudhir Kulkarni, PBC Tech
John Olenick, EnRG

Developer's Round Table

CHAIRPERSON:
Joe Martens, NY Offshore Wind Alliance

Thomas Brostrom, Ørsted
Jeffrey Grybowski, Deepwater Wind
Christer af Geijerstam, Statoil
Lars Thaaning Pedersen,
Copenhagen Infrastructure Partners (CIP)

Sustainable Gas Systems- New Business Models

CHAIRPERSON:
Keith Rooney, National Grid

Prof. Clive Clayton,
Stony Brook University
Matt Tomich, Energy Vision
Sean Gleeson,
Noblehurst Green Energy LLC
Bill Jorgensen, Vanguard Renewables
Curt Gooch, Cornell University

NETWORKING BREAK, VISIT EXHIBITORS - 5TH FLOOR

3:45PM - 4:15PM

Transitioning from Net Metering

CHAIRPERSON:
David Sandbank, NYSERDA

Sean Garren, Vote Solar
Hannah Muller, Clean Energy Collective
Ilan Guthertz, Borrego Solar
Evan Dube, Sunrun
Stephen Wemple, Con Edison

Additive Manufacturing for Aerospace Applications

CHAIRPERSON:
Dr. Denis Cormier,
Rochester Institute of Technology

Jason Jones, Moog
Scott Vader, Vader Systems
Michael Leach, nTopology
Carl Johnson, Norsk Titanium

Offshore Wind Policy Considerations in Industry & Port Development

CHAIRPERSON:
Dr. Kathleen Araújo, Stony Brook Univ.

Bonnie Ram, University of Delaware
Ross Tyler,
Business Network for Offshore Wind
Bruce Hamilton, Navigant
Andy Geissbuehler, RRI

Technology to Market

CHAIRPERSON:
Chris Cavanagh, National Grid

Jon Garrity, TagUp
Dr. Shailesh Upreti, C4V
Angelo D'Anzi, StorEn
Dr. Gabriel Rogriguez-Calero, Ecoelectro
Paul Mutolo, Standard Hydrogen Corp.

RECEPTION, EXHIBITS, JUDGED POSTER SESSION - 5TH FLOOR

5:30PM - 6:30PM

ADJOURNED, REGISTRANTS ARE NOW FREE TO GO OUT TO A LOCAL RESTAURANT FOR DINNER

6:30PM

CONFERENCE AGENDA - WEDNESDAY, MARCH 28

7:30AM

Registration Open

7:30AM

Breakfast Begins in Exhibit Area - Open Networking

PLENARY SESSION

6th Floor,
Broadway
Ballroom

8:00am -8:05am

Opening Remarks Dr. Yacov Shamash, Stony Brook University

8:05am -8:20am

Plenary Speaker Casey Walsh Cady, California Department of Food and Agriculture

8:20am -8:35am

Keynote Speaker Hongguang Wang, PhD, Deputy Director General Chinese Academy of Science and Technology for Development, Ministry of Science and Technology

8:35am - 8:40am

Closing Logistics Robert B. Catell, AERTC

8:40AM - 9:15AM

NETWORKING BREAK, VISIT EXHIBITORS - 5TH FLOOR

TRACK A

Early Stage & Growth Capital

CHAIRPERSON:

Mark Austin, *Bright Capital*

Sarah Kearney, *PRIME Coalition*

John Santoleri,

Clean Energy Venture Group NY

Praveen Sahay, *WAVE Equity Partners*

Rahul Bhalodia,

Constellation Technology Ventures

Bill Lese, *Braemar Energy Ventures*

TRACK B

Advanced Distributed Simulation Tools

CHAIRPERSON:

Jeff Smith, *EPRI*

Dr. Mohammad Mojdehi,

O'Brien and Gere

Robert Broadwater, *EDD*

Dave MacRae, *Opus One Solutions*

TRACK C

Smart Buildings - Owners' Perspective

CHAIRPERSON:

Joseph Borowiec, *NYSERDA*

Jerritt Gluck, *Bonded Energy*

John J. Gilbert III,

Rudin Management Company, Inc.

Luke Falk, *Related Management*

Mike Reed, *NYSERDA*

SESSION IV

9:15am - 10:30am

7th Floor

10:30AM - 11:15AM

NETWORKING BREAK, VISIT EXHIBITORS - 5TH FLOOR

Raising Capital: Lessons Learned

CHAIRPERSON:

Mark Sperry, *Sperry Energy*

Dr. Gabriel Rodriguez-Calero, *Ecolectro*

Andy Frank, *Sealed*

Colleen Costello, *Vital Vio*

Rob Anstey, *Graphenix Development*

The DSO/DSP Transition

CHAIRPERSON:

Dr. Bob Currie,
Smarter Grid Solutions

Damian Sciano, *Con Edison*

Kevin Morissey,

Smarter Grid Solutions

Keith Bell, *University of Strathclyde*

Simon Gill, *University of Strathclyde*

Will Fischer, *Summit Ridge Energy*

Michael Razanousky, *NYSERDA*

Smart Buildings Solutions

CHAIRPERSON:

Dr. Edward A. Bogucz,
Syracuse University

Terry Casey, *IntellaStar*

John Petze, *Skyfoundry*

Dan Leonhardt, *EcoSystem Energy*

David Klatt,

Energy Technology Savings

SESSION V

11:15am - 12:30pm

7th Floor

12:30PM - 1:00PM

NETWORKING BREAK, VISIT EXHIBITORS - 5TH FLOOR

1:00PM

Lunch Begins & Exhibit Area Will Close

PLENARY SESSION

6th Floor,
Broadway
Ballroom

1:00pm -1:05pm

Welcome Samuel L. Stanley Jr., MD, President, Stony Brook University

1:05pm -1:15pm

Opening Remarks Chancellor Kristina M. Johnson, PhD, The State University of New York

1:15pm -1:35pm

Fireside Chat John Rhodes, Chair, New York State Department of Public Service
Katherine Hamilton, Chair, 38 North Solutions

1:55pm -2:45pm

Keynote Panel of Utilities Tim Cawley, Con Edison • Kenneth D. Daly, National Grid
Steve Demers, Hydro-Québec International • Dan Eichhorn, PSEG-LI
Peter Oleksiak, DTE Energy

2:45pm -3:00pm

Plenary Speaker Dr. Thierry Godart, Intel Corporation

3:00pm -3:15pm

Keynote Speaker Pierre Moreau, Minister of Energy and Natural Resources, Québec

3:15pm -3:30pm

Keynote Speaker Brad Gammons, Global Managing Director, IBM Energy,
Environment and Utilities Industry

3:30pm - 3:35pm

Closing Remarks Robert B. Catell, AERTC

3:35PM - 4:00PM

NETWORKING BREAK, VISIT EXHIBITORS - 5TH FLOOR

4:00PM

CONFERENCE ADJOURNED

CONFERENCE AGENDA - WEDNESDAY, MARCH 28

Registration Open

7:30AM

Breakfast Begins in Exhibit Area - Open Networking

7:30AM

Opening Remarks Dr. Yacov Shamash, Stony Brook University

8:00am - 8:05am

Plenary Speaker Casey Walsh Cady, California Department of Food and Agriculture

8:05am - 8:20am

Keynote Speaker Hongguang Wang, PhD, Deputy Director General Chinese Academy of Science and Technology for Development, Ministry of Science and Technology

8:20am - 8:35am

Closing Logistics Robert B. Catell, AERTC

8:35am - 8:40am

PLENARY SESSION

6th Floor,
Broadway
Ballroom

NETWORKING BREAK, VISIT EXHIBITORS - 5TH FLOOR

8:40AM - 9:15AM

TRACK D

TRACK E

TRACK F

TRACK G

Meeting Peak Demand Through Energy Storage

CHAIRPERSON:
Scott Egbert, *NYSERDA*

Ravi Manghani, *GTM Research*
Christian Perreault, *Hydro-Québec*
Rick Cutright, *GE*
John Bellacicco, *Stem Energy*
Ray Hohenstein, *AES*

