

NASEO 2013 Annual Meeting and Getting to Zero National Forum

Resiliency, Growth, and Sustainability

Sunday, September 15 – Wednesday, September 18, 2013
The Curtis Hotel
1405 Curtis Street, Denver, Colorado 80202 • Telephone: 303.571.0300

Preliminary Agenda

Sunday, September 15, 2013

10:00 am – 4:00 pm

Conference Registration (Flower Foyer, Third Floor)

12:00 pm - 2:00 pm

State Energy Program Competitive Project Meeting (State Energy Offices by Invitation Only) (Marco Polo Ballroom, Third Floor)

NASEO will host a U.S. Department of Energy Office of Weatherization and Intergovernmental Programs (WIP) meeting among State Energy Offices selected in FY'12 under area one, "Advancing Energy Efficiency in Public Facilities," within the State Energy Program (SEP) Competitive Grant Program. The purpose of the meeting is for DOE to provide program updates and host a discussion that will advance the states' projects.

2:00 pm - 4:00 pm

NASEO Concurrent Committee Sessions

NASEO committees are the mechanism for members to focus on the states' key priorities and issues in specific sectors. The primary role of the committees is to identify emerging issues, discuss solutions, and develop policies and projects. Committee meetings are open to all attendees at this conference.

• Transportation Committee (Marco Polo Ballroom, Third Floor)

The NASEO Transportation Committee leads NASEO's efforts to accelerate the use of domestic alternative fuels, increase transportation efficiency across sectors (cars, trucks, marine, off-road), fuel economic development and innovation, and contribute to improved air quality. The Committee will discuss alternative fuel vehicle market transformation activities being carried out by the National Renewable Energy Laboratory, explore opportunities to coordinate State Energy Office's activities with those of Clean Cities Coordinators from around the country, and discuss the next steps for the Committee's project, *Unlocking Private Sector Financing for Alternative Fuel Vehicles and Fueling Infrastructure*.

Committee Co-Chairs:

Ruth Horton, Program Manager, New York State Energy Research and Development Authority

David Jenkins, Director of Commercialization and Market Development, Wisconsin State Energy Office

Committee Staff: Julia Friedman, Program Manager, NASEO

Presenters:

Alex Schroeder, Technology Deployment Manager, National Renewable Energy Laboratory Lorrie Lisek, Executive Director, Wisconsin Clean Cities – Southwest Area (invited)
Sam Spofforth, Executive Director, Clean Fuels Ohio

Natalia Swalnick, Director of Environmental Health, American Lung Association in Colorado Karen Glitman, Director of Transportation Efficiency, Vermont Energy Investment Corporation Sarah Dougherty, Finance Fellow, Center for Climate and Energy Solutions Cathie France, Deputy Director for Energy Policy, Virginia Department of Mines, Minerals, and Energy

• Energy Security Committee (Hopscotch, Third Floor)

NASEO's Energy Security Committee meeting will present updates from the U.S. Department of Energy on the natural gas adequacy assessment for the Northeast, Energy Assurance Program. Relevant next steps and action items will be identified.

Committee Chair:

Mark Sylvia, Commissioner, Massachusetts Department of Energy Resources; NASEO Board of Directors, Regional Representative

Committee Staff:

Jeff Pillon, Director of Energy Assurance, NASEO Shemika Spencer, Grants and Program Manager, NASEO

Presenter:

Alice Lippert, Senior Technical Advisor, Office of Electricity Delivery and Energy Reliability, U.S. Department of Energy (*invited*)

• Buildings Committee (Red Rover, Third Floor)

NASEO's Buildings Committee will convene for an interactive meeting of State Energy Offices and Affiliates to discuss priorities for properties in the residential, commercial, and institutional sectors and efforts to support building energy codes.

Moderator: John Davies, Deputy Commissioner, Kentucky Department for Energy Development and Independence

Committee Staff:

Sandy Fazeli, Program Manager, NASEO Chris Wagner, Program Manager, NASEO

Presenters:

Advanced HVAC Technologies in the Multi-Family and Residential Sectors
Jay Perkins, Senior Government Affairs Specialist, Mistubishi Electric Cooling & Heating
Buildings Codes Status Update

Brian Henderson, Southeast Regional Coordinator, NASEO Chris Wagner, Program Manager, NASEO

4:15 pm – 5:30 pm (Marco Polo Ballroom, Third Floor)

NASEO Board of Directors Meeting

NASEO's Board of Directors Meeting is open to NASEO state and affiliate members only and covers programmatic and administrative updates of the organization.

