

2010 ADVANCED ENERGY CONFERENCE AGENDA

7:45am

WELCOME BY DEAN YACOV SHAMASH
Special Breakfast – **The Business of CleanTech** – **Panel Discussion**
 MODERATOR: Kenneth Adams (BCNYS) Bruce Bailey (AWS True Power), Patricia Glaza (Clean Technology and Sustainable Industries), Stephen Filler (Prism Solar Technologies Inc.)

8:00am - 9:15am

SESSION I
9:30am - 10:45am

TRACK A
BEEKMAN PARLOR

Energy Policy I

CHAIRPERSON – Dr. Gerald Stokes, Brookhaven National Lab
Regional Energy Policy: Leadership for the nation

Christian Brosseau, HydroQuebec
Meeting Energy Needs with Clean and Renewable Power

Janet Joseph, NYSERDA
Energy and Climate Policy in New York State

Dr. Anthony Joseph, NYS DOL
Clean Energy Policy Challenges – Balancing Mutually Exclusive Objectives

TRACK B
SUTTON PARLOR NORTH

Innovation and Entrepreneurship

CHAIRPERSON – Michael Shimazu, NYSERDA
Clean Energy Innovation and Entrepreneurship

Micah Kotch, NYC ACRE

Michael Herzig, Locus Energy

Andrew Clark, IBM Research

Reed Sarver, GeoEnergy Enterprises

Russell Tencer, Wind Products

TRACK C
SUTTON PARLOR CENTER

Smart Networks I Modeling and Simulation

CHAIRPERSON – Dr. Dario Gil, IBM Energy Research
Smarter Energy for a Smarter Planet

Dr. Eugene Feinberg, Stony Brook University
Stochastic Modeling and Supercomputing for Smart Grids

Dr. Lei Wu, Clarkson University
Stochastic Security of Power Systems Operation

Lloyd Treinish, IBM Deep Thunder
Applications of Weather Modelling for Smarter Grids

TRACK D
SUTTON PARLOR SOUTH

Advanced Lighting Research I

CHAIRPERSON – Dr. Vikas Midha, General Electric
Future Trends in Lighting

Daniel Lax, Autronic Plastic
LED Lighting Technology in Unique Applications

Scott Ziegenfus, Lutron
Lighting Control for Intelligent Sustainable Buildings

TRACK E
REGENT PARLOR

D.O.E. Sponsored Small Modular Nuclear Reactors

CHAIRPERSON – Dr. David Diamond, Brookhaven National Lab
Small Modular Reactors – Smaller and Smarter

Dr. Paul Farrell, Brookhaven Technology Group
A Compact, Lightweight, Transportable Nuclear Reactor System

Jeffrey Boaz, Hyperion Power
Small Modular Reactors (SMR's); Enhancing Nuclear Resurgence

Dr. Earl Saito, GE Hitachi
PRISM: Cost Reduction Using Sodium Reactors

TRACK F
NASSAU SUITE A

Energy Storage Options for Transportation Applications

CHAIRPERSON – Steve Medwin, The Raymond Corporation
Managing Energy Storage Options in Forklift Trucks

Dr. Mark Mathias, General Motors
Electrification Technology and the Future of the Automobile

Tom Apalenek, BAE Systems
Energy Storage for Transportation and More

Tim Richter, General Electric
Electrification Challenges and Energy Storage Solutions

TRACK G
NASSAU SUITE B

Innovative Pathways toward Low Carbon Society: Policy and Technologies

CHAIRPERSON – Dr. Nay Htun, Stony Brook University

Hon. Ketil Solvik-Olsen, Norway Parliament
Norway's Policy Towards Low Carbon Paradigm

Frank Dalene, Telemark
Functional Net Zero, Carbon Neutral Technologies

Peter Gilbert, CA Technologies
Unlocking Sustainability - Why IT Holds the Key

Kevin Neumaier, Ecology & Environment
Lower Carbon; Lower Cost; Better Existence

11:30am

Welcome – Introductions – Keynotes Bob Catell (Chair of Advanced Energy Center, NYSmart Grid Consortium), Governor David Patterson of New York, Bob Gilligan (GE Energy),

Dr. Samuel Stanley (President of Stony Brook University), Chancellor Nancy Zimpher (SUNY), Dr. John Marburger (former Science Advisor to the President), Special Energy Keynote