The Digital Utility

CHAIRPERSON:
Kaumil Dalal,
West Monroe Partners

Doug McMahon, *NYPA*
Steve Sundstrom, *C3 IOT*
Kevin Dick, *Delta Institute*
Kristin Barbato,
Independent Consultant

Offshore Wind Workforce

CHAIRPERSON:
Ross Gould, *WDI*

Chris van Beek, *Deepwater Wind*
Matt Vestal, *NYSERDA*
Janice Padula,
Clinton Community College
Michael Yee, *Local Union 3 IBEW*

Emerging Technologies

CHAIRPERSON:
David South, *West Monroe Partners*

Doron Brenmiller, *Brenmiller Energy*
Michael Brookman, *BRASH Power*
Jason Salfi, *Dimensional Energy*
Dave Hershberg, *STS Global*
Thomas Thundat, *University at Buffalo*

NETWORKING BREAK, VISIT EXHIBITORS - 5TH FLOOR

10:30AM - 11:15AM

Energy Storage Permitting Requirements

CHAIRPERSON:
Jason Doling, *NYSERDA*

Tria Case, *CUNY*
Paul Rogers, *FDNY*
Victoria Carey, *DNV GL*

Big Data Analytics

CHAIRPERSON:
Paul DeCotis, *West Monroe Partners*

Jorge Calzada, *National Grid*
Jeff Adams, *ICF Consulting*
Mamoon Latif,
Infosys Utility Business Unit
Shannon Tassin,
Infosys Utility Business Unit
Alan McMorran, *Open Grid Systems*

Offshore Wind Technologies to Reduce Costs

CHAIRPERSON:
Matthew Palmer, *WSP*

Dr. Jeff Freedman,
University at Albany
Mike Passaretti, *ULC Robotics*
Matt Filippelli, *AWS Truepower*
Kevin Pearce, *Siemens*

Heat Pumps: Utilities, Emerging Business Models and Enabling R&D

CHAIRPERSON:
Donovan Gordon, *NYSERDA*

Bob Wyman, *Independent Consultant*
Jens Ponikau, *GroundUp*
Chong "John" Lin, *National Grid*
Margaret Jolly, *Con Edison*
Jean-Philippe Drouin, *Ecosystem*

NETWORKING BREAK, VISIT EXHIBITORS - 5TH FLOOR

12:30PM - 1:00PM

Lunch Begins & Exhibit Area Will Close

1:00PM

Welcome Samuel L. Stanley Jr., MD, President, Stony Brook University

1:00pm - 1:05pm

Opening Remarks Chancellor Kristina M. Johnson, PhD, The State University of New York

1:05pm - 1:15pm

Fireside Chat John Rhodes, Chair, New York State Department of Public Service
Katherine Hamilton, Chair, 38 North Solutions

1:15pm - 1:35pm

Keynote Panel of Utilities Tim Cawley, Con Edison • Kenneth D. Daly, National Grid
Steve Demers, Hydro-Québec International • Dan Eichhorn, PSEG-LI
Peter Oleksiak, DTE Energy

1:55pm - 2:45pm

Plenary Speaker Dr. Thierry Godart, Intel Corporation

2:45pm - 3:00pm

Keynote Speaker Pierre Moreau, Minister of Energy and Natural Resources, Québec

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Keynote Speaker Brad Gammons, Global Managing Director, IBM Energy,
Environment and Utilities Industry

3:15pm - 3:30pm

Closing Remarks Robert B. Catell, AERTC

3:30pm - 3:35pm

PLENARY SESSION

6th Floor,
Broadway
Ballroom

NETWORKING BREAK, VISIT EXHIBITORS - 5TH FLOOR

3:35PM - 4:00PM

CONFERENCE ADJOURNED

4:00PM

EXHIBIT HALL & BOOTH ASSIGNMENTS

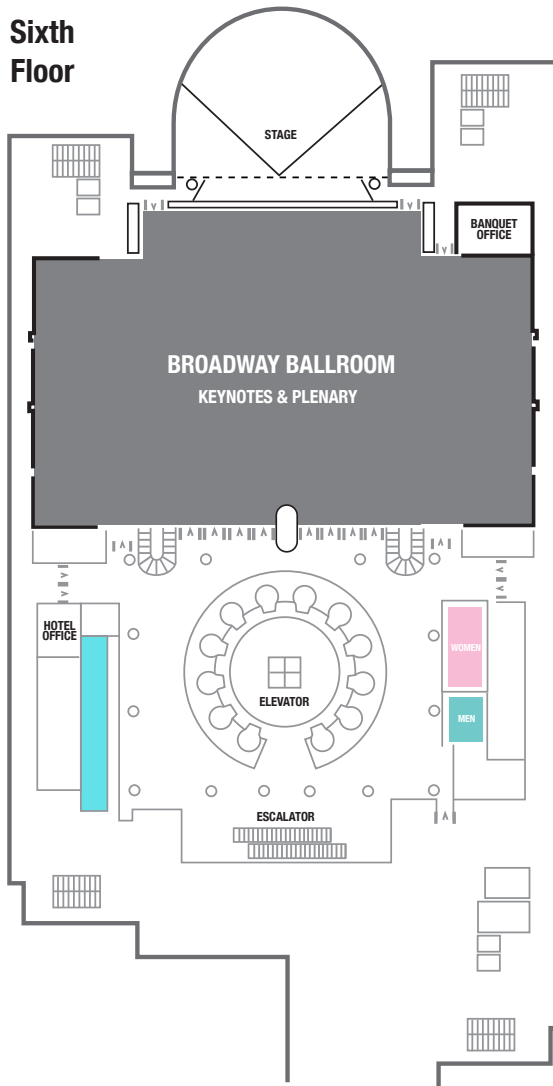


| EXHIBITOR | BOOTH # |
|--|---------|
| Advanced Energy Research & Technology Center | 703 |
| AHEAD Energy | ESD-4 |
| Allied Microbiota | NY-23 |
| AMPrint Center / RIT | 512 |
| App Innovators | T1 |
| Avatar Sustainable Technologies | ESD-6 |
| Bettergy | ESD-9 |
| Binghamton University S3IP | 407 |
| Bonded Energy | NY-10 |
| Brash Power | NY-6 |
| Brenmiller Energy | NY-1 |
| Brookhaven National Laboratory (BNL) | 305 |
| C4V | NY-7 |
| Center for Advanced Ceramic Technology (CACT) / RPI | 408 |
| Center for Automation Technologies and Systems (CATS) / RPI | 309 |
| Center for Future Energy Systems (CFES) / RPI | 313 |
| Center for Integrated Electric Energy Systems (CIEES) at SBU | 406 |
| Center of Excellence in Advanced & Sustainable Manufacturing (CoE-ASM) / RIT | 508 |
| ChemCubed | ESD-11 |
| Council Rock | ESD-13 |
| Dimensional Energy | NY-18 |
| Eco2Heat | T11 |

