NASEO Orientation

About NASEO

- Formed by the states in 1986
  - See also - President Bill Clinton's video about NASEO's founding
- Membership includes the 56 Governor-designated energy officials from each state and territory, as well as private sector affiliates
- Facilitates peer learning across states to improve the effectiveness of energy programs and policies
- Serves as a resource for and about State and Territory Energy Offices
- Advocates on behalf of the State Energy Offices (SEO) with Congress, federal agencies, and private-sector organizations
- Organized through regional and committee structure

NASEO Board of Directors

Board of Directors	
Chair	Robert Jackson, Michigan
Vice-Chair	Andrew McAllister, California
Treasurer	William (Dub) Taylor, Texas
Secretary	Molly Cripps, Tennessee
Parliamentarian	Paul Miller, Louisiana
Past Chair	Vaughn Clark, Oklahoma
Central Region Representatives	David L. Bracht, Nebraska Laura Rennick Andersen, Montana
Mid-Atlantic Region Representatives	Tommy Wells, District of Columbia Marisa Slaten, New Jersey
Midwest Region Representatives	Tristan Vance, Indiana Maria Redmond, Wisconsin
Northeast Region Representatives	Judith Judson, Massachusetts John Williams, New York
Southeast Region Representatives	David Gipson, Georgia Kelly Smith Burk, Florida
Western Region Representatives	Laura Nelson, Utah Michael Furze, Washington
Affiliates' Co-Chairs	Meredith Tunick, Bosch Anna Pavlova, Schneider Electric

Support for State Energy Offices – Regional Program and Crosscutting

Regional Program and Peer-to-Peer Support

- Sharing best practices on all energy and policy program areas
- Facilitate regional coordination among state energy officials and staff
- Develop multi-state programs to leverage resources
- Elevate issues and solutions through NASEO Committees
- Energy Outlook Conference, Annual Meeting, Regional Meetings

One-on-One Assistance

- Leverage NASEO Staff and Affiliate Member Experts: Planning, Energy Assurance, Electricity, Financing, Codes, Transportation, State Policies and Programs, Federal Regulations, Environmental
- Assist in resolving SEP and other DOE programmatic issues
- State Energy Director and Senior Staff training in DC

State Energy Planning

- Tracking and analysis of state plans, expertise on best practices in state planning and stakeholder processes, data analysis support

Issue-Based Committees

- Buildings, Energy Security, Financing, Fuels and Grid Integration, Government Affairs, Transportation, Regional Program, Affiliates Program, Energy-Environment Program

Committee and Program Structure

Committee/ Program	Co-Chairs	NASEO
Regional Program	Regional Board Representatives	David Terry, Shemika Spencer, Cassie Powers
Buildings	Christian Williss (CO); Laith Younis (CA) Chris Baker, The Weidt Group	Ed Carley
Energy Security	David Gipson (GA); Kylah McNabb (OK)	Shemika Spencer, Jeff Pillon, Fred Hoover
Financing	Jeff Pitkin (NY), Al Christopher (VA)	Sandy Fazeli, Sam Cramer
Fuels and Grid Integration	Dub Taylor (TX), Chris Yunker (HI), Deana Dennis (EPRI)	Fred Hoover, Stephen Goss, Rod Sobin
Government Affairs	Robert Jackson (MI)	Jeff Genzer, David Terry
Transportation	Maria Redmond (WI); Alexa Voytek (TN); Kellen Schefter (EEI)	Cassie Powers
Affiliates Program	Kristy Manning (MO); Ashley Duckman (AGA)	Sandy Fazeli

- Check the NASEO "Events" page for a list of upcoming Committee calls: http://www.naseo.org/events

Affiliates' Program

A robust and engaged network of +60 private-sector partners, including representatives from business, trade associations, nonprofit organizations, educational institutions, laboratories, and government.

State and Territory Energy Office

Operations and Programs:

Final Results of

NASEO's 2014 Member Survey

(NOT for Distribution or Reproduction)

Prepared for NASEO State and Territory Members

October 16, 2015

Acknowledgements

The National Association of State Energy Officials (NASEO) initiated the **2014** Member Survey to examine State and Territory Energy Office operations and programs. NASEO wishes to thank the following contributors and reviewers for executing this latest survey: Chuck Clinton, NASEO Senior Advisor and Lead Regional Coordinator, for designing the survey and leading the analysis effort, with able assistance from Stephen Goss, NASEO Program Manager; Dub Taylor (TX) and John Davies (KY) for insightful member input and assistance; NASEO's regional coordinators – Clinton, Melissa Savage, William Nesmith, and Brian Henderson – for helpful outreach to the NASEO state and territory members; and NASEO affiliates Ty Petersen of the Center for Sustainable Energy (CSE) and Deana Dennis of the National Electrical Manufacturers Association (NEMA), both of whom provided helpful and insightful guidance to the project, Chuck Clinton and Stephen Goss conducted the data analysis and prepared this report.

