

New York State Energy Research and Development Authority

Environmental Monitoring, Evaluation, and Protection in New York: Linking Science and Policy

2011 EMEP Conference
Holiday Inn, Wolf Road
Albany, New York
November 15 & 16

Photo: Courtesy of Brookhaven National Laboratory

nyszerda
Energy. Innovation. Solutions.

Environmental Monitoring, Evaluation, and Protection in New York: Linking Science and Policy Agenda

Tuesday, November 15

7:30 - 8:30 am

REGISTRATION

8:30 - 9:00 am

Welcome and Opening Remarks

- Francis J. Murray, Jr. - President and CEO (NYSERDA)
- Jared Snyder - Assistant Commissioner for Air Resources, Climate Change, and Energy (NYS Dept. of Env. Conservation)

9:00 - 10:00 am

Energy-Related Environmental Research: Setting Priorities in a Changing Policy Landscape (Part I)

Moderator: Alan Belenz (NYS Office of the Attorney General)

- The 2011 National Acid Precitation Assessment Program Report to Congress - Doug Burns (U.S. Geological Survey)
- Mercury in the Environment: Sources, Effects, and Management - Charles Driscoll (Syracuse Univ.)
- EPA's Air, Climate, and Energy Research Program: An Overview - Tim Watkins (U.S. Env. Protection Agency)

10:00 - 10:20 am

BREAK

10:20 - 12:00 pm

Energy-Related Environmental Research: Setting Priorities in a Changing Policy Landscape (Part II)

- Mitigating Electric Sector CO₂: Policy Tools, Cost, and Technologies - Vic Niemeyer (Electric Power Research Institute)
- Setting Priorities for Environmental Research for Offshore Wind Energy - Chris Rein (ESS Group, Inc.)
- Audience Discussion

12:00 - 1:15 pm

LUNCH - Networking

1:15 - 2:45 pm

Concurrent Session A - Ecosystem Response to Sulfur, Nitrogen and Mercury Deposition (Part I)

Moderator: Leon Sedefian (NYS Dept. of Env. Conservation)

- Mercury Bioaccumulation within Terrestrial Foodwebs in the Adirondack Park of New York State - Amy Sauer (Syracuse Univ.)
- Deposition and Fluxes of Mercury in Forests of the Adirondacks - Brad Blackwell (Syracuse Univ.)
- Recovery Responses of Phytoplankton and Zooplankton Assemblages to Decreasing Acidic Deposition in Adirondack Mountain Lakes - Bill Shaw (Darrin Freshwater Institute)
- Onondaga Lake Watershed Liming Project: Overview and Status - Daniel Josephson (Cornell Univ.)

Concurrent Session B - Air Quality and Associated Health Effects

Moderator: S.T. Rao (U.S. Env. Protection Agency)

- Assessing the Health Outcomes of Air Quality Actions - Rashid Shaikh (Health Effects Institute)
- Impact of NO_x Emission Reduction Policy on Hospitalizations for Respiratory Disease in New York State - Shao Lin (NYS Department of Health)
- Impact of Regional Transport of Pollution on Health Outcomes - Valerie Garcia (U.S. Env. Protection Agency)
- Utility of Different Exposure Metrics Used in Epidemiological Studies of Air Pollution - Haluk Özkaynak (U.S. Environmental Protection Agency)

2:45 - 3:15 pm BREAK

3:15 - 4:45 pm

Concurrent Session A - Ecosystem Response to Sulfur, Nitrogen and Mercury Deposition (Part II)

Moderator: Stuart Findlay (Cary Institute of Ecosystem Studies)

- Soil Chemistry and the Recovery of Sensitive Watersheds from Chronic Acidification - Chris Johnson (Syracuse Univ.)
- Response of Forest Carbon and Nitrogen Cycles to Reduced Acidification - Christine Goodale (Cornell Univ.)
- Acid Deposition Effects on Adirondack Sugar Maple Trees - Greg Lawrence (U.S. Geological Survey)
- Ecosystem Disturbance in Catskill Mountain Streams: Coincidence or Indicators of Climate Change? - Barry Baldigo (U.S. Geological Survey)

Concurrent Session B - Understanding Impacts of Energy Use & Production on Air Quality, Climate Interactions and Health Effects

Moderator: Praveen Amar (Clean Air Task Force)

- Climate and Air Quality - Daniel Jacob (Harvard Univ.)
- Climate Change, Air Quality, and Public Health - Patrick Kinney (Columbia Univ.)