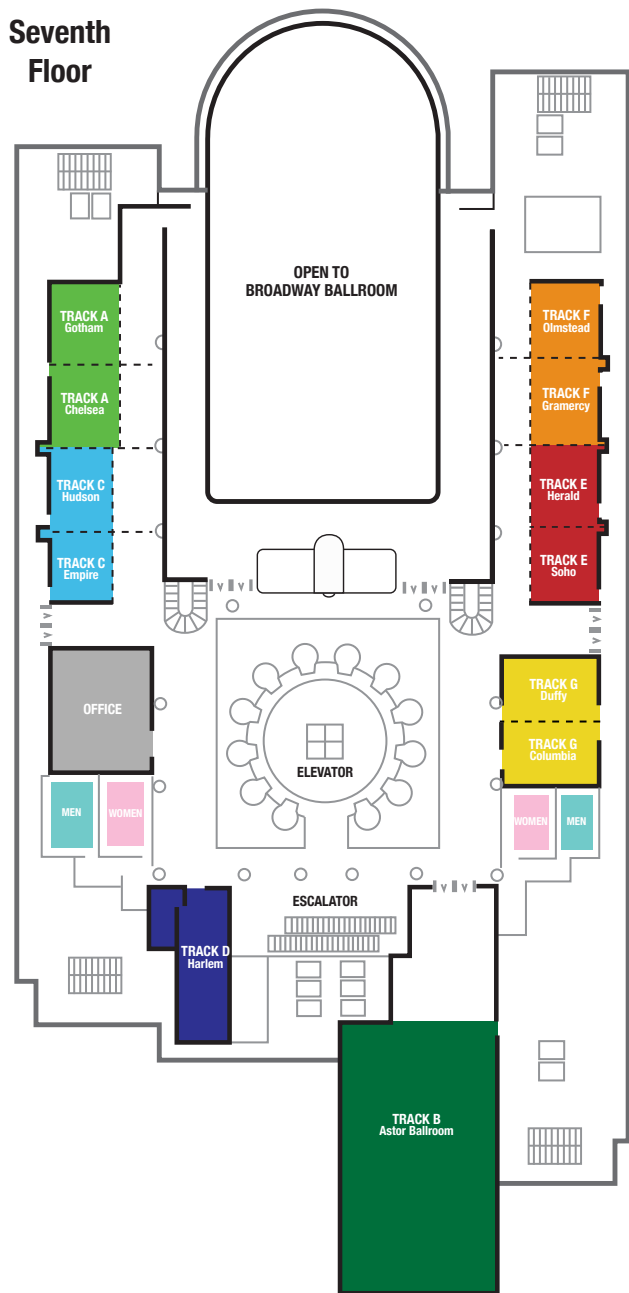
| EXHIBITOR | BOOTH # |
|--|---------|
| Ecolectro | NY-16 |
| Economic Development at Stony Brook University | 707 |
| Energystics | NY-11 |
| ENrG | ESD-14 |
| Essence Partners | 500 |
| EthosGen | NY-8 |
| Farmingdale State College Renewable Energy & Sustainability Center | 405 |
| Future Facilities | ESD-10 |
| FuzeHub/NYSTAR | 409 |
| GoElectric | NY-2 |
| Green Sulcrete Corp. | NY-14 |
| HBM Prencsia Solutions/Omnicon | 709 |
| Highview Power | NY-2 |
| Intellastar | 502 |
| Island Group Enterprises (IGE) | ESD-3 |
| Jasmine Universe | ESD-15 |
| LC Drives | ESD-8 |
| Lockheed Martin | 504 |
| Long Island MEP | 412 |
| Manifold Robotics | NY-19 |
| MicroEra Power (MEP) | ESD-2 |
| NanoSulf | NY-20 |
| National Grid | 109 |

EXHIBIT HALL & BOOTH ASSIGNMENTS

Sixth Floor



Seventh Floor



| EXHIBITOR | BOOTH # |
|---|---------|
| NeuralNet | NY-12 |
| New York Institute of Technology (NYIT) | T9 |
| New York Power Authority (NYP&A) | 503 |
| New York State Smart Grid Consortium | 301 |
| Novorocs | NY-17 |
| NYSERDA | 203 |
| NYU Tandon School of Engineering | 303 |
| Orion Polymer | ESD-5 |
| Petro Home and Commercial Services | 403 |
| PowerMarket | NY-3 |
| PSEG Long Island | 400 |
| Québec Pavilion (iSun Energy by Renewz, The Lion Electric Co., Sigma Energy Storage, Systemex Energies) | 101 |
| Scottish Development International | T10 |
| Sensor CAT | ESD-17 |
| Simuwatt | NY-4 |
| Solar Hygro | NY-21 |
| Solid Cell | ESD-12 |
| Standard Hydrogen Corp. | NY-24 |
| StorEn Technologies | NY-13 |
| Sun Hunter | NY-21 |

| EXHIBITOR | BOOTH # |
|--|---------|
| Suntegra | NY-9 |
| Syracuse University CoE | 307 |
| Tagup | NY-5 |
| Tesla Science Center at Wardencllyffe | T2 |
| Tesla Science Foundation | T12-15 |
| Thermolift, Inc. | 401 |
| Tire Conversion Technologies (RPI CATS) | ESD-7 |
| ULC Robotics, Inc. | 115 |
| Unique Technical Service (UTS) | ESD-1 |
| University at Buffalo NYS Center of Excellence Materials Informatics | 506 |
| Urban Freight | NY-15 |
| WeatherWatt | NY-22 |
| West Monroe Partners | 404 |
| WexEnergy LLC | ESD-16 |

SPONSORS & EXHIBITORS



ADVANCED ENERGY RESEARCH AND TECHNOLOGY CENTER (AERTC) AT STONY BROOK UNIVERSITY

- Exhibitor

The AERTC is a partnership of academic and research institutions, energy providers, industry, and government. The mission of the AERTC is to increase the efficiency of current energy systems, while promoting the adoption of alternative and renewable sources to reduce New York's carbon footprint. The AERTC will conduct cutting edge research and development of new technologies to generate, transmit and distribute, store and manage energy; including but not limited to alternative and renewable sources, by accelerating deployment of these new technologies, and providing education and training to disseminate the skills necessary to implement, maintain and capitalize on their enhanced functionalities. The AERTC's programs will involve nanotechnology applications for energy efficiency and conservation as well as new "green" energy sources and Smart Grid, combining basic energy sciences research together with wireless information and sensor technology, modeling and simulation, testing, and evaluation. The fundamental goal of the AERTC is to lead research, development, deployment, and work force development efforts to facilitate in reliable, economical, and plentiful sources of clean energy for a sustainable economy.



APP INNOVATORS - Exhibitor

App Innovators is a full-service digital agency specializing in mobile app development, website development, and digital marketing. Now with more than 200 apps published to iTunes and Google Play, our clients are experiencing the powerful benefits and affordability of an interactive digital presence. Clients from all around the U.S. have chosen App Innovators, as we make every project our own. We begin with an ideation session unlocking the client's passion and priorities. Throughout development we provide the utmost attention to every detail in our design and publishing process. We have the proven track record to craft great mobile experiences.



BINGHAMTON UNIVERSITY S3IP - Supporter Sponsor

Binghamton University's smart energy research is transformative, focusing on reliability, efficiency, resilience, integration and sustainability. Business partners around the world rely on our expertise in next-generation lithium-ion batteries; energy-efficient electronic systems; solar energy harvesting; and sensor development. Join the innovative environment at the premier public university in the Northeast: www.binghamton.edu/s3ip.



BROOKHAVEN NATIONAL LABORATORY - Gold Sponsor

The U.S. Department of Energy's (DOE) Brookhaven National Laboratory offers world-class facilities and expertise to answer the most exciting, important questions in science—from the birth of our universe to the sustainable energy technologies of tomorrow. Brookhaven is managed on behalf of DOE by Brookhaven Science Associates (BSA), a partnership formed by Stony Brook University and Battelle.



CAITHNESS LONG ISLAND - Supporter Sponsor

Caithness Energy, L.L.C. is an independent power producer engaged in the development and acquisition of power plants from renewable energy and natural gas in the United States. Over the last 40 years, Caithness has successfully developed, operated and owned interests in over 40 power projects utilizing wind, geothermal, solar and natural gas.