5:30 pm – 6:00 pm (*Marco Polo Ballroom, Third Floor*)

NASEO Annual Business Meeting

NASEO's Annual Business Meeting is open to NASEO state and affiliate members only and covers the review and approval of NASEO's FY'14 budget.

Monday, September 16, 2013

7:00 am - 4:00 pm

Conference Registration and Exhibit Hall (Flower Foyer, Third Floor)

7:00 am – 8:00 am (Four Square Ballroom, Third Floor)

Continental Breakfast

8:00 am – 8:30 am (Marco Polo Ballroom, Third Floor)

Energy, Growth, and Sustainability: NASEO and Colorado Energy Office Welcome and Opening Remarks

This year's Annual Meeting will highlight the states' leadership in energy resiliency, economic growth, and sustainability. Also, through a partnership with New Buildings Institute, NASEO is launching the first annual *Getting to Zero National Forum*, which will combine technical, market, and policy perspectives and showcase how states and companies are using zero net energy buildings to meet resiliency, economic, and sustainability goals. This opening session will set the stage for the meeting. In addition, Colorado, this year's host state, will share its mission to promote sustainable economic development in Colorado through advancing the state's energy market and industry to create jobs, increase energy security, lower long-term consumer costs, and protect the environment.

Presenters:

David Terry, Executive Director, NASEO

Vaughn Clark, Director, Oklahoma Office of Community Development; NASEO Chair Jeff Ackermann, Director, Colorado Energy Office

8:30 am – 9:45 am (*Marco Polo Ballroom, Third Floor*)

40 Years After the Oil Embargo: On a Path to North American Energy Independence

Forty years after the Oil Embargo, an American oil and natural gas production renaissance is bringing high-paying jobs, increased tax revenues, and economic growth. When combined with a growing list of transportation alternatives and higher vehicle efficiency the United States is on a path to a more resilient future and dramatically less dependence on imported petroleum products. Gulf port cities in Texas and other states could triple in size within a few years, and energy intensive manufacturers in Ohio and Pennsylvania are rallying to leverage the natural gas boom. The chemical industry is building major facilities to utilize domestic natural gas, railroads are expanding to move oil from states such as North Dakota to refineries, and coastal states are examining LNG export facilities. These growth-

oriented domestic energy investments stand in sharp contrast to what had been a multi-decade transfer of energy dollars to other nations. This session will explore the evolving market impacts from this dramatic transformation and provide an up-to-the-minute outlook at the nation's oil and gas future.

Moderator: Dan Lapato, Deputy Director, Office of External Affairs, Pennsylvania Department of Environmental Protection; Co-Chair, NASEO Natural Gas Task Force

Presenters:

Todd Onderdonk, Senior Energy Advisor, Corporate Strategic Planning, Exxon Mobil Corporation Scott Nyquist, Director, Oil and Gas Practice, McKinsey & Company

9:45 am – 10:00 am (*Flower Foyer, Third Floor*) **Networking Break**

10:00 am - 11:00 am (Marco Polo Ballroom, Third Floor)

Extraordinary and Increasing Threats to Energy Infrastructure: A Fresh Look at Industry and Government Response

Recent cyber security breaches and Super Storm Sandy are the latest examples of what has become an increasing number of energy supply disrupting events. These threats have highlighted the need for further improvements in communications and the availability of real-time data on the electric grid operation, liquid fuel supplies, and natural gas distribution during emergencies. This session will inform attendees about new steps the U.S. Department of Energy and the energy industry are taking – in partnership with the states – to improve response and resiliency. The discussion will also explore further actions states can take to mitigate the health, safety, and economic impacts of serious energy supply disruptions.