SESSION II
2:30pm - 3:45pm

Energy Policy II

CHAIRPERSON – Paul DeCotis, LIPA

Charles Fox, ZeroPoint

Dr. Thomas Perry, NREL

Dr. James Winebrake, RIT

Dr. Susan Tierney, The Analysis Group

Cleantech Funding Lifecycle

CHAIRPERSON – Jim Rossman, Lazard Freres

Craig Cornelius, Hudson Clean Energy

William Lese, Braemar Energy Ventures

Mark Florian, First Reserve Corporation

Smart Networks II Cybersecurity

CHAIRPERSON – Daniel Thanos, GE Digital Energy
Future Directions in Smart Grid Security

Dr. Kathleen Robertson, Athena Strategies
Cyber Security in a New Energy Dynamic

Kenneth Van Meter, Lockheed Martin
Moving to a Real-Time Cybersecurity Model

Todd Lowe, SiCore
Anti-Tamper Technologies for Critical Information Protection

Advanced Lighting Research II

CHAIRPERSON – Dr. Satyen Mukherjee, Philips Research
Advanced Lighting for Outdoor Applications

Dr. Nadarajah Narendran, Rensselaer Polytechnic Institute
Evaluating LED Lighting with Application Metrics

Ian Hendler, Leviton
Commercial Lighting Control Technologies

Brian Chemel, Digital Lumens
How Intelligence Drives Radical Efficiency in Lighting

Intelligent and Advanced Transportation I

CHAIRPERSON – Michael Dixon, Eaton
EV Charging Infrastructure: Trends and Solutions

Dr. Laura Wynter, IBM Research
Smarter Transportation Analytics

Dr. Yuko Nakanishi, Intelligent Transportation
Intelligent Transportation in New York State

Alain Steven, Viridity Energy
Impact of Energy Markets on Transit Systems

Grid Storage Options Benefits & Analysis

CHAIRPERSON – Aubrey Braz, Con Edison
Smart Grid and Energy Storage Integration

Mark Henley, Boeing
Grid-Scale Energy Storage Technology Opportunities

Richard Fioravanti, KEMA
Impacts of Current Electricity Storage Implementations

Dr. James Powell, Maglev Storage
Maglev Energy Storage and the Grid

Financing the Transition to Low Carbon Society

CHAIRPERSON – Dr. Yannick Glenmarec, UNDP / GEF
Engineering Investibility

Olav Kjørven, United Nations
Low Carbon Climate Resilient Development Strategy

Mark Fulton, Deutsche Bank
GET FIT in Developing Countries

Sandy Taft, National Grid

30 MINUTE BREAK

SESSION III
4:15pm - 5:30pm

Technology Options for Policymakers

CHAIRPERSON – Chairman Garry Brown, New York State Public Service Commission
Role of the Regulator: Professional Skeptic

Dr. Reza Ghafurian, Con Edison
Smart Grid In Urban Environment

Stephen Gunthrie, Enerpath
Technology Enabled Large-Scale Energy Efficiency Program

Kathryn Brown, Verizon
Three Challenges for Policy Makers

Power Electronics for the Smart Grid

CHAIRPERSON – Dusty Becker, Emerson Energy Systems
Power Electronics and the Smart Grid

Dr. Leo Casey, SatCon
Advanced Power Electronics in Inverter Applications

Dr. Douglas Hopkins, University At Buffalo
Solid-State Protection: Dual-Use for Microgrids

Dr. Deepak Divan, Georgia Tech/IPIC
Dynamic Control of Grid Assets

Smart Networks III Cybersecurity

CHAIRPERSON – Scott Pugh, U.S. Department of Homeland Security

Dr. Robert Johnson, Stony Brook University

Dr. Jeffrey Katz, IBM Energy & Utility

Ernie Hayden, Verizon

Energy Efficiency

CHAIRPERSON – David Brender, Cooper Development Association
Distribution Transformer Energy Efficiency Regulations

Kevin Carriere, Powerton Global
Improving Thermal Transfer Through Nanomagnetism – Permanently!

Mike Bakalyar, Gardner Denver
Compressed Air Systems - Best Practice Efficiency

Evens Jourdain, NYPA
Real-Time Diagnostics and Monitoring

Intelligent and Advanced Transportation II

CHAIRPERSON – Dr. Robert Paaswell, City College of New York

Tim Roughan, National Grid
Proposed Northeast Low Carbon Fuel Standard

Joseph Ambrosio, ElectroMotive Designs
Medium and Heavy Duty EV/HEV Deployment

Todd Jackson, General Electric
Advanced Vehicle Charging Station

Collette Ericsson, MTA NYC Transit
The Long & Winding Road to Zero

Energy Storage & Generation

CHAIRPERSON – Com. Robert Curry, New York Public Service Commission

Adrian Corless, Plug Power
Fuel Cell Hybrids for Material Handling

SPECIAL KEYNOTE
 Dr. Yet-Ming Chiang, MIT, A123, & M24
Advanced Energy Storage

Dr. Frank Zeman (NYIT)
PHEVs as Electron Storage Devices

Dr. Robert Miller, Paper Battery Company
Print Formed Energy Storage Sheets

D.O.E. Sponsored Carbon Capture, Sequestration & Storage

CHAIRPERSON – Dr. Neeraj Gupta, Battelle Memorial Institute
Field Testing for CO2 Geologic Storage