CENTER FOR CORPORATE EDUCATION - Supporter Sponsor

The Center for Corporate Education (CCE) at Stony Brook University revitalizes the area's workforce through education that helps stimulate business growth and strengthen economic well-being. CCE programs provide essential skill sets that promote corporate competitiveness while, at the same time, helping to fill available employment niches with highly qualified workers. Specific industry sectors' needs are addressed including clean energy, manufacturing, information systems, defense, life sciences, government and more.

SPONSORS & EXHIBITORS



CENTER FOR INTEGRATED ELECTRIC ENERGY SYSTEMS (CIEES) - Exhibitor

CIEES is a Center for Advanced Technology funded by New York State. Our goal is to make New York State a global leader in renewable energy.



CLEAN ENERGY BUSINESS INCUBATOR PROGRAM - Supporter Sponsor

The Clean Energy Business Incubator Program (CEBIP), funded by NYSERDA, provides resources for developers of disruptive renewable/clean energy technologies. Bringing innovation to market can be a difficult process that requires technical and business guidance, successful acquisition of funding, and maintaining competitive advantages. By mentoring entrepreneurs, CEBIP helps to establish successful enterprises and bring their technologies to market.



DEEPWATER WIND - Gold Sponsor

Deepwater Wind is proud to be America's leading offshore wind developer. The company's path breaking Block Island Wind Farm is the first in the nation. Led by a veteran management team with experience in developing complex energy projects worldwide, Deepwater Wind is making offshore wind in America a reality. Headquartered in Providence, RI, we are actively planning offshore wind projects to serve multiple East Coast markets located 15 or more miles offshore, including New York, Massachusetts, Rhode Island, Maryland, and New Jersey.



ECO2HEAT - Exhibitor

Eco2heat offers the most energy-efficient far-infrared heating solutions in 16 countries (Europe and the US) that reduce CO2 emissions by up to 50%.



ECONOMIC DEVELOPMENT AT STONY BROOK UNIVERSITY - Exhibitor

The Office of the Vice President for Economic Development oversees more than 20 economic development and business assistance programs serving companies of any size at any stage of growth across all technology industry sectors, as well as companies that depend on technology to manage critical business processes. These programs have helped 500 companies, through some 4000 projects, create or retain more than 19,000 jobs.



ESSENCE PARTNERS - Platinum Sponsor

Essence Partners is an award-winning strategic marketing firm focused on the evolving energy and utilities sectors. Our clients include electric, gas, and water utilities, government entities and clean energy nonprofit organizations. Our creative team of strategists, marketers and technology experts are uniquely positioned to offer a wide breadth of strategic services, creating long-lasting campaigns that transform the marketplace.



FARMINGDALE STATE COLLEGE RENEWABLE ENERGY & SUSTAINABILITY CENTER - Supporter Sponsor

The Renewable Energy and Sustainability Center (RESC) at Farmingdale State College (FSC) was established as the result of the 12 million dollar "Smart Grid Demonstration" grant. The mission of the RESC is to enhance public awareness of emerging renewable energy resources through a focus on applied research and workforce.



FUZEHUB - Silver Sponsor

FuzeHub provides New York State manufacturers with guided access to our extensive network of industry experts, programs and assets to solve productivity, commercialization, research and development issues, and other challenges to growth.

SPONSORS & EXHIBITORS



HBM PRENSCIA/OMNICON - Exhibitor

HBM Prensca Solutions provides a range of industry leading reliability and data analysis using nCode and ReliaSoft software and Omnicon services for the design and development of reliable and safe systems; operational improvements; predictive analytics; and reduced life cycle costs to enhance returns on investment and operational success.



HYDRO-QUÉBEC - Silver Sponsor

Our mission is to provide our customers with a high-quality power supply while contributing significantly to Québec's collective wealth and our hydroelectric facilities play a central role in the emergence of a low-carbon economy. As recognized leaders in hydropower and large transmission systems, Hydro-Québec exports clean, renewable power and commercializes our expertise and innovations on world markets. **Companies representing Québec:**



iSUN ENERGY BY RENEWZ

iSun Energy is a brand of solar energy and electric vehicle technology solutions by Renewz. The Canadian company is on a mission to create free and clean energy to people, right where they are, through delivering and sharing a smart, shared energy experience. Using state of the art American solar technology, combined with Canadian structure and European software, iSun Energy has created a line of solar power shading systems for all types of uses, from residential to commercial, that are available and configurable to user delight on isunenergy.com.



THE LION ELECTRIC CO.

The Lion Electric Co. is an innovative manufacturer of zero emission buses & trucks. Since its foundation in 2008, Lion's mission has been to develop durable, integrated solutions while reducing its environmental footprint.



SIGMA ENERGY STORAGE

Sigma Energy Storage's hybrid thermal-compressed air energy storage (HT-CAES) technology reduces fossil fuel consumption and enables green energy use for maximum economic and environmental impact.



SYSTEMEX ENERGIES

Systemex Energies frequency-based grid reliability solution, SOFTload™, manages grid-connected devices such as residential and industrial loads, electrical vehicles and batteries to provide frequency response.



INTELLASTAR - Exhibitor

Intellastar provides IoT Technology to manage Energy in Buildings. Our Tipify Software analyzes and visualizes energy performance, detects faults through analytics, delivering enhanced energy efficiency.



LOCKHEED MARTIN - Exhibitor

We deliver cost effective, forward thinking solutions to help utilities manage operations, programs and resources from generation and transmission to distribution. Focused on DSM programs delivering reliable energy savings and enhanced grid solutions.

SPONSORS & EXHIBITORS



LONG ISLAND POWER AUTHORITY - *Silver Sponsor*

The Long Island Power Authority is the third largest public power authority in the United States. Its mission is to provide clean, reliable, and affordable electric service to 1.1 million customers on Long Island and in the Rockaways. LIPA owns Long Island's electric grid and partners with PSEG Long Island to combine the cost advantages of public power with the experience of an energy company with a strong record of customer satisfaction.



NATIONAL GRID - *Platinum Sponsor*

At National Grid, we are committed to delivering safe and reliable energy to the customers and communities we serve. We are one of the largest investor-owned energy companies in the world – covering Massachusetts, New York and Rhode Island. We also operate the systems that deliver gas and electricity across Great Britain. We are at the heart of one of the greatest challenges facing our society – delivering clean energy to support our world long into the future. Every day we work with stakeholders to promote the development and implementation of sustainable, innovative and affordable energy solutions. We are proud of the contributions our work and our people make to the prosperity and well-being of our customers, communities and investors. We do this by investing and supporting new and emerging innovations and technologies that drive cleaner energy, improved efficiency, and promote affordability and increased choice for our customers. In the U.S., we are primarily a distribution company with assets in all three states we operate in. We also have transmission assets in these states, as well as in New Hampshire and Vermont. On Long Island, we provide natural gas to more than 590,000 customers and operate 12 electricity generating units contracted to LIPA. National Grid plays a vital role in connecting millions of people to their energy needs today and will be there to help meet their energy needs of tomorrow.



NEW YORK EMPIRE STATE DEVELOPMENT - *Silver Sponsor*

As NY's chief economic development agency, ESD provides technical and financial resources to encourage investment and create jobs across the State. Growing our clean energy economy is a priority for New York.



NEW YORK INSTITUTE OF TECHNOLOGY - *Exhibitor*

New York Institute of Technology (NYIT) has programs in Cybersecurity, Information Technology, Bioengineering, Electrical and Computer Engineering, Mechanical Engineering, Energy Management, and Environmental Technology.



NEW YORK POWER AUTHORITY - *Platinum Sponsor*

The New York Power Authority (NYPA), the largest state public power organization in the nation, operates 16 generating facilities, more than 1,400 circuit-miles of transmission lines, and our state-of-the-art digital asset health center, the Integrated Smart Operations Center (iSOC). Our commitment to Gov. Andrew M. Cuomo's landmark energy policies, Reforming the Energy Vision and the Clean Energy Standard, can be seen in the stewardship of our generation and transmission assets, leadership in energy efficiency and clean energy generation, and environmental justice and sustainability practices. A national leader in the development of clean energy technologies and electric vehicles, NYPA implements energy services projects throughout New York State, saving our customers money while helping reduce greenhouse gas emissions.