This is NASEO's fifth member operation and program survey, following those in 1989, 2006, 2009 and 2012. NASEO would also like to acknowledge the contributions to this initiative in previous years:

Chuck Clinton (DC), Jeffrey Pillon (MI), and Larry Barrett, an independent consultant, collaboratively developed the first survey in **1989.**

NASEO, in conjunction with the District of Columbia Energy Office (DCEO), conducted the second member survey in **2006.** The member advisory team guiding the effort included Chuck Clinton (DC), Chris Benson (AR), Peter Smith (NY), Dub Taylor (TX), and Jeffrey Pillon (MI).

In late 2008, requests from NASEO members and a number of state legislators led NASEO to again survey State and Territory Energy Offices and analyzed the results in early **2009**. Belien Tadesse, Nebiat Solomon, and Sosina Tadesse from the DCEO's Planning and Evaluation Division fielded the survey and conducted the analysis.

Chuck Clinton, NASEO Senior Advisor and Lead Regional Coordinator, with assistance from Christopher Wagner, NASEO Project Manager, designed the **2012** survey; David Terry, NASEO Executive Director, and Kate Marks, NASEO Managing Director, provided guidance throughout the process; Dub Taylor (TX) and John Davies (KY) facilitated member input and assistance; and NASEO's regional coordinators supervised outreach to the NASEO members. Chuck Clinton, Chris Wagner, and Jeff Pillon, NASEO Midwest Regional Coordinator, conducted the data analysis and prepared the 2012 report.

NASEO especially appreciates the time and dedication of the State and Territory Energy Offices in completing the survey. The results of this important operations and program review will facilitate peer learning and guide the State and Territory Energy Offices in meeting strategic energy goals.

Introduction, Overview, and Summary of Results

Fifty-three of the 56 State and Territory Energy Offices (SEOs) participated in the NASEO 2014 Member Survey—a 95% participation rate. This is the most robust response to any of the NASEO surveys to date. Fifty-two responses were received in 2012, a 93% participation rate. By comparison, 52 SEOs participated in the 2006 survey and 45 SEOs participated in 2009.

All of the data presented in this report is based on responses received from the 53 participating SEOs. While this is not inclusive of the entire SEO population, it does provide a strong representation from which to draw conclusions.

Similar to previous surveys, the 2014 survey elicited information on SEO structure and placement within state government, budget, staffing, program priorities, Evaluation, Monitoring and Verification (EM & V), the use of social media, and the value of existing NASEO services. Where appropriate, NASEO compared the 2014 survey data to results from past surveys to assess trends and developments. New questions raised in the 2014 survey probed other topics, such as the use of technical assistance, collaboration with NASEO affiliates, SEE Action and STEAB, and ARRA SEP success ratings by SEOs.

This report contains results from the 2014 NASEO Member Survey for all closed ended questions. Analysis of the dozen or so open-ended questions remains to be performed, and will be done shortly by the NASEO staff. Most of these questions asked "what else can NASEO do for you in regard to . . .?" so it is appropriate that the pertinent staff do follow-up analysis.

Following are ten of the key results from the survey analysis:

- The visibility and importance of SEOs continues to grow nationwide. Approximately 83% of participating SEOs report their status as a cabinet level agency, compared to 63% in 2012 and only 13% in 2009. This indicates a major upgrade in the SEO position within state government over the past six years. However, cabinet level status of the SEO does not necessarily indicate level of authority or resources. It is reasonable to posit that this elevation of SEO status in state governments results from, among other causes, the emphasis NASEO has placed on helping SEO construct strong comprehensive energy plans which tend to involve all germane stakeholders and drive energy policy in the various states.
- SEO director positions continue to show significant turnover. Four out of five SEO directors (79%) report being in their position for five years or less, and only two have been in their post fifteen years or longer. Evidence suggests institutional SEO experience is therefore at a premium with the combination of elevated roles of these agencies and demographics and other forces driving the change in average tenure. Sixty percent of SEO directors also function as energy advisor to their governor, a continuation of a trend in favor of this dual role observed in the 2012 survey. The average staff size of an SEO is 38, and the median size is 12.

- The SEO's command a combined $2.6B when state ($1.9B) and federal dollars ($.7B) are combined.
- Six emerging program areas of priority to SEO's are
    - Policy development and comprehensive energy planning
    - Financing programs
    - Energy assurance
    - Building codes
    - Electric grid, natural gas, and related issues
    - Clean Power Plan, 111 (d)
- Regional meetings and national meetings conducted by NASEO stand out as the most highly rated forms of service or technical assistance to members of the organization. NASEO technical assistance consistently outscores TA provided by US DOE.
- Four out of five (80%) of SEO's report use of evaluation, measurement, and verification strategies to account for results achieved by their various programmatic initiatives.
- 93% of all respondents rate the expenditure of ARRA SEP funds very positively in terms of energy savings and energy efficiency impact.
- Collaboration of SEOs with NASEO affiliate members is on the rise; awareness of STEAB is registered by little more than half of SEO's, which helps explain that the usefulness of STEAB for SEOs is rated as mixed; usefulness of SEE Action for SEO's, however, is rated very weak.
- Use of social media continues on the upward arc noted in the 2012 survey.
- More than ninety percent of respondents' rankings of ***all*** NASEO services were in the excellent, very good, or good category.