Moderator: Mark Sylvia, Massachusetts

Presenters:

Alice Lippert, Senior Technical Advisor, Office of Electricity Delivery and Energy Reliability, U.S. Department of Energy

David Owens, Executive Vice President of Business Operations, Edison Electric Institute (invited) Joanne Shore, Chief Industry Analyst, American Fuel and Petrochemical Manufacturers (invited) Representative, American Gas Association

Representative, New Jersey Petroleum Council

11:00 am - 12:15 pm (Marco Polo Ballroom, Third Floor)

State Energy Offices Transforming the Electricity Sector

The energy landscape around the country is undergoing a rapid transformation. Factors such as slow or negative electricity load growth, higher levels of distributed generation, the application of smart grid technologies, and low natural gas prices are forcing policymakers, utilities, energy service providers, and consumers to rethink the traditional utility business models and policy and regulatory tools for ensuring affordable and reliable energy. This panel will explore how State Energy Offices are ushering in innovative paradigms for utility service and adapting existing tools and markets to meet the demands of this new reality.

Moderator:			

Lisa Schwartz, Director, Oregon Department of Energy (invited)

Presenters:

Mark Glick, Administrator, Hawaii State Energy Office Denise Foster, Vice President, State and Member Services, PJM Interconnection, LLC Devon Dodson, Chief of Staff, Maryland Energy Administration

12:15 pm – 1:15 pm

Keynote Luncheon – National Renewable Energy Laboratory: Beyond Innovation (Four Square Ballroom, Third Floor)

Like the State Energy Offices, the National Renewable Energy Laboratory (NREL)—the U.S. Department of Energy's primary national laboratory for renewable and efficiency research and development—is aimed at bringing advanced technologies to market and eliminating associated barriers to commercialization. NREL's mission responds to the future challenges of energy demand growth, geopolitical instability, and carbon reduction to address the nation's energy and economic security. NREL is working with the states and others to look beyond innovation and focus on rapid commercialization—a crucial part of creating a sustainable energy future for the nation and the world.

Presenter:

Dan Arvizu, Director and Chief Executive, National Renewable Energy Laboratory (invited)

1:30 pm - 3:30 pm Concurrent Sessions

Trends in State Energy Office Policy Development and Program Implementation

1:30 pm – 3:30 pm (Hopscotch, Third Floor)

Session 1: Solar PV Grid Integration: Bringing Down the Soft Costs to Realize the Benefits Integrating solar energy technologies into the electricity grid will be a critical component of grid modernization, making electricity production more sustainable and the grid more resilient. In recent years, rooftop solar photovoltaic systems have also provided customers a means of hedging against volatile electricity prices, creating a level of predictability that serves as a driver of economic development. While the price of rooftop solar has declined significantly in the past decade largely due to technological innovation, the soft costs of solar often remain a barrier. This session will explore efforts supported by a number of State Energy Offices, financial institutions, and a national laboratory to bring down the soft costs of rooftop solar.

Moderator:

Leisa Brug, Director, Arizona Governor's Office of Energy Policy (invited)

Presenters:

Janet Streff, Manager, Division of Energy Resources, Minnesota Department of Commerce; NASEO Board of Directors, Regional Representative (invited)

Mark Sylvia, Commissioner, Massachusetts Department of Energy Resources; NASEO Board of Directors, Regional Representative; Chair, NASEO Energy Security Committee (invited)
Bob Wall, Director of Marketing and Outreach, Clean Energy Finance Investment Authority
Paul Schwabe, Energy and Financial Analyst, Market and Policy Impact Analysis Group, Strategic Energy Analysis Center, National Renewable Energy Laboratory

1:30 pm - 3:30 pm (Red Rover, Third Floor)

Session 2: Driving Economic Development through Industrial Energy Efficiency and Combined Heat and Power

Keeping American manufacturers competitive is at the forefront of priorities for policymakers across the United States. Helping companies reduce their energy consumption through energy efficiency and combined heat and power (CHP) is vital to regaining and maintaining a competitive advantage. However, investments in energy efficiency and combined heat and power can require significant upfront capital. Moreover, the cost of capital may be high due to a wide range of factors. Creating market demand for energy efficiency and CHP, and ensuring that low-cost financing is available, will be important to increasing the deployment of energy efficiency and CHP. This panel will explore various financing models and policies to create demand energy efficiency and CHP in the industrial sector.