4:45 - 5:00 pm

POSTER INTRODUCTIONS

5:00 - 6:30 pm

POSTER RECEPTION

Environmental Monitoring, Evaluation, and Protection in New York: Linking Science and Policy Agenda

Wednesday, November 16

8:00 - 8:30 am

REGISTRATION

8:30 - 10:15 am

Climate Change in New York State

Moderator: Amanda Stevens (NYSERDA)

- New York State ClimAID Adaptation Assessment: Lessons Learned and Future Direction
- Cynthia Rosenzweig (NASA Goddard Institute for Space Studies), Art DeGaetano (Cornell Univ.)
- Climate Adaptation in the Hudson Valley - Kristin Marcell (NYS Dept. of Env. Conservation)
- Sustainable Controlled Environment Agriculture: An Agricultural Model for a Changing World
- Viraj Puri (Gotham Greens)

10:15 - 10:35 am

BREAK

10:35 - 12:00 pm

Mapping, Modeling, and Data: Tools for Guiding Environmental Policy

Moderator: Tim Tear (The Nature Conservancy)

- New Tools for Improving Wind Project Siting for Biodiversity Conservation
- Tim Howard (NY Natural Heritage Program)
- Long-term Monitoring and Accountability in Air Quality Planning
- Ken Demerjian (University of Albany, Atmospheric Sciences Research Center)
- Modeling Critical Loads: NY and Beyond - Tim Sullivan (E&S Environmental Chemistry, Inc.)

12:00 - 1:15 pm

LUNCH

1:15 - 2:50 pm

Biomass Heating

Moderator: Judy Jarnefeld (NYSERDA)

- Environmental, Energy, Market, and Health Characterization of Four Wood-fired Hydronic Heater Technologies - Brian Gullet (U.S. Environmental Protection Agency)
- High-Efficiency Made-in-NY Wood Pellet Boiler and Solar-thermal Heating System at the Wild Center - Stephanie Ratcliffe and David St. Onge (The Wild Center)
- Residential Wood Pellets: Elemental Composition, Market Analysis and Policy Implications
- Lisa Rector (Northeast States for Coordinated Air Use Management)
- Wood Combustion for Industrial, Commercial, and Institutional Heat and Power: Implications for Public Health and Public Policy - Polly Hoppin (University of Massachusetts, Lowell)

2:50 - 3:10 pm

BREAK

3:10 - 4:25 pm

Natural Gas in the Marcellus Shale

Moderator: Lloyd Wilson (NYS Dept. of Health)

- Geology of the Marcellus Shale - Langhorne Smith (NYS Museum)
- Marcellus Shale Gas Development and Water Resources - John Williams (U.S. Geological Survey)
- High-Volume Hydraulic Fracturing: The Regulatory and Policy Debate - Stuart Gruskin (Gruskin Gordon)
- Panel Discussion

4:25 - 4:45 pm

CLOSING REMARKS

- Mark Torpey – Director, Clean Energy Research and Market Development (NYSERDA)

NYSERDA's EMEP Program: Supporting the Scientific Foundation for Sound Energy and Environmental Policies

We know energy production and use pose significant burdens on public health and our environment. Yet we also know that energy is absolutely vital to the overall well being of our society. NYSERDA's EMEP program provides policy-relevant research aimed at three primary goals:

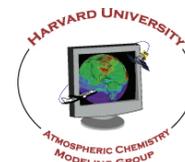
- Enhancing the understanding of electrical energy-related pollution and its impacts on the environment and human health;
- Characterizing relative impacts of electrical energy production sources; and
- Evaluating ways to mitigate the impacts of electrical energy use and production.

In the coming months, the program will embark on its third comprehensive planning effort. Several working groups of science and policy experts will identify critical gaps and research needs in New York State, divided into focus areas representing the major issues related to pollution associated with energy generation and use.

The research plan's potential users will include NYSERDA, other New York State/regional/national research funding organizations and agencies, the scientific community, and policy makers. Implementation of the plan's recommendations will help maximize the use of limited resources to serve the needs of New York State and others.

NYSERDA, a public benefit corporation, offers objective information and analysis, innovative programs, technical expertise, and funding to help New Yorkers increase energy efficiency, save money, use renewable energy, and reduce their reliance on fossil fuels. NYSERDA professionals work to protect our environment and create cleanenergy jobs. NYSERDA has been developing partnerships to advance innovative energy solutions in New York since 1975.

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