Brian Slater, New York State Museum
New York State Carbon Sequestration Potential

Dr. John Marin, NYSERDA
Carbon Sequestration in New York

Dr. Timothy Carone, Northrop Grumman
Remote Sensing and Carbon Sequestration

5:30pm - 7:30pm

Reception – Exhibits

– Poster Session

7:45am

WELCOME BY DEAN YACOV SHAMASH

Breakfast - Keynotes Edward Reinfurt (NYSTAR),

Kevin Law (LIA), Thomas Congdon (Deputy Secretary of Energy for NYS), Scott Pugh (Department of Homeland Security)

SESSION IV
9:00am - 10:15am

TRACK A
BEEKMAN PARLOR
Climate Change Impacts & Adaption Strategies
CHAIRPERSON – Dr. Harry Davitian, Entek Power
Dr. Cynthia Rosenzweig, NASA Goddard Institute for Space Studies
Climate Change and its Impacts on New York State
Alan Belenz, NYS Office of Climate Change
Planning for New York's Changing Climate
Dr. Malcolm Bowman, Stony Brook University
NYC/LI Rising Sea Levels, Storm Surges
Mark Way, Swiss RE
Climate Change and its Impacts on New York State

TRACK B
SUTTON PARLOR NORTH
Solar I Utility Scale Solar
CHAIRPERSON – Bonnie Gurry, NYPA
100MW New York Distributed PV Initiative
Doug Pellemounter, Advanced Energy Industries, Inc.
LVRT: Stability in Grid-Tie PV
Fouad Dagher, National Grid
Large Scale Utility Owned Photovoltaic Systems
Elie Nasr, SMA America
Evolution of PV Interconnection Requirements

TRACK C
SUTTON PARLOR CENTER
Smart Networks Interoperability
CHAIRPERSON – Dr. George Arnold, NIST
John McDonald, GE Digital Energy
Robert Burke, ISO-NE
Gridwise Architecture Council
Dr. Peter Tippett, Verizon

TRACK D
SUTTON PARLOR SOUTH
Utility Scale Geothermal
CHAIRPERSON – Dr. Jefferson Tester, Cornell University
Geothermal Co-generation Opportunities in New York
Lucien Bronicki, Ormat Technologies
Implementing New Power Plant Technologies
Dr. John Martin, NYSERDA
New York State Geothermal Overview

TRACK E
REGENT PARLOR
Green Building Technology System of Systems
CHAIRPERSON – Dr. Osman Ahmed, Siemens
Green building integration-Lesson from Green Human
Jerry Skaggs, UL DQS
Energy and Quality Management Working Together
Alessandro Meynardi, Verizon
The Network Effect
Dr. Franklin Schuling, Philips Research
Lighting Centric Holistic Green Buildings System Solutions

TRACK F
NASSAU SUITE A
Energy Storage - Chemistries, Materials & Applications I
CHAIRPERSON – Andrew Naukam, Ultralife Corporation
Multiple Energy Source Energy Storage
Robert Misback, Altairmano
Applications for Advanced Energy Storage- New Technologies
Martin Klein, CUNY Energy Institute
Nickel-Zinc Flow Battery
Matt Fronk, RIT/NY-BEST
Battery Cell Durability within a Pack
Gary Blake, Delphi
Solid Oxide Fuel Cell Development

TRACK G
NASSAU SUITE B
BioEnergy Options & Technology
Chairperson – Jeffrey Peterson, NYSERDA
The Question of Sustainability
SPECIAL KEYNOTE
Robert Gardner, Exxon Mobil
Carlos Pereira, U.S. Army
Renewable Power and Energy Systems for Defense Needs
Dr. Kevin Hicks, USDA-ARS
Winter Barley Ethanol and Other New Advanced Biofuels

30 MINUTE BREAK
SESSION V
10:45am - 12:00 noon

Energy Sector Finance
CHAIRPERSON – Dennis Mullen, Empire State Development Corporation
Larry Siegel, Tobay Capital
Ross Ain, Caithness
Mitchell Dong, Mohave Sun Power
Constantine Kontokosta, New York University

Solar II Thermal Solar
CHAIRPERSON – Jacques Roeth, NYSERDA
Solar Thermal – Promoting Adoption
Steven Levine, Infinia
Focus Your Energy: The Infinia PowerDish™
Jeff Perlman, BrightPower
Solar Thermal Nuances in Multifamily Buildings
Adam Farrell, SunMaxx Solar
Systems Optimization and Commercial Applications of Solar Thermal

Smart Infrastructure I
CHAIRPERSON – Dr. Madhav Manjrekar, Siemens
Electronic Power Interface
Jamshid Sharif-Askary, GE Energy
Helping Utilities Anticipate Asset Potential - Holistic Approach
Diane Blankenhorn, National Grid
Electric Business Challenges
Dr. Denis Faubert, HydroQuebec
Smart Grid - A R&D Perspective from Quebec

Geothermal Technologies
CHAIRPERSON – Jay Nathwani, D.O.E. Geothermal Technologies
U.S. DOE Portfolio of Geothermal Technologies
Louis Capuano, ThermaSource
Geothermal Drilling 101: How to Drill a Geothermal Well
Shawn Genung, GeoEnergy Enterprise
The GeoColumn - Geothermal Made Easy

Green Building Technology Materials and Process
CHAIRPERSON – Dr. Ed Bogucz, SyracuseCoE
NY's Energy Regional Innovation Cluster
Dr. Alexander Orlov, Stony Brook University
New Materials for Environmental and Sustainable Energy Applications
Doug Gatlin, U.S. Green Building Council
Promoting leadership in building performance
Jerry Polly, Flad Architects
Energy Research Facilities - A Whole New Game

D.O.E. Sponsored Energy Frontier Research Centers
CHAIRPERSON – Dr. Jim Misewich, Brookhaven National Lab
Dr. Peter Johnson, Emergent Superconductivity Center for Emergent Superconductivity
Dr. Thomas Miebach, GE Research
Virtual Hydrogen Storage for Fuel Cells
Dr. Glenn Amatucci, Rutgers University
Approaching New Horizons in Lithium Batteries
Dr. James Yardley, Columbia University
New Horizons in Organic Photovoltaic Cells

BioMass Processing
CHAIRPERSON – Donald Chahbazpour, National Grid
Renewable Gas
Dr. Hazem Tawfik, SUNY Farmingdale
Combined Heat and Power (CHP) using Hydrogen from Biomass
Dr. Thomas Butcher, Brookhaven National Labs
Biofuels from Regional Waste Sources
Dr. Douglas Goodale, SUNY Cobleskill/U.S. Army
Gasification Feedstock Hydrokinetics

25 MINUTE BREAK

12:25pm

Lunch – Keynotes Bob Catell (Chair of Advanced Energy Center, NYSmart Grid Consortium),

Richard Kessel (NYPA), Frank Murray (NYSERDA), Dr. George Arnold (NIST, National Director of Smart Grid Interoperability)

25 MINUTE BREAK
SESSION VI
2:15pm - 3:30pm

Policies, the Smart Grid and Financing Renewables
CHAIRPERSON – Allan Page, Hudson Renewable Energy Institute
Charles Freni, Central Hudson Gas & Electric
Scott Medla, TAG Energy
Raymond Wuslich, Winston & Strawn
Richard Dewey, NYISO

Solar III PV Solar
CHAIRPERSON – Dr. Jong-Gyu Lee, Woongjin Energy
Polysilicon for Solar Cells
Brian Grenko, Yingli Solar
Better Longer Smarter Stronger Solar Power
James Huff, abakus solar AG
State PV Feed-in Tariff Creation
David Hebert, Spire Solar Systems
PV Solar from Process to Deployment

D.O.E. Sponsored Smart Grid 2.0: Challenges & Opportunities
CHAIRPERSON – Dr. Jim Misewich, Brookhaven National Lab
Dr. Mani Vadari, Battelle Energy Technology
Active Demand Management
Carl Imhoff, Pacific Northwest National Laboratory
Capturing New Smart Grid Value Streams
Bob Hawsey, National Renewable Energy Laboratory
Integrating Renewables and the Smart Grid
Tom King, Oak Ridge National Laboratory
How Do We Become Energy Independent?