Presenters:

Third-Party Financing

Dick Munson, Senior Vice President for Public Affairs, Recycled Energy Development, LLC Trenton Allen, President, Sustainable Capital Advisors

Demand Response Markets

Joe Sullivan, Vice President for Energy and Policy Development, Concord Engineering Group (invited)

Rick Counihan, Vice President, Government Affairs, EnerNOC, Inc.

Dana Levy, Project Manager, Industrial Research, New York State Energy Research and Development Authority (NYSERDA) (invited)

<u>Market Development with Energy Efficiency Resources Standards and Renewable Portfolio Standards</u>

Jim Thoma, Green Campus Partners (invited)

Todd Currier, Division Manager, Washington State University Energy Program (invited)

1:30 pm – 3:30 pm (Duck Duck Goose, Third Floor)

Session 3: America's Power Plan: Rethinking Policy to Deliver a Clean Energy Future

Market forces, driven by public demand for cleaner, more efficient energy and technological innovation, are transforming America's power sector. Policymakers, regulators, and the public sector must evaluate the tools in their toolbox to facilitate and adapt to this changing landscape. With input from over 150 energy leaders, America's Power Plan tackles the tough questions around utility business models, finance, market design, transmission and distribution policies, distributed energy resources, and siting. Panelists will discuss the new challenges facing the energy sector and the policy changes needed to foster innovation.

Moderator:

Dub Taylor, Director, Texas State Energy Conservation Office

Presenter:

Sonia Aggarwal, Director of Strategy, Energy Innovation

3:30 pm – 4:30 pm (*Marco Polo Ballroom, Third Floor*)

State Actions in Energy Efficiency Innovation

Mississippi's recent legislative and regulatory action and the underlying stakeholder engagement process have combined to create a sea change in the way Mississippi is advancing energy efficiency and economic opportunity. Wisconsin is conducting a net-zero retrofit of the 500-cow dairy complex located on the state-owned Arlington Agricultural Research Station, which has the potential for replication throughout the agricultural sector. Minnesota is finalizing the deployment of a Guaranteed Energy Savings Program, which is intended to maximize job creation and operational cost savings through investment in public facilities with the goal of reducing aggregate energy consumption by 20 percent throughout all state agencies. This session will highlight these State Energy Program (SEP) Competitive projects and their energy and economic benefits.

Presenters:

Larissa Williams, Technical Assistance Bureau Manager, Energy and Natural Resources Division, Mississippi Development Authority (invited)

Megan Levy, Director, Local Energy Programs, Wisconsin State Energy Office Janet Streff, Manager, Division of Energy Resources, Minnesota Department of Commerce (invited)

4:30 pm – 5:00 pm (*Marco Polo Ballroom, Third Floor*)

Washington Update

In this session, hear the latest on Congressional and Administration energy polices, as well as the outlook for federal appropriations affecting the states and energy markets.

Moderator:

David Terry, Executive Director, NASEO

Presenter:

Jeff Genzer, Counsel, NASEO

5:00 pm – 5:30 pm (*Marco Polo Ballroom, Third Floor*)

State Energy Priorities (State and Territory Energy Offices Only)

This session will provide a forum for discussion of state policy priorities and other issues.

Tuesday, September 17, 2013

7:00 am - 4:00 pm

Conference Registration and Exhibit Hall (Flower Foyer, Third Floor)

7:00 am - 8:00 am (Four Square Ballroom, Third Floor)

Continental Breakfast

8:00 am - 8:30 am (Marco Polo Ballroom, Third Floor)

A Changing Energy Landscape: Sustainable Energy in America 2013 Factbook

The nation's energy profile is changing as natural gas, renewables, and energy efficiency are on the rise. These changes have far-reaching implications for U.S. economic and national security interests by increasing the diversity of the country's energy mix, improving energy security, and rapidly reducing carbon impacts. The *Sustainable Energy in America 2013 Factbook*—researched and produced by Bloomberg New Energy Finance and commissioned by the Business Council for Sustainable Energy—offers a fresh look at the state of U.S. energy along with the roles of new technologies and innovations.

This session will provide an overview of the Factbook focusing on the contributions of these new technologies and finance and investment trends in clean energy resources.

Presenters:

Lisa Jacobson, President, Business Council for Sustainable Energy (invited)
Ethan Zindler, Head of Policy Analysis, Bloomberg New Energy Finance (invited)

8:30 am – 9:30 am (*Marco Polo Ballroom, Third Floor*)

From "K-to-Gray": Improving Energy Literacy Across the Public Spectrum

Energy is one of the world's largest industries that provokes constant debate; however, few could name a fossil fuel or renewable energy resource. The nation's (and the world's) energy challenges are closely interconnected with environmental, economic, health, and social challenges. Fostering public knowledge and understanding of energy principles and basic concepts will help individuals and communities make informed decisions about energy use. The ultimate goals of energy literacy are to mitigate risks, develop a prepared workforce, and make the connection between energy and climate adaptation. This session will highlight energy literacy research, utility efforts, and state programs that aim for a more energy and climate literate society.

Presenters:

Mary Spruill, Executive Director, The NEED Project Molly Cripps, Director, Tennessee Energy Division

9:30 am – 9:45 am (Flower Foyer, Third Floor)

Networking Break

9:45 am – 10:45 am (Marco Polo Ballroom, Third Floor)

Rebuilding Toward Resiliency and Sustainability in the Face of Extreme Weather

There is an urgent need to reduce the nation's vulnerability to natural disasters and their impact on public health and safety and the economy. Increasingly, extreme weather patterns are having a direct impact on the nation's built environment. A number of states are developing targeted strategies and actions that address community rebuilding, ensure capacity, prepare the public, and enhance resiliency. This session provides a climate status update, focuses on cost-effective adaptation measures and resilient public infrastructure, and shares lessons learned from community rebuilding efforts.

Presenter:

Jonathan Pershing, Deputy Assistant Secretary for Climate Change Policy and Technology, Office of Policy and International Affairs, U.S. Department of Energy (invited)

10:45 am – 11:30 am (*Marco Polo Ballroom, Third Floor*)

State Trends in Energy Efficiency Policy

State energy policy continues to evolve across the country, with action by legislatures, governors, and utility commissions impacting all energy sectors. This session reviews the changes in energy efficiency and renewable energy policy over the past year in the Southwest.

Presenters:

Howard Geller, Executive Director, Southwest Energy Efficiency Project Representative, Northwest Energy Efficiency Alliance

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11:30 am – 12:00 pm (*Marco Polo Ballroom, Third Floor*) **Pending**

12:00 pm – 1:15 pm (*Four Square Ballroom, Third Floor*) **Keynote Luncheon**

1:30 pm - 2:30 pm — Getting to Zero National Forum

The Zero Net Energy Landscape: Quantifying Ultra-Efficiency Costs and Benefits in the Built Environment

In this session, New Buildings Institute will release the findings of the 2013 Getting to Zero Status Update. The early 2012 publication included 99 verified and emerging zero net energy and zero net energy capable buildings. The update represents the most comprehensive look at the cost and features of and motivations for zero net energy buildings in the United States. The findings will demonstrate the status of the market, the associated costs, and the related challenges and opportunities of zero net energy buildings. In addition, Denis Hayes of the Bullitt Foundation will share the motivations and challenges of creating what may be the tallest and largest zero net energy building in the world.

Moderator:

Ralph DiNola, Executive Director, New Buildings Institute

Presenters:

Denis Hayes, President and Chief Executive Officer, Bullitt Foundation Cathy Higgins, Research Director, New Buildings Institute David Terry, Executive Director, NASEO

2:30 pm – 2:45 pm (*Flower Foyer, Third Floor*) **Networking Break**

2:45 pm - 4:00 pm

Zero Net Energy Interactive Breakout Sessions

Session 1: Incremental Costs of Zero Net Energy Commercial and Public Buildings (*Marco Polo Ballroom, Third Floor*)

One of the most common barriers to zero net energy projects is the concern over incremental costs as compared to typical building practices. This session will highlight the results of several studies by states and organizations that explore the opportunities in achieving scalable and cost-effective zero net energy buildings. Strategies used by design and construction teams to meet the ambitious cost targets set by building owners will also be explored.