Methodology

NASEO developed the 2014 survey questions using previous surveys as a starting point, with considerable effort made to include only essential questions. As was the case with the 2012 project, SurveyMonkey was used to conduct and analyze the survey results.

Once again the SurveyMonkey online platform afforded NASEO greater convenience and flexibility in collecting data and analyzing the results while ensuring consistent data formats across the participating SEOs. Overall the process worked smoothly and ensured data as robust as in 2012 and more robust than in the previous years.

Feedback received suggested that the survey this time was too long and should be shortened or split up into parts in the future. This feedback will indeed be heeded when conducting the next NASEO survey, set for 2016. In fact the 2014 survey contained 81 questions, whereas the 2012 survey included 56. That represents a

31% increase in the number of questions asked. What's more, approximately a dozen of the newly added questions were open ended. All of which is to say, the message about this survey being too long has been heard, and the next survey will indeed be shorter!

NASEO distributed unique survey form links to each SEO on November 10, 2014, and responses were due to be submitted no later than December 5, 2014. Fifty-three SEO responses were received, a record number, equaling a 95% response rate. This report contains results of all close-ended questions; more work remains to be done on analysis of open-ended questions.

The 2014 survey contained 81 questions spread across ten sections, including:

1) SEO Location and Structure;

2) SEO Staffing Patterns;

3) SEO Funding Sources and Budget Outlook;

4) Emerging Program Areas;

5) Technical Assistance;

6) EM&V Metrics;

7) ARRA SEP Success Ratings;

8) Collaboration with NASEO Affiliates, SEE Action, STEAB;

9) Use of Social Media; and

10) NASEO Service Ratings.

National Association of State Energy Officials
Board of Directors Resolution on Energy Emergency and Cyber Security Planning, Preparedness, and Response

WHEREAS, the 56 State and Territory Energy Offices and the National Association of State Energy Officials (NASEO) have long recognized the importance of energy emergency and energy-related cyber security planning, preparedness, and response;

WHEREAS, there is a critical need to assure informed crisis communications and information sharing among the governors, state and federal energy officials, private sector energy and interdependent infrastructure providers, and the public;

WHEREAS, threats and hazards to the nation's energy system and resources – oil, gasoline and other petroleum products, propane, natural gas, coal, electricity – continue to pose significant economic and human consequences;

WHEREAS, energy emergency exercises have highlighted the continued need to assure states' capacity to coordinate with the federal government and private sector in planning for and responding to energy supply disruptions that can cause energy emergencies;

WHEREAS, most states have not updated their energy assurance plans since 2012 and a variety of risks, such as cyber security threats to the electricity, natural gas, and petroleum systems are not fully accounted for in most plans;

WHEREAS, the bipartisan Fixing America's Surface Transportation Act, or *FAST Act,* was passed by Congress in 2015 and called for significant improvements in energy emergency coordination and response among state, federal, and private energy providers and the states called upon the U.S. Department of Energy (DOE) to revive the *"Agreement for Enhanced Federal and State Energy Emergency Coordination, Communications, and Information Sharing"*. The state-led agreement was renewed in 2016 between NASEO, the National Association of Regulatory Utility Commissioners, National Governors Association, National Emergency Management Association, and DOE to prioritize and improve energy emergency communication protocols and information sharing during in the event of energy emergencies and shortages.

NOW, THEREFORE, BE IT RESOLVED, that the NASEO Board of Directors encourages state energy officials, regulators, and other agencies responsible for energy emergency planning to review and update state plans as needed to ensure that an *"all hazards"* approach, including energy-related critical infrastructure interdependencies and cyber security, are addressed in the plans. This update should reflect evolving state and federal organizational structures, roles and responsibilities, and other critical planning needs such as responding to petroleum shortages and energy disruptions from cyber incidents. NASEO will continue to support states' efforts to update their energy assurance plans and maintain their preparedness capabilities;

AND BE IT FURTHER RESOLVED, that NASEO under the *"Agreement for Enhanced Federal and State Energy Emergency Coordination, Communications, and Information Sharing"* calls upon states to review and update, as needed, their Energy Emergency Assurance Coordinators points of contact and assure that these individuals understand their role and responsibilities under this agreement.

Recommended by NASEO's Energy Security Committee and adopted by the NASEO Board of Directors on April 27, 2017.

National Association of State Energy Officials
Board of Directors Resolution
Supporting Buildings-to-Grid Integration and
Improved Systems Efficiency

WