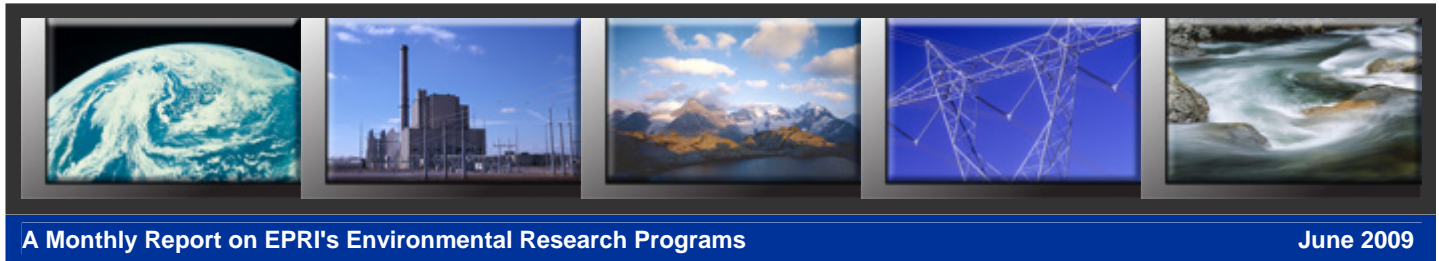


Environment Quick News



Program members can use their epri.com ID and password to download Acrobat PDF files of EPRI technical reports. For assistance, contact the EPRI Customer Assistance Center at (800) 313-3774.

Dear Environment Sector members:

Climate change legislation has moved past its first hurdle in Congress with the passage of the American Clean Energy and Security Act of 2009 by the House Energy and Commerce Committee. There is a lot of speculation about when final legislation will emerge from Congress and in what form, and how the electric industry will be affected. Given the implications, all we can say at this time is that there will be many changes to the legislation as it exists today before it becomes law.

The staff of our Global Climate Change programs has been feverishly working with members, federal and state agencies, legislative staff, and other stakeholders to convey EPRI research results and engage people in collaborative dialogue. The recent Climate Seminar in Washington is a good example of EPRI's ability to engage the stakeholder community in an open dialogue to discuss issues such as climate policy, geoengineering, energy efficiency, and climate science. As noted in this issue of *Quick News*, we have just completed our 5th Greenhouse Gas Emissions Offset Policy Dialogue, which was attended by a broad spectrum of stakeholders, many of whom are intimately engaged in the legislative process. We also sponsored a webcast by EPA in which Agency staff summarized an economic analysis of the Waxman-Markey climate legislation for members of our Global Climate Change programs.

Such meetings and dialogues provide a neutral forum for open discussions to occur, reinforcing EPRI's public benefit mission. We would like to thank you for your support of our research efforts, and we look forward to working with you as this process winds its way through the halls of Congress and into a regulatory framework.

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EPRI-UARG Presentations Posted

Presentations from the May 2009 EPRI-UARG Air Toxics Research Coordination Conference are now available on epri.com. Please use your epri.com ID and password to sign in first, then use [this link](#) and select the Meeting Materials tab. Presentations restricted to program 59 funders are available [here](#).

AIR QUALITY

Program 42: Air Toxics Health and Risk Assessment***EPA and California Sign Pact to Speed Chemical Risk Assessments***

EPA and California risk assessment groups recently signed a memorandum of understanding agreeing to “work together to standardize our risk assessments so we can in effect double in size” and become more efficient, according to Peter Preuss, director of EPA’s National Center for Environmental Assessment (NCEA). The NCEA manages EPA’s Integrated Risk Information System (IRIS) database, where backlogged risk assessments for chemicals under investigation have raised concerns that the database no longer presents timely information about health risks. The short-term goal of the pact is to share information about chemicals under assessment by NCEA and California’s Office of Environmental Health Hazard Assessment (OEHHA). The long-term goal is to “harmonize the way we do assessments,” says Preuss. For more information, contact Sharan Campleman, (650) 855-2331, scampleman@epri.com.

Preliminary Analysis of Impacts of Proposed Arsenic Cancer Slope Factor on Water Quality Criteria and Soil Ingestion Levels

See story under program 53 in Water and Ecosystems.

GEOS-Chem Presentations Available

Presentations from the April 2009 4th GEOS-Chem Scientific and User’s Meeting are now available at the [meeting website](#).