Presenters:

Mike Rovito, Energy & Resource Solutions, Inc. (ERS)

Session 2: States Advancing Zero Net Energy Schools and Municipal Buildings (*Red Rover, Third Floor*)

Leading by example, a number of states and local jurisdictions have expanded zero net energy building activities in sectors such as schools and municipal buildings. This session will highlight recent policy trends, lessons learned on building cost-effectively, and the public benefits of dramatically lowering or permanently eliminating building energy costs. State energy officials

and their project partners will describe their roles in catalyzing these projects and the associated benefits, including grid resiliency, reduced energy bills, and environmental stewardship.

Session 3: Community Scale Zero Net Energy (Duck Duck Goose, Third Floor)

Cleveland, Denver, Pittsburgh, Seattle, and other major cities are launching 2030 Districts to pursue zero net energy performance on a community scale over the next two decades. This approach promotes the leverage of resources and ensures enhanced resiliency across a group of buildings. This session will examine successful zero net energy models of community action that convene multiple buildings owners to share costs, address challenges, and achieve common goals.

Presenter:

Brett Phillips, Director of Sustainability, Unico Properties

Session 4: Stretch Codes Meet Utility Programs on the Way to ZNE (Hopscotch, Third Floor) Local governments, utilities, and others are working to accelerate zero net energy practices through innovative stretch code programs that integrate financial incentives, training and education, and technical assistance.

Presenters:

Peter Turnbull, Principal Program Manager, Zero Net Energy Program, Pacific Gas and Electric Company (invited)

Carolyn Sarno, Northeast Energy Efficiency Partnerships

4:15 pm – 5:15 pm (*Marco Polo Ballroom, Third Floor*)

Jolt Session: Innovations in Zero Net Energy Projects and Technologies

In this fast-paced session, presenters will feature case studies of zero net energy projects and enabling technologies. The goal is to showcase cutting-edge zero net energy projects and technologies.

5:30 pm – 7:30 pm (Four Square Ballroom, Third Floor)

Networking Reception

Join NASEO and the New Buildings Institute for the official release of the 2013 list of the pioneering projects – the definitive inventory of ZNE and ZNE-capable buildings from around the nation.

Wednesday, September 18, 2013

7:00 am - 12:00 pm

Conference Registration and Exhibit Hall (Flower Foyer, Third Floor)

7:00 am – 8:00 am (*Marco Polo Ballroom Foyer, Third Floor*)

Continental Breakfast

8:00 am – 9:30 am (*Marco Polo Ballroom, Third Floor*)

Making the Business Case for Zero Net Energy Buildings

Zero net energy buildings are defined by building owners, sought by design teams, and desired by occupants. A growing list of America's leading companies, such as Walgreens, PNC, and TD Bank, are building zero net energy retail outlets. During this session, building owners and business leaders will

share an economic perspective on the motivations and factors used in their decisions to move to zero net energy. The panel will address issues around the cost and other challenges that can delay the acceptance of zero net energy projects. This session will also examine the public-private partnership opportunities that have increased the viability of zero net energy projects.

Presenter:
David Del Rossi, TD Bank
Jamie Meyers, Walgreens (invited)

9:30 am - 10:45 am (Marco Polo Ballroom, Third Floor)

State and Federal Policies and Programs to Promote Zero Net Energy Buildings

Several states and federal agencies have integrated a zero net energy goal into their long-term energy policy and program strategies in order to meet goals related to resiliency, economic development, and reduced energy consumption. In this session, we will hear from state and federal leaders about their experience developing and tracking zero net energy policies and programs and the lessons learned that can benefit other states as they head down the path to zero net energy buildings.

Presenter: Mark Mahoney, Director, Army Regional Environmental and Energy Office – West (invited)

10:45 am - 12:00 pm (Marco Polo Ballroom, Third Floor)

Moving Zero Net Energy to the Mainstream

Scaling up zero net energy building projects will require a combination of partnerships across the technology and policy sectors. This final session will wrap up the Getting to Zero National Forum with a thought-provoking look at what is needed to accelerate the transition to zero net energy. The session will also feature a facilitated summary of the lessons learned throughout the Getting to Zero National Forum and an identification of the path forward for states, jurisdictions, design professionals, and building owners that want to pursue the path to zero net energy.

Moderator: Ralph DiNola, Executive Director, New Buildings Institute

Presenter: Edward Mazria, Founder and Chief Executive Officer, Architecture 2030

12:00 pm (Marco Polo Ballroom, Third Floor)

Closing Remarks and Adjourn

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