Green Datacenters I
CHAIRPERSON – Una Song, EPA - Energy Star
EPA ENERGY STAR Impacts on Data Center Efficiency
Dr. Roger Schmidt, IBM
Energy Efficient Data Center Designs
Dr. Michael Patterson, Intel
Innovative Data Center Efficiency Techniques
Dr. Rami Rihani, Accenture
Enablers for a Green Data Center

Offshore Wind Power
CHAIRPERSON – Sharon Laudisi, NYPA
Dr. Caleb Gordon, Pandion Systems
Anthony Camarota, Epox-Z
Dan Zaweski, LIPA
Dr. Mohammed Safiuddin, University At Buffalo

Energy Storage - Chemistries, Materials & Applications II
CHAIRPERSON – Dr. John Elter, SUNY Albany
Metal-Air Batteries: Opportunities and Challenges
Dr. Brian Landi, RIT
Carbon Nanotubes for Lithium Ion Batteries
Dr. Karim Zaghib, HydroQuebec
Safe Li-ion For Green Transportation
Thomas Mazz, Aeroflex Laboratories
Autonomous Battery Balancing-Safe, Reliable and Scalable

BioFuel Production
CHAIRPERSON – Dr. Devinder Mahajan, Brookhaven National Lab
Atom Economical Biofuel Production from Biomass
Randal Goodfellow, Evergent
Pyrolysis Oil to Stationary & Transportation Fuels
Dr. Benjamin Hsiao, Stony Brook University
Breakthrough Energy-Saving Nanofibrous Membrane Technology
Jonathan Rhone, Nexterra Systems Corp.
Advanced Biomass Gasification For Heat and Power Applications

15 MINUTE BREAK
SESSION VII
3:45pm - 5:00pm

Sensors for the Smart Grid
CHAIRPERSON – Stephen Whitley, NYISO
True Grid
Mark Adamiak, GE Multilin
Smart Grid Architecture Development
Dr. Michael Gouzman, Sensor CAT Stony Brook University
Sensors for Smart AC+DC Grids
Dr. George Stefanopoulos, NYPA
PMU Data Analysis and Smart Grid Applications

Solar IV Materials and Technologies
CHAIRPERSON – Dr. Miriam Rafailovich, Stony Brook University
Engineering Nanocomposite Heterodyne Junction Photovoltaic Cells
Dr. James Glimm, Stony Brook University
A Supercomputing Study of Photo Voltaic Quantum Dots
Dr. Glen R. Kowach, City College of NY
Thermoelectric Materials for Large Thermal Gradients

Smart Infrastructure II
CHAIRPERSON – Florence Hudson, IBM
Smarter Infrastructure - Building a Smarter Planet
Mike Wojcik, Verizon
Leveraging Public Wireless Networks for Smart Grid Deployments
Dr. Farshad Khorrami, NYU-POLY
Adaptive Fault-Tolerant Control for Smart Grid Application
Dr. Jon Longtin, Stony Brook University
High-Resolution Metering for Gas Meters

Green Datacenters II
CHAIRPERSON – Philip Meyers, Morgan Stanley
Advanced Datacenters
Dhesikan Ananchaperaul, CA Technologies
Greening an IT Cloud
Edward Koplin, AFCO Systems, Xnth
"Chips for Bricks" – Sustainable Data Centers
James Gowen, Verizon
The Green Data Center

Onshore Wind Power
CHAIRPERSON – Kara Clark, GE Energy
Integrating High Penetrations of Wind and Solar Energy
Michael Tyson, Suzlon Wind Energy
Wind Turbine Monitoring and Control
Dr. Luciano Castillo, Rensselaer Polytechnic Institute
The Importance of Turbulence in Wind Energy
William Bradshaw, Dayton T. Brown
Testing of Advanced Energy Systems

Energy Storage Options-Mechanical and Phase Change Storage
CHAIRPERSON – Greg Tropsha, Ice Energy
Distributed Storage: Peak Reduction and System Efficiency
Tom Welsh, National Grid
Advances in Energy Storage (from a Utility Perspective)
Chet Lyons, Beacon Power
20 Megawatt Flywheel Energy Storage Plant
Dr. Li Kou, NYPA
Investigation of Compressed Air Energy Storage

BioEnergy Science & Technology
CHAIRPERSON – James Wegrzyn, Brookhaven National Lab
Marianne Mintz, Argonne National Labs
Renewable Natural Gas as a Vehicle Fuel
Dr. Gail Richardson, Energy Vision
Optimal Technology "Fit" - Biomethane for Trucks
Kurt Sorschak, Xebec Corportaion
Renewable Gas in Transportation