Program 91: Assessment Tools for Ozone, Particulate Matter, Regional Haze and Atmospheric Deposition***New Definitions Proposed for Organic Aerosols***

Under EPRI and EPA funding, a group of leading aerosol researchers has reviewed the body of knowledge to redefine the organic aerosols present in the atmosphere. Scientists and air quality managers have historically described organic aerosols as either primary (POA) or secondary (SOA). These definitions were thought to be convenient and sufficient for breaking down organic aerosols as to their sources and reactivity in the atmosphere. However, recent advances in measurement methods and in the understanding of physical/chemical reactions over time show that these traditional definitions are inadequate. For science purposes, definitions need to take into account the volatility of POA as well as SOA, reactions cycling between particulate and gas phases, and losses due to deposition of particles and gases. A paper has been submitted for journal publication. For more information, contact Naresh Kumar, (650) 855-2990, nkumar@epri.com.

Role of Aerosol Acidity in Secondary Organic Aerosol Formation

TVA and EPRI researchers have looked at measurements from several sites in the Southeast to see if laboratory experiments relating acidity to secondary organic aerosol (SOA) formation are supported by real-world data. Laboratory tests suggest that the presence of strong acids in the atmosphere increases the formation of SOA. Researchers examined hourly speciated fine particle data to determine if there were greater increases in the concentrations of organic aerosol mass on days when the aerosol was more acidic (based on lower ammonium-to-sulfate ratios). They found that field data could only weakly support the laboratory hypothesis of acid-catalyzed enhancement of SOA formation and that, if confirmed, the effect may be indistinguishable from meteorological effects on SOA. A paper on the research is in press (*Atmospheric*

Environment, ([doi:10.1016/j.atmosenv.2009.03.045](https://doi.org/10.1016/j.atmosenv.2009.03.045)). For more information, contact Stephanie Shaw, (650) 855-2353, sshaw@epri.com, or Eladio Knipping, 202-293-2691, eknippin@epri.com.

Inhalation of Secondary Organic Aerosol — a Laboratory First

See Program 92 below for article.

Program 92: Assessment of Air Quality Impacts on Health and the Environment

Inhalation of Secondary Organic Aerosol — a Laboratory First

For the first time, rodent inhalation exposures to secondary organic aerosol (SOA) have been accomplished in a laboratory test chamber. The newly developed chamber is part of EPRI's Secondary Particulate Health Effects Research (SPHERES) project. Results to date, which have been submitted for peer-reviewed journal publication, indicate that the chamber design and experimental approach are capable of directly assessing cardiovascular and pulmonary responses to SOA in test animals. Experiments thus far have focused on biogenic SOA atmospheres derived from the oxidation of alpha-pinene; results indicate that exposure to the atmospheric mixtures, which contain organosulfate compounds, did not result in pulmonary inflammation. A mild increase in two proteins involved in oxidant responses was observed, but no increase was evident in a protein involved with the vascular response. Taken together, alpha-pinene-derived SOA produced only limited biological response. For more information, contact Annette Rohr, (650) 855-2765, arohr@epri.com, or Eladio Knipping, 202-293-2691, eknippin@epri.com.

Pittsburgh New Site for Aerosol Study

EPRI and researchers at the University of Pittsburgh have begun the first-ever large-scale characterization of air pollution health effects in the Pittsburgh region. The study is part of the Aerosol Research and Inhalation Epidemiology Study (ARIES), designed to explore the relationship between air pollution components and adverse human health impacts, such as asthma and heart disease. Pittsburgh joins similar sites in St. Louis, New York City, Birmingham, Detroit, and Dallas, to see if the results observed at the initial ARIES location in Atlanta are consistent across geographical areas with different mixes of air pollution, meteorology, and demographics. For more information see the [press release](#) for the Pittsburgh study or view the new [Fact Sheet](#) for an overview of ARIES. For additional information, contact Ron Wyzga, (650) 855-2577, rwyzga@epri.com.

Children's Air Pollution Asthma Study Results Presented

Preliminary results from the Children's Air Pollution Asthma Study were presented at the May 17–20 annual meeting of the American Thoracic Society. EPRI's Annette Rohr, along with researchers from the Mount Sinai School of Medicine and Harvard University, presented results from the first two seasons (winter 2008 and summer 2008). The study aims to better understand the role played by different PM sources and components in the exacerbation of asthma in children living in the high asthma prevalence areas of the South Bronx and East Harlem. Findings included the following:

- Both daily indoor and outdoor PM_{2.5} concentrations tended to be higher in the summer than in the winter.
- Indoor ozone concentrations were higher in the summer, likely as a result of increased ventilation due to opening of windows.
- Indoor NO₂ concentrations were higher in the winter, likely due to gas stove usage with lower ventilation.
- Seasonal differences in elemental concentrations were observed both indoors and outdoors.
- Analysis of symptoms showed an association between PM_{2.5} and symptom severity in the summer but not in the winter.