SPONSORS & EXHIBITORS



NEW YORK STATE SMART GRID CONSORTIUM - *Platinum Sponsor*

The New York State Smart Grid Consortium (Consortium) is a unique non-profit public-private partnership that promotes broad statewide implementation of a clean, safe, and reliable smart grid. The Consortium brings together many of the world's leading utilities, technology providers, policy makers and research institutions to identify opportunities for accelerating grid modernization. The Consortium is the only organization of its kind in the US, with its diverse membership, focused on catalyzing the evolution of our energy system. The organization provides the perfect convening point to develop, test and implement optimal solutions to address regulatory and energy policy challenges. The Consortium is committed to assisting the public, energy policy makers and the energy industry in taking full advantage of clean energy technology.



NEW YORK UNIVERSITY TANDON SCHOOL OF ENGINEERING - *Gold Sponsor*

The NYU Tandon School of Engineering dates back to 1854. A January 2014 merger created a comprehensive school of education and research in engineering and applied sciences, rooted in invention and entrepreneurship and dedicated to furthering technology in service to society. NYU Tandon collaborates with other schools within NYU, the country's largest private research university, and is closely connected to engineering programs at NYU Abu Dhabi and NYU Shanghai. For more information, visit engineering.nyu.edu.



NEXTERA ENERGY RESOURCES, LLC - *Platinum Sponsor*

NextEra Energy Resources, LLC is a clean energy leader. It operates primarily as a wholesale power generator, providing power and environmental attributes to utilities, retail electricity providers, power cooperatives, municipal electric providers and large industrial companies. It owns and operates more than 19,000 megawatts of generating assets located primarily in 32 states and Canada as of year-end 2017. NextEra Energy Resources, together with its affiliated entities, is the world's largest operator of renewable energy from the wind and sun. NextEra Energy Resources is a subsidiary of Juno Beach, Fla.-based NextEra Energy, Inc. NextEra Energy owns and operates generating assets of 46,790 megawatts, including the assets of NextEra Energy Resources. NextEra Energy subsidiaries, including Florida Power & Light Company, have developed new or repowered natural gas power plants with a combined generating capacity of more than 17,000 megawatts.



NYSERDA - *Host Sponsor*

NYSERDA, a public benefit corporation, offers objective information and analysis, innovative programs, technical expertise, and support to help New Yorkers increase energy efficiency, save money, use renewable energy, and reduce reliance on fossil fuels. NYSERDA professionals work to protect the environment and create clean energy jobs. NYSERDA has been developing partnerships to advance innovative energy solutions in New York State since 1975. To learn more about NYSERDA's programs, visit nyserdera.ny.gov or follow us on Twitter, Facebook, YouTube, or Instagram.



NYSTAR - *Silver Sponsor*

Empire State Development's Division of Science, Technology and Innovation (NYSTAR) advances technology innovation and commercialization in New York State. Its programs assist companies from start-up through maturity, leveraging the state's unparalleled investment in world-class technology assets.



ORSTED - *Twitter Sponsor*

Ørsted is the world's leading offshore wind developer, responsible for constructing nearly a quarter of the world's installed offshore wind capacity. Based in Denmark, its North American headquarters is in Boston. Ørsted has development projects in Massachusetts and New Jersey and is delivering a two-turbine test project in Virginia for Dominion Energy. Additionally, they have an early stage project in British Columbia, Canada.

SPONSORS & EXHIBITORS



PETRO HOME AND COMMERCIAL SERVICES - *Silver Sponsor*

As the #1 heating oil company in the country, with over 100 years of experience, Petro is the only partner you need to help design cleaner, cost-effective energy and fuel solutions packages. We offer ultra-low sulfur heating oil, bio fuel and solar energy options to residential, commercial and multi-family dwellings and work with local authorities to offer solutions for all regulation compliance issues which can lead to Energy Star Ratings for your buildings.



POWER BRIDGE - *Supporter Sponsor*

With \$10M in funding from the New York State Energy Research and Development Authority, PowerBridgeNY's mission is to turn cleantech innovations from the academic research labs of our partner institutions (Columbia University, New York University, City University of New York, Cornell Tech, Stony Brook University, and Brookhaven National Laboratory) into strong, cleantech, businesses in New York State. Learn more at powerbridgeny.com



PSEG LONG ISLAND - *Platinum Sponsor*

PSEG Long Island proudly serves more than 1.1 million electrical customers, from Far Rockaway to Montauk, with a pledge to provide excellent customer service, best in class reliability, and opportunities for energy efficiency and renewable energy. PSEG Long Island helped customers save more than 280,000 megawatt-hours (MWh) of electricity in 2017, equivalent to more than \$46 million per year in bill savings. Along with providing customers significant savings every month, the amount of energy saved is also good for the environment, roughly equal to taking more than 45,000 cars off the road. The company plans to do even more in demand-side management in the coming years.



RUSKIN MOSCOU FALTISCHEK, P.C. - *Supporter Sponsor*

Ruskin Moscou Faltischek is the preeminent Long Island business law firm. With more than 50 attorneys, superior knowledge of the law, polished business acumen and proven credentials, we have earned a reputation for excellence and success. The strength of our firm's resources greatly enhances what we can accomplish for clients; to not only solve problems, but to create opportunities. This ongoing achievement makes Ruskin Moscou Faltischek an acknowledged leader among our peers and the preferred choice among business leaders.



SCOTTISH DEVELOPMENT INTERNATIONAL (SDI) - *Exhibitor*

SDI attracts inward investment to Scotland and assists Scottish companies to trade overseas. Scotland's energy technology companies shape low carbon energy solutions around the world.



SMM ADVERTISING - *Gold Sponsor*

SMM Advertising: Humanizing Brands. SMM is AEC 2018's official marketing agency. With a 33-year history of serving technology-based clients, SMM has deep roots in the energy industry, as well as electronics, bioscience, manufacturing, education, healthcare and employee recruitment. A full-service advertising and marketing agency headquartered on Long Island, NY, SMM has been humanizing brands since 1985: they do that by building authentic and engaging communication strategies through all available media platforms. Services include: branding, websites, video, print, broadcast and online advertising; collateral, direct and Internet marketing, social media, and PR.



STATOIL - *Silver Sponsor*

Turning natural resources into energy for people and progress for society. We use our competence and technology to provide energy to a growing population in a responsible manner. This guides us as we work towards a future where energy is affordable and sustainable for all.

SPONSORS & EXHIBITORS



STONY BROOK UNIVERSITY - *Platinum Sponsor*

Stony Brook University, widely regarded as a SUNY flagship, is going beyond the expectations of what today's public universities can accomplish. Since its founding in 1957, this young university has grown to become one of only four University Center campuses in the State University of New York (SUNY) system with more than 25,700 students and 2,500 faculty members, and 18 NCAA Division I athletic programs. Our faculty have earned numerous prestigious awards, including the Nobel Prize, Pulitzer Prize, Indianapolis Prize for animal conservation, Abel Prize and the inaugural Breakthrough Prize in Mathematics. The University offers students an elite education with an outstanding return on investment: U.S. News & World Report ranks Stony Brook among the top 50 public universities in the nation. Its membership in the Association of American Universities (AAU) places Stony Brook among the top 62 research institutions in North America. As part of the management team of Brookhaven National Laboratory, the University joins a prestigious group of universities that have a role in running federal R&D labs. Stony Brook University is a driving force in the region's economy, generating nearly 60,000 jobs and an annual economic impact of more than \$4.6 billion. Our state, country and world demand ambitious ideas, imaginative solutions and exceptional leadership to forge a better future for all. The students, alumni, researchers and faculty of Stony Brook University are prepared to meet this challenge.



SYRACUSE UNIVERSITY CENTER OF EXCELLENCE - *Supporter Sponsor*

SyracuseCoE is New York State's Center of Excellence for Environmental and Energy Systems. Led by Syracuse University, SyracuseCoE engages faculty, students and collaborators at 200+ firms and institutions to catalyze innovations that improve energy efficiency, environmental quality and resilience in healthy buildings and cleaner, greener communities.



TESLA SCIENCE CENTER AT WARDENCLYFFE - *Exhibitor*

Tesla Science Center at Wardencllyffe is renovating inventor Nikola Tesla's last remaining laboratory into a science museum and center for education and technological innovation.



TESLA SCIENCE FOUNDATION - *Exhibitor*

To learn more about The Tesla Science Foundation, please visit our website at teslasciencefoundation.com.



THERMOLIFT - *Exhibitor*

ThermoLift is developing a natural gas-driven heat pump and air conditioner to replace residential and commercial heating, cooling, and hot water systems with a single appliance.



UNIVERSITY AT BUFFALO NYS CENTER OF EXCELLENCE MATERIALS INFORMATICS - *Exhibitor*

University at Buffalo New York State Center of Excellence Materials Informatics. We leverage UB's cutting edge materials science, big data analytics and advanced manufacturing expertise to drive critical R&D activities that directly impact private sector growth.



ULC ROBOTICS, INC. - *Green Sponsor*

ULC Robotics, Inc. is a leader in developing and deploying innovative technology and processes that help utility companies repair, inspect and assess their infrastructure. The deployment of ULC Robotics' range of products and services helps to eliminate costly and disruptive excavation while eliminating gas leaks, reducing greenhouse gas emissions and improving efficiency.



WEST MONROE - *Silver Sponsor*

West Monroe is a progressive business and technology consulting firm that partners with dynamic organizations to reimagine, build, and operate their businesses at peak performance. Our team of more than 925 professionals is comprised of an uncommon blend of business consultants and deep technologists.

NYSERDA CORRAL EXHIBITORS



ALLIED MICROBIOTA

AMB is a nano-biotechnology firm (spun off from Columbia University) focusing on solving environmental pollution by applying the capabilities of selected microbes and their enzymes.



BONDED ENERGY SOLUTIONS CORPORATION

Bonded Energy Solutions is a systems integrator that provides predictive proactive management solutions for buildings.



BRASH POWER

Brash has a direct replacement for old home-scaled heating systems that can generate heat and power on demand. The Brash CHP utilizes our patented air-steam engine cycle to provide heat and power (1-5 kW) as needed by the homeowner, or the grid, as a distributed generated node.



BRENMILLER ENERGY

Brenmiller Energy, based on its unique high temperature thermal storage technology, provides sustainable energy solutions to the distributed generation market.



C4V

C4V is a knowledge company possessing critical insight on advanced lithium ion batteries. Our key discoveries have been fruitful in fine-tuning system level performance.



DIMENSIONAL ENERGY

Dimensional Energy is an engineering-technology company driven by a vision of a sustainable energy future, modeled on nature's ability to recycle waste into valuable resources. Closing the loop on our carbon cycle means reducing energy demand, saving money, reducing greenhouse gas emissions and creating new economic opportunities along the way.



ECOLECTRO

Ecolectro is a specialty chemical company that develops and manufacturer's polymers for clean energy, chemical and water applications.



ENERGYSTICS

Energystics, LTD is a research startup company that developed radically different patented linear electric generators for converting any environmental vibrational energy source including ocean waves into electric power.



ETHOSGEN

EthosGen generates distributed revolutionary and resilient electricity and cooling through advanced materials from waste heat sources produced by commercial/industrial processes, geothermal and wastestreams.



GO ELECTRIC

Go Electric develops customer side of the meter energy storage and microgrid solutions that help facilities, communities, and military bases be energy resilient and sustainable.

NYSERDA CORRAL EXHIBITORS



GREEN SULFCRETE CORP.

Sulcrete is commercializing a superior strength, low carbon, waterless alternative to Portland Cement, which can now be manufactured in economic parity to conventional Cement.



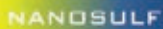
HIGHVIEW POWER STORAGE

We need long-duration energy storage to balance the grid. Highview offers a low-cost, reliable solution that our customers can trust.



MANIFOLD ROBOTICS

Manifold Robotics develops technologies for the safe, thorough, and cost-effective collection of data in surface waters using unmanned surface vehicles.



NANOSULF

An innovative sulfur treatment system that upgrades gas streams for air quality compliance and power production. We provide a lower maintenance, renewable solution.



NEURALNET, INC.

Inspired by the human nervous system, our "neuron network" and "cortex" permits renewable energy sources with storage to increase its role in the electric grid.



NOVOROCS TECHNOLOGIES

NOVOROCS Technologies provides custom catalytic reforming solutions and systems for the energy and petrochemical industries. Products include catalysts, reformers, combustors and recuperators for fuel cells.



POWERMARKET

The PowerMarket provides residential and small business customers access to clean, locally produced more affordable power.



SIMUWATT

Simuwatt enables building owners, experts and utilities to identify, prioritize and realize energy efficiency investments through standardized data acquisition, modeling and analytics.



SOLAR HYGRO

Our evaporation-driven generators enable power generations from evaporation at open bodies of water. This increases both electricity and water revenues of reservoir operators.



STANDARD HYDROGEN CORP.

SHC is establishing simple, economical, and local infrastructure that serves customers' needs for electrical energy storage and carbon-free recharging and refunding.



STOREN TECHNOLOGIES

StorEn develops innovative Vanadium Flow Batteries based upon proprietary innovation. StorEn batteries last around 25 years, with no decay of performance over time.



SUN HUNTER

Sun Hunter makes high efficiency solar panel packs to provide reliable off-grid power for remote surveillance solution providers.

NYSERDA CORRAL EXHIBITORS



SUNTEGRA

SunTegra develops and sells high-performance, cost effective solar building products that better integrate with how we live and build for residential and commercial applications.



TAGUP

Tagup applies cutting edge machine learning research from MIT to proactively predict equipment failures, mitigating public safety incidents, unplanned outages, and lost revenue.



URBAN FREIGHT

Urban Freight is a last mile delivery system that will take up to 1,000 trucks off urban streets daily. This new system increases the efficiency of inbound freight shipments while providing delivery to congested downtown districts without trucks entering the city.



WEATHERWATT

WeatherWatt forecasts building energy demands for entire cities at a time, empowering users to optimize their day to day operations.

NYSTAR PAVILION EXHIBITORS



AHEAD ENERGY

AHEAD Energy, a 501c3 non-profit, provides access to unique technical infrastructure, through its Clean Energy Commercialization Center, to address climate change through clean energy solutions.



AMPRINT CENTER

The AMPrint Center is a NY Center for Advanced Technology (CAT) located at Rochester Institute of Technology devoted to functional printing (3D and Printed Electronics).



AVATAR SUSTAINABLE TECHNOLOGIES

Avatar Sustainable Technologies has developed a process that converts a waste stream from paper mills into fermentable sugars that can be used to produce low-GHG bio-based chemicals and biofuels.



BETTERGY

Bettergy is an advanced materials and nanoengineering technology company located in Peekskill, New York that is developing innovative energy and environmental technologies.



BINGHAMTON UNIVERSITY S3IP - *Supporter Sponsor*

Binghamton University's smart energy research is transformative, focusing on reliability, efficiency, resilience, integration and sustainability. Business partners around the world rely on our expertise in next-generation lithium-ion batteries; energy-efficient electronic systems; solar energy harvesting; and sensor development. Join the innovative environment at the premier public university in the Northeast: www.binghamton.edu/s3ip

NYSTAR PAVILION EXHIBITORS



CENTER FOR ADVANCED CERAMIC TECHNOLOGY (CACT)

Alfred University's Center for Advanced Ceramic Technology (CACT) supports commercialization of technical ceramics and glass by providing access to faculty, research, and analytical testing infrastructure.



CENTER FOR AUTOMATION TECHNOLOGIES AND SYSTEMS (CATS)

Rensselaer's Center for Automation Technologies and Systems (CATS) is a leading industry partner for applied manufacturing R&D with a mission to improve profitability of manufacturers.



CENTER FOR FUTURE ENERGY SYSTEMS (CFES)

The RPI Center for Future Energy Systems (CFES) is where world-leading science and engineering researchers from all fields gather to collaborate on advancing energy technologies.



CENTER FOR INTEGRATED ELECTRIC ENERGY SYSTEMS (CIEES) - Exhibitor

CIEES is a Center for Advanced Technology funded by New York State. Our goal is to make New York State a global leader in renewable energy.



CHEMCUBED

ChemCubed is a developer and manufacturer of nanocomposite materials for Additive Manufacturing, focusing 25 years of applicable experience on end-use applications for final product specifications.



COE-ASM

COE-ASM is a NYS Center of Excellence at RIT that works with manufacturers to apply new technologies to improve their product designs and manufacturing processes.



COUNCIL ROCK

Council Rock, founded in 2009 by seasoned wireless industry engineers and executives, is a full-service telecommunications engineering company, delivering world-class products & services for Smart Grid Communications.



ENrG

ENrG manufactures and markets Thin E-Strate™ - a lightweight, ultra-thin, dense, chemically inert, high temperature flexible ceramic, which is an ultra-barrier for moisture and air.



FUTURE FACILITIES

Future Facilities develops CFD tools that help designers and operators maximize the cooling performance of energy hungry data centers while balancing system efficiency and effectiveness.



ISLAND GROUP ENTERPRISES (IGE)

Island Group Enterprises (IGE) is a Long Island chemical company. IGE develops specialty chemicals and polymers that use renewable feedstock.



JASMINE UNIVERSE

The Jasmine Universe energy management platform automates your SMB customers' existing equipment so they can reduce their expenses while improving customer experience.

NYSTAR PAVILION EXHIBITORS



LC DRIVES

LC Drives has developed a revolutionary PM motor/ generator stator cooling topology that delivers a doubling in power density when compared to conventional machines.



MANUFACTURING AND TECHNOLOGY RESOURCE CONSORTIUM (MTRC)

The MTRC at Stony Brook University is New York's Empire State Development's Manufacturing Extension Partnership (NY-MEP) center for the Long Island region.



MICROERA POWER

MicroEra Power's CHPplus provides commercial buildings backup power, energy savings, fast payback, and optional renewables integration. Fuel cell and automotive technologies support economical, climate-friendly energy.



ORION POLYMER

Orion Polymer is a world leader in the synthesis/manufacture of advanced ion exchange polymers. We can customize ionic properties to meet specific application requirements.



SOLID CELL

Solid Cell develops, designs and manufactures innovative clean energy products based on advanced thermoelectric, fuel cell, catalytic and low-emission combustion technologies.



SYRACUSE UNIVERSITY CENTER OF EXCELLENCE - *Supporter Sponsor*

SyracuseCoE is New York State's Center of Excellence for Environmental and Energy Systems. Led by Syracuse University, SyracuseCoE engages faculty, students and collaborators at 200+ firms and institutions to catalyze innovations that improve energy efficiency, environmental quality and resilience in healthy buildings and cleaner, greener communities.



TIRE CONVERSION TECHNOLOGIES (TCT)

TCT designs and manufactures custom molded products using recycled tire rubber for multiple industries including solar, HVAC, and oil & gas.



UNIQUE TECHNICAL SERVICE (UTS)

Unique Technical Service (UTS) is a small business specializing in development of power electronics for hybrid vehicles and electrical grid.



UNIVERSITY AT BUFFALO NYS CENTER OF EXCELLENCE MATERIALS INFORMATICS - *Exhibitor*

We leverage UB's cutting edge materials science, big data analytics and advanced manufacturing expertise to drive critical R&D activities that directly impact private sector growth.



WEXENERGY

WexEnergy delivers energy efficient solutions - one window, one home, one building at a time. WindowSkin's™ proven, cost-effective technology improves your building's energy performance year-round.

ADVANCED ENERGY CONFERENCE SERIES: A 12-YEAR HISTORY OF GROWTH AND SUCCESS

Individuals Attending

| | 2007 | 2008 | 2009 | 2010 | 2011 | 2012* | 2013 | 2014 | 2016 |
|-----------|------|------|------|------|------|-------|------|------|-------|
| Attendees | 270 | 960 | 1080 | 1441 | 443 | 1640 | 1662 | 684 | 1,624 |

Corporate/Organizational Participation

| | 2007 | 2008 | 2009 | 2010 | 2011 | 2012* | 2013 | 2014 | 2016 |
|----------------|------|------|------|------|------|-------|------|------|------|
| Represented | 100 | 375 | 466 | 533 | 214 | 750 | 765 | 403 | 696 |
| Exhibit Booths | 18 | 47 | 67 | 114 | 49 | 90 | 130 | 57 | 96 |

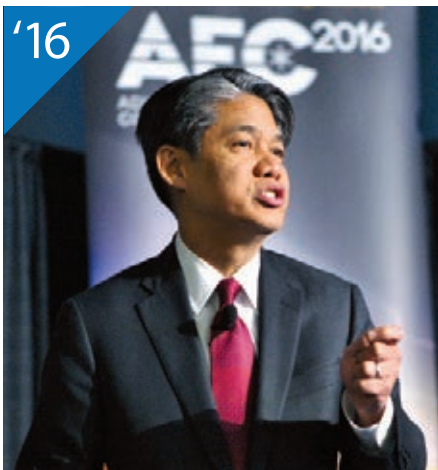
Individuals Presenting

| | 2007 | 2008 | 2009 | 2010 | 2011 | 2012* | 2013 | 2014 | 2016 |
|------------|------|------|------|------|------|-------|------|------|------|
| Presenters | 21 | 136 | 192 | 232 | 123 | 342 | 369 | 129 | 298 |

Academic Participation

| | 2007 | 2008 | 2009 | 2010 | 2011 | 2012* | 2013 | 2014 | 2016 |
|-----------------------------------|------|------|------|------|------|-------|------|------|------|
| Colleges/Universities Represented | 6 | 17 | 31 | 37 | 25 | 31 | 72 | 29 | 45 |
| Posters Presented | 8 | 36 | 48 | 59 | 37 | 60 | 96 | 30 | 85 |

* Advanced Energy 2012 canceled due to Hurricane Sandy. (estimates)



ADVANCED ENERGY CONFERENCE SERIES: A 12-YEAR HISTORY OF GROWTH AND SUCCESS

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'14



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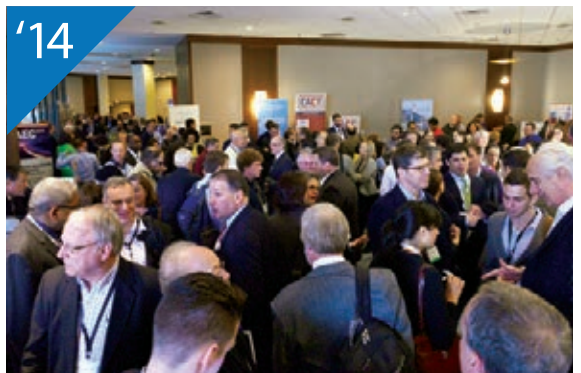
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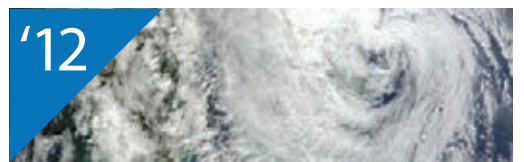
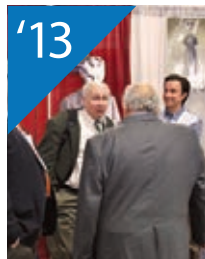
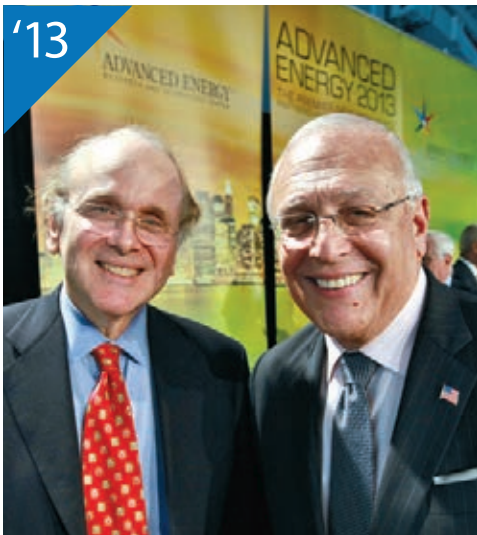
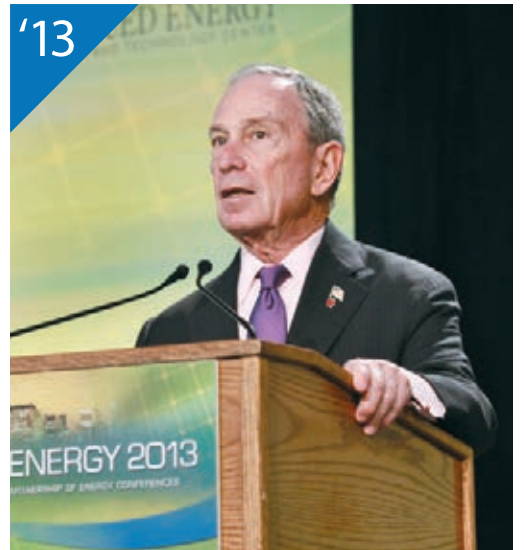
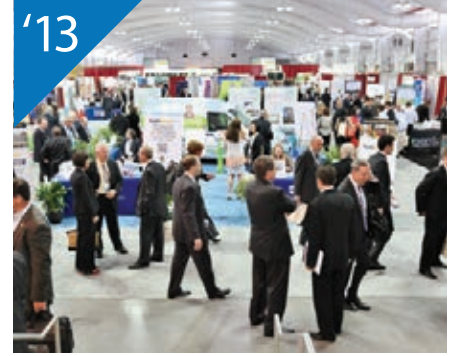
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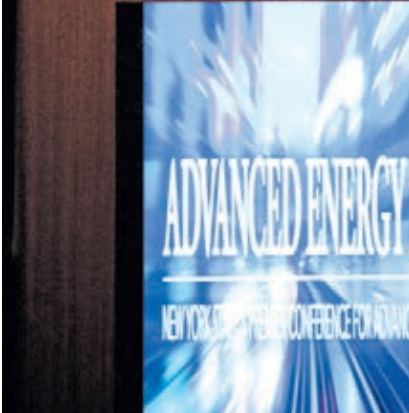
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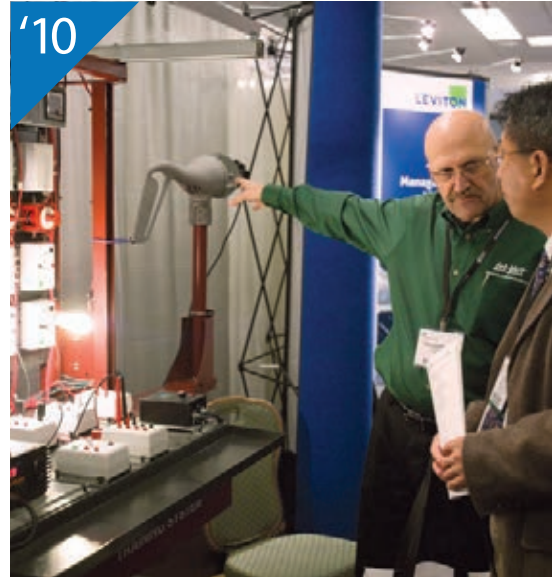
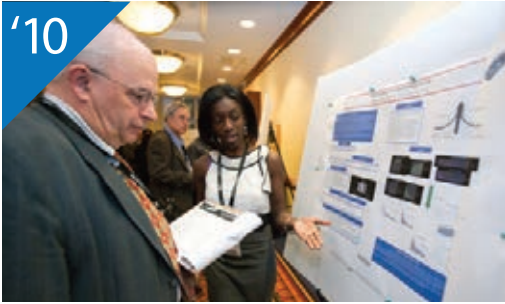
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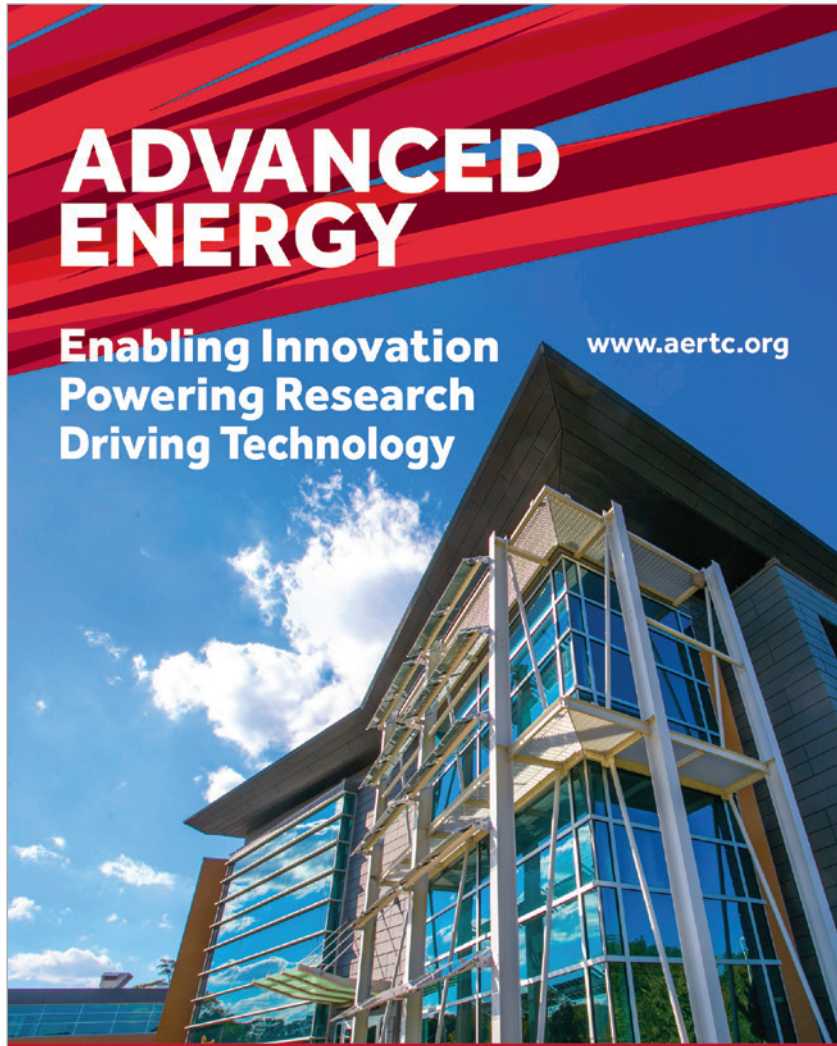


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