Field work for the fourth and final season will begin in early June. For additional information, contact Annette Rohr, (650) 855-2765, arohr@epri.com.

[Visit the Global Climate Webpage](#)

Program 102: Global Climate Policy Costs and Benefits

EPRI Analyzes Transition Scenarios for Achieving Climate Stabilization

Using the Model for Evaluating the Regional and Global Effects of Greenhouse Gas Reduction Policies (MERGE), EPRI has assessed the feasibility of reaching global targets for greenhouse gas reductions. The analysis looked at transition scenarios defined by the Energy Modeling Forum (EMF) 22 study, in which certain countries delay participation in emissions reduction efforts. Using MERGE, transition scenarios were analyzed for costs, timing of emissions reductions, and progress toward global climate goals. Key findings showed that

- full global participation is necessary eventually to achieve long-term climate goals,
- certain aggressive goals are unattainable when developing countries delay participation, and
- the current global recession affects near-term economic growth but does not change the long-term results.

The EPRI analysis also compared international results with U.S. scenarios designed to represent current domestic proposals. Useful insights were gained on the treatment of non-CO₂ gases and the role of banking and borrowing. Results were presented to policymakers at a June 4 EMF briefing in Washington, DC. A special issue of *Energy Economics*, dedicated to the papers from this EMF study, will be published later this year and available online in June. For more information, contact Geoff Blanford, (650) 855-2126, gblanford@epri.com, or Richard Richels, (202) 293-7510, rrichels@epri.com.

EPA Briefs EPRI on Economic Analysis of the Waxman-Markey Climate Bill

On March 31, the House Energy and Commerce Committee released the Waxman-Markey Discussion Draft of the American Clean Energy and Security Act of 2009. The EPA's Office of Atmospheric Programs was asked by the Committee to conduct an economic analysis of the draft; the analysis was released on April 20. EPA economist Allen Fawcett led this analysis effort and on May 14 briefed about 35 of EPRI's Global Climate Change Program members on the results. A preliminary version of the analysis is available [here](#). The briefing was recorded and can be made available upon request. For more information, contact Geoff Blanford, (650) 855-2126, gblanford@epri.com.

New Book on Land Use in Global Climate Change Policy

EPRI's Steven Rose is one of the editors of and contributors to a new book, [Economic Analysis of Land Use in Global Climate Change Policy](#). Land use has often been overlooked in economic analyses; however, that inattention is changing. Part of the solution to climate change may lie in the global growing of crops for fuel and use of trees for storing carbon. The book investigates, among other things, "the potential of these options to reduce greenhouse gas emissions, estimates the costs to the economy, and analyzes the trade-offs with growing food." In addition, the book provides new global datasets and methodological building blocks for global economic analyses of land-use decisions and implications. Dr. Rose's contributions were based on work that he began before joining EPRI and that he is continuing to pursue as part of EPRI's Global Climate Change research group. The book is available from [Routledge Publishing](#). For more information, contact Steven Rose, (202) 293-6183, srose@epri.com.

Program 103: Greenhouse Gas Reduction Options

EPRI Hosts 5th GHG Emissions Offset Policy Dialogue Workshop

On May 13 in Washington DC, EPRI hosted the fifth workshop in its Greenhouse Gas Emissions Offset Policy Dialogue project. Approximately 85 representatives from the policymaking, environmental, industrial, financial, and research communities participated. The workshop explored the key role of reduced emissions from deforestation and (forest) degradation (REDD) in mitigating global climate change and the challenges and benefits of establishing REDD-based GHG emissions offset programs and policies. The workshop also focused on key technical issues associated with REDD-based offsets. All of the project and workshop

background materials and expert presentations are available [here](#). For more information, contact Adam Diamant, (510) 260-9105, adiamant@epri.com.

EPRI Presents at 2009 Environmental Markets Association Annual Conference

EPRI's Adam Diamant recently participated in a panel discussion at the 2009 Annual Environmental Markets Association conference focused on the role of GHG emissions offsets in evolving national and regional GHG cap-and-trade emissions reduction programs. His presentation (available [here](#)) focused on the benefits of GHG offsets and their potential to provide CO₂ allowance price "cost containment" in the early years of the implementation of any future U.S. domestic GHG cap-and-trade scheme. For more information, please contact Adam Diamant, (510) 260-9105, adiamant@epri.com.

EPRI Presents at Experts Workshop on Biological Sequestration Through Greenhouse Gas Offsets

EPRI's Adam Diamant participated in a recent two-day workshop entitled Biological Sequestration Through Greenhouse Gas Offsets, cosponsored by the World Resources Institute, the Pew Center on Global Climate Change, and other organizations actively engaged in the development of policies to incorporate greenhouse gas emissions offsets from the agriculture and forestry sectors into evolving national and regional GHG cap-and-trade emissions reduction programs. This invitation-only workshop convened expert representatives of key U.S. and Canadian federal agencies, the Northeast Regional Greenhouse Gas Initiative, the Western Climate Initiative, the Midwestern Greenhouse Gas Reduction Accord, and the Canadian Province of Alberta. Mr. Diamant's presentation (available [here](#)) identified key challenges associated with creating compliance-quality GHG offsets from biological sequestration projects—challenges such as additionality, baselines, permanence, and leakage—and identified potential approaches to addressing these challenges. For more information, contact Adam Diamant, (510) 260-9105, adiamant@epri.com

Global Climate Change Area News

Advisors Wanted for EPRI's New Regional Economic Modeling Project

EPRI is looking for Program 102 and 103 members who would like to participate in an advisory group for the development of EPRI's new U.S. regional energy-economic model. This model will be designed to more properly assess the impact of new climate policies on the electric power sector, the energy system, and the economy. For more background on the project, click [here](#). Advisory group members would provide input on many important aspects of the modeling and research. EPRI plans to convene a webcast to initiate this advisory group on Thursday, July 23. It most likely will be scheduled in the afternoon (East Coast time) and last up to 2 hours depending on how many people wish to participate. If you would like participate on this advisory group or have any questions about the new regional model, please contact Francisco de la Chesnaye, (202) 293-6347, fdelachesnaye@epri.com.

LAND AND GROUNDWATER

Program 49: Coal Combustion Products—Environmental Issues

Coal Combustion Products Focus of International Conference

The World of Coal Ash international conference was held May 4–7 in Lexington, KY. The conference, the largest such event focused exclusively on coal combustion products (CCPs), included more than 150 oral and poster presentations on ash and FGD solids disposal and use. EPRI CCP research was represented at the conference with three oral and three poster presentations, one of which won an award for best poster for its presentation on the evaluation of mercury inhalation risk associated with CCPs used in construction materials. For more information, contact Ken Ladwig, (262) 754-2744, keladwig@epri.com.

Program 50: Manufactured Gas Plant Site Management

Contaminated Sediment Symposium Reviews Alternative Remediation Methods

After attending a recent Contaminated Sediment Management Symposium in Alexandria, VA, EPRI's Jeff Clock notes that, "it is becoming clear that dredging is not the 'silver bullet' for sediment remediation that many assumed it would be. Practitioners are finding that residuals of 5–10 percent remain." The symposium,

cosponsored by the Sediments Management Working Group and the U.S. Army Corps of Engineers Environment Research and Design Center, reviewed alternative sediment remediation methods such as capping and monitored natural recovery, methods for improving and streamlining decision making, and several case studies. One project, removal of PCBs from sediments in Wisconsin's Fox River, is expected to require a combination of dredging and capping at a cost exceeding \$700 million. For the symposium agenda or more information, contact Jeff Clock, (845) 608-0642, jclock@epri.com.

Program 59: Power Plant Toxics Characterization

RY2008 LARK-TRIPP Software Available

[LARK-TRIPP RY2008 Version 1.1](#) (1019357). This most recent version of EPRI's software estimates chemical releases from power plants for use in year 2008 Toxics Release Inventory reporting to EPA. For more information, contact Naomi Goodman, (650) 855-2193, ngoodman@epri.com.

Report Tracks Multimedia Fate of Trace Elements at Bituminous-Fired Power Plant

[Multimedia Fate of Trace Elements at a Full-Scale Bituminous Coal Power Plant with SCR and Wet FGD](#) (1017982). This report describes the behavior of a number of trace elements across pollution control devices—an electrostatic precipitator, a selective catalytic reduction system, and a wet flue gas desulfurization system—at a power plant burning bituminous coal. For more information, contact Paul Chu, (650) 855-2812, pchu@epri.com.

Program 59 EPRI-UARG Presentations Posted

[Program 59 presentations](#) from the May 2009 EPRI-UARG Air Toxics Research Coordination Conference are now available on epri.com (ID and password required).

WATER AND ECOSYSTEMS

Program 53: Water Quality Criteria Development and Assessment

Preliminary Analysis of Impacts of Proposed Arsenic Cancer Slope Factor on Water Quality Criteria and Soil Ingestion Levels

EPRI researchers have completed a preliminary analysis of the impacts of the proposed new arsenic cancer slope factor (CSF)—expected to increase approximately twentyfold over the current CSF—on arsenic ambient water quality criteria (AWQC) and soil ingestion levels. EPRI has prepared a memo describing the results of the analysis, which examined effects on calculated AWQC values of changes in a number of variables, including the CSF, fish ingestion rates, drinking water concentrations, bioaccumulation factors, and percentage of inorganic arsenic in edible fish tissue. The memo notes, "By far the most important parameter is the CSF." The memo is available to any funder of Program 53 or Program 42. For more information, contact John W. Goodrich-Mahoney, (202) 293-7516, jmahoney@epri.com.

Program 54: Fish Protection at Steam Electric Power Plants

Engineering Evaluation of Fine-Mesh Screens Under Way

EPRI researchers have completed two of their six planned site visits for EPRI's new project conducting an engineering evaluation of fine-mesh screens. Researchers gathered operational data on the performance of fine-mesh screens installed and operating at Progress Energy's Brunswick Station in North Carolina and Tampa Electric Company's Big Bend Station in Tampa, Florida. The four additional trips will be to plants in the Gulf of Mexico and Great Lakes areas. Results of the site visits will be discussed at the Water & Ecosystems summer advisory meeting in June. For more information, contact Doug Dixon, (804) 642-1025, ddixon@epri.com.

Report Published on Value of Impingement Losses at Ohio River Intakes

[Ohio River Ecological Research Program: Economic Valuation of Impingement Losses at Cooling Water Intakes on the Ohio River](#) (1018643). This Technical Report provides estimates of the economic value of fish

impinged at 13 intake structures withdrawing cooling water from the Ohio River. For more information, contact Doug Dixon, (805) 642-1025, ddixon@epri.com.

Program 55: Strategic Water Issues: TMDLs, Availability, Climate

EPRI Research Reaches Wider Audience

Bob Goldstein recently was invited to give a presentation at the ASME Water Management Technology Best Management Practices and Innovations Workshop for the Process Industries, organized by the American Society of Mechanical Engineers in cooperation with EPA. He described the strategies and technologies EPRI has identified for power plant cooling using nontraditional waters—such as municipal effluent, agricultural drainage, saline groundwater aquifers, and water produced during oil and gas production—that might also be of use in process industries, such as chemicals, pharmaceuticals, and petroleum. The 2008 EPRI report [Use of Alternate Water Sources for Power Plant Cooling](#) (1014935) details these strategies. He also gave an invited presentation at the Electric Power 2009 Conference within the strategic track Challenges of Water Usage in Power Generation. For more information, contact Robert Goldstein, (650) 855-2593, rgoldst@epri.com.

Program 56: Effluent Guidelines and Water Quality Management

Program Webcast Describes Results From Recent Research Report

Program 56 researchers held a webcast on May 15 to discuss the recently published report [Impact of Wet Flue Gas Desulfurization \(FGD\) Design and Operating Conditions on Selenium Speciation](#) (1017952). The webcast was designed to summarize the report results, especially for those who do not have the time to review the entire report. The [webcast presentation](#) is available to Program 56 funders on epri.com (ID and password required). Future webcasts on other reports are planned, and funders will be notified in advance. For more information, contact Paul Chu, (650) 855-2812, pchu@epri.com.

Program 58: Waterpower

EPRI Research Presented at National Hydropower Association Conference

Doug Dixon participated in the National Hydropower Association (NHA) Annual Conference, held May 11–13 in Washington DC. In addition to serving as a panelist in a session on Migratory Fish Populations and Status, Doug presented EPRI research in meetings of the NHA committees on R&D and hydraulic power and to the Hydropower Research Foundation, the NHA's research affiliate. Doug reviewed the current EPRI water power research program, including EPRI's collaborative work with the U.S. Department of Energy (DOE) on advanced "fish-friendly" turbines, and EPRI's plans for additional work with DOE. For more information, contact Doug Dixon, (805) 642-1025, ddixon@epri.com.

EPRI and Oak Ridge National Laboratory Submit Proposal to DOE

EPRI is collaborating with Oak Ridge National Laboratory on a proposal to DOE to conduct research on GHG emissions from hydropower reservoirs. EPRI's role will be to provide industry support to the research. A decision on the proposal is expected from DOE this summer. If the project is chosen for funding, an EPRI Supplemental Project Notice will be issued for companies interested in participating in the work. For more information, contact Doug Dixon, (805) 642-1025, ddixon@epri.com.

T&D ENVIRONMENTAL ISSUES

Program 57: ROW: Siting, Vegetation Management, and Avian Issues

EPRI Developing Cumulative Impact Analysis Primer

EPRI is developing a primer to help companies understand and conduct cumulative impact analyses of transmission development projects. The National Environmental Policy Act requires a cumulative impact analysis for all impacts greater than zero, and these analyses are becoming more important in environmental permitting. According to Council on Environmental Quality regulations, "cumulative impacts can result from individually minor but collectively significant actions taking place over a period of time." Cumulative impacts represent all direct and indirect impacts of a company's actions combined with impacts of other actions affecting the same resources—in this case, resources within the transmission corridor. EPRI's primer will

review the basic legal and regulatory framework for cumulative impact analysis, discuss available guidance documents, and describe how to conduct an analysis with a case study example. For more information, contact John W. Goodrich-Mahoney, (202) 293-7516, jmahoney@epri.com.

Program 60: EMF Health Assessment and Radio-Frequency Safety

[Visit the EMF Health Assessment and RF Safety Public Webpage](#)

Residential Measurements Consistent With Proposed Role of Contact Current Exposure in Childhood Leukemia

Kavet, R. and Hooper, C. "Residential magnetic fields and measures of neutral-to-earth voltage: Variability within and between residences," accepted for publication in *Health Physics*. This paper describes minute-by-minute measurements of magnetic fields and neutral-to-earth voltages taken in 15 single detached residences in San Jose, CA. The voltage between bathtub plumbing fixtures and the drain is a source of exposure to contact current for bathing children, and has been proposed to explain the reported association between power-frequency magnetic fields and childhood leukemia. In this study, measures of magnetic field, bathtub plumbing fixture-to-drain voltage, and water line-to-earth voltage were positively correlated with each other within a residence and displayed similar diurnal patterns. Furthermore, these measures were positively correlated with each other across residences, when pooled with similar data from two prior studies. The authors conclude that "the observed relationships within and across residences indicate that contact current has the characteristics of a factor that could explain the association of magnetic fields with childhood leukemia." For more information, contact Rob Kavet, (650) 855-1061, rkavet@epri.com.

ENVIRONMENT FEDERAL HIGHLIGHTS (Washington D.C. Office, John Novak)

For more information on the items below, contact John Novak, 202-293-6180, jnovak@epri.com.

Major Economies Forum on Energy and Climate

Ministers from the 17 major economies met on April 27–28 in Washington, DC, in a preparatory session for the Leaders' Meeting that will take place in La Maddalena, Italy, in July, adjacent to the G-8 Leaders' Meeting. In March 2009, President Barack Obama announced the launch of the Major Economies Forum on Energy and Climate, which is intended to facilitate a candid dialogue among key developed and developing countries, help generate the political leadership necessary to achieve a successful outcome at the December U.N. climate change conference in Copenhagen, and advance the exploration of concrete initiatives and joint ventures that increase the supply of clean energy while cutting greenhouse gas emissions. John Novak attended an invitation-only reception in honor of the delegates.

Center for Clean Air Policy

On May 4, John Novak participated in a meeting of the Center for Clean Air Policy (CCAP) Climate Policy Initiative. CCAP is an independent think tank working on air and climate issues. The Climate Policy Initiative convenes leading companies, federal, state and local governments and environmental organizations to discuss and advance a national climate policy solution. The May 4 meeting focused on understanding the cap-and-trade design choices made in the American Clean Energy and Security Act (Waxman-Markey draft legislation)—including industrial competitiveness, approaches to limiting allowance price volatility and containing costs, interactions with the Clean Air Act, and allowance allocation—and how these choices are viewed by key stakeholders. Novak was a member of the panel discussion of the use of offsets in the draft legislation.

Meeting with Minister from UK Department of Energy and Climate Change

On May 20, Bryan Hannegan and John Novak met with Mike O'Brien, Minister of State for the Department of Energy and Climate Change in the UK. The purpose of the meeting was to discuss areas of US-UK energy cooperation, specifically electricity grids, coal capture and storage, renewables R&D, and efficiency programs and other areas related to mitigating climate change. Hannegan described the EPRI Prism/MERGE analysis, the technology challenges, and the EPRI demonstration projects.

Meeting with EPA Office of Air and Radiation

On May 21, Bryan Hannegan and John Novak met with Ana Maria Wood, Rob Brenner and other staff of the EPA Office of Air and Radiation to brief them on the Prism/MERGE analysis and the EPRI analysis of decisions to retrofit existing power plants.

New Supplemental Project Opportunities

Program 49: Coal Combustion Products—Environmental Issues

- [Sustainable Management of Coal Combustion Products: Informing the Regulatory Process](#) (1019334). EPRI will provide scientific and technical information to inform the impending EPA regulatory determination on the management of coal combustion products.

Program 54: Fish Protection at Steam Electric Power Plants

- [American Eel Interest Group](#) (1019333). EPRI is launching an American eel interest group, which will allow participants to monitor technical and regulatory developments related to protection of American eels.

For a complete list of all active Environment Supplemental Project Opportunities, click [here](#).

New Marketing Communications

Program 55: Strategic Water Issues: TMDLs, Availability, Climate

- [Regional Water Quality Trading in the Ohio River Basin: Program Summary](#) (1019305)

Upcoming Events

* denotes EPRI sponsored or cosponsored event

Environment Sector

*** Environment Sector and Area Council Advisory Meetings**

Oct. 5–8, Boulder, CO. Contact: Adina Kozuh, (650) 855-2991, akozuh@epri.com.

*** Environment Sector and Area Council Advisory Meetings**

Mar. 15–18, 2010, Orlando, FL. Contact: Adina Kozuh, (650) 855-2991, akozuh@epri.com.

Air Quality

9th International Conference on Mercury as a Global Pollutant

June 7–12, Guiyang, China. Contact: Leonard Levin, (650) 855-7929, llevin@epri.com. More information is available at the [event website](#).

Air & Waste Management Association 102nd Annual Conference & Exhibition

June 16–19, Detroit, MI. Contact: Naresh Kumar, (650) 855-2990, nkumar@epri.com. More information is available at the [event website](#).

Exposure Science in the 21st Century

June 18–19, Washington, DC. Contact: Sharan Campleman, (650) 855-2331, scampleman@epri.com. More information is available at the [event website](#).

42nd Annual Society for Epidemiologic Research Meeting

June 23–26, Anaheim, CA. Contact: Sharan Campleman, (650) 855-2331, scampleman@epri.com. More information is available at the [event website](#).

Gordon Research Conference on Atmospheric Chemistry

Aug. 23–28, Waterville Valley, NH. Contact: Eladio Knipping, 202-293-2691, eknippin@epri.com.

Twenty-First Conference of the International Society for Environmental Epidemiology

Aug. 25–28, Dublin, Ireland. Contact: Annette Rohr, (650) 855-2765, arohr@epri.com.

Annual Meeting of the American College of Epidemiology

Sept. 12–15, Silver Spring, MD. Contact: Sharan Campleman, (650) 855-2331, scampleman@epri.com. More information is available at the [event website](#).

National Atmospheric Deposition 2009 Annual Meeting & Scientific Symposium

Oct. 6–8, Saratoga Springs, NY. Contact: Arnout Ter Schure, (650) 855-2753, aterschu@epri.com.

Air Quality VII Conference

Oct. 25–29, Arlington, VA. Contact: Leonard Levin, (650) 855-7929, llevin@epri.com. More information is available at the [event website](#).

American Association for Aerosol Research 28th Annual Conference

Oct. 26–30, Minneapolis, MN. Contact: Stephanie Shaw, (650) 855-2353, sshaw@epri.com. More information is available at the [event website](#).

2009 National Ambient Air Monitoring Conference

Nov. 2-5, Nashville, TN. Contact: Stephanie Shaw, (650) 855-2353, sshaw@epri.com. More information is available at the [event website](#).

Society of Environmental Toxicology and Chemistry 30th Annual Meeting

Nov. 19–23, New Orleans, LA. Contact: Sharan Campleman, (650) 855-2331, scampleman@epri.com. More information is available at the [event website](#).

Society for Risk Analysis 2009 Annual Meeting

Dec. 6–9, Baltimore, MD. Contact: Sharan Campleman, (650) 855-2331, scampleman@epri.com. More information is available at the [event website](#).

American Geophysical Union 2009 Fall Meeting

Dec. 14–18, San Francisco, CA. Contact: Stephanie Shaw, (650) 855-2353, sshaw@epri.com. More information is available at the [event website](#).

Land and Groundwater

9th International Conference on Mercury as a Global Pollutant

June 7–12, Guiyang, China. Contact: Leonard Levin, (650) 855-7929, llevin@epri.com. More information is available at the [event website](#).

Air & Waste Management Association 102nd Annual Conference & Exhibition

June 16–19, Detroit, MI. Contact: Babu Nott, (650) 855-7946, bnott@epri.com. More information is available at the [event website](#).

2009 Naphthalene Research Meeting

June 22–23, Davis, CA. Contact: Annette Rohr, (650) 855-2765, arohr@epri.com. This meeting will be held at the University of California at Davis.

*** MGP Mid-Year Research Review Webcast**

June 25, 10–2 EDT. Program 50 members will review the technical research portfolio. Contact: Jeff Clock, (845) 608-0642, jclock@epri.com.

*** Coal Combustion Product Research Mid-Year Meeting—Joint Programs 49 and 78**

July 21–22, Beltsville, MD. Contact: Ken Ladwig, (262) 754-2744, keladwig@epri.com.

Air Quality VII Conference

Oct. 25–29, Arlington, VA. Contact: Leonard Levin, (650) 855-7929, llevin@epri.com. More information is available at the [event website](#).

*** Agricultural & Industrial Uses of FGD Gypsum**

Nov. 17–19, Indianapolis, IN. Contact: Ken Ladwig, (262) 754-2744, keladwig@epri.com. This conference is jointly sponsored by EPRI, ACAA, USDA-ARS, EPA, and Southern Company. More information is available at the [event website](#).

*** EPRI MGP 2010 Symposium**

Jan. 27–29, 2010, San Antonio, TX. Contact: Jeff Clock, (845) 608-0642, jclock@epri.com, or Jim Lingle, (414) 355-5559, jlingle@epri.com. EPRI has issued a [call for abstracts](#). More information is available at the [event website](#).

Water and Ecosystems

9th International Conference on Mercury as a Global Pollutant

June 7–12, Guiyang, China. Contact: Leonard Levin, (650) 855-7929, llevin@epri.com. More information is available at the [event website](#).

Water and Ecosystems Summer Advisory Meeting

June 17–18, Holden, MA. Contact: Kent Zammit, (805) 481-7349, kezammit@epri.com.

WaterPower XVI Conference

July 27–30, Spokane, WA. Contact: Doug Dixon, (804) 642-1025, ddixon@epri.com. More information is available at the [event website](#). EPRI will also hold a workshop on July 26 at which any conference attendee can review and comment on EPRI's waterpower research program.

American Fisheries Society Annual Meeting

Aug. 30–Sept. 3, Nashville, TN. Contact: Doug Dixon, (804) 642-1025, ddixon@epri.com. Doug Dixon is organizing a National Symposium on Fish Community Monitoring in Big Rivers during this meeting. More information is available at the [event website](#).

T&D Environmental Issues

The Bioelectromagnetics Society 31st Annual Meeting

June 14–19, Davos, Switzerland. Contact: Rob Kavet, (650) 855-1061, rkavet@epri.com. More information is available at the [event website](#).

*** Mid-Year Joint Meeting of P51 (Transmission & Distribution) and P57 (Rights-of-Way)**

July 8–9, Charlotte, NC. Contact: Babu Nott, (650) 855-7946, bnott@epri.com. More information is available at the [event website](#).

*** 2009 EMF Scientific Advisory Committee Meeting**

July 20–21, Milwaukee, WI. Contact: Rob Kavet, (650) 855-1061, rkavet@epri.com.

International Society of Arboriculture 85th Annual Conference & Trade Show

July 24–29, Providence, RI. Contact: John W. Goodrich-Mahoney, (202) 293-7516, jmahoney@epri.com.
More information is available at the [event website](#).

Ninth International Symposium on Environmental Concerns in Rights-of-Way Management

Sept. 27–Oct. 1, Portland, OR. Contact: John W. Goodrich-Mahoney, (202) 293-7516, jmahoney@epri.com.
More information is available at the [event website](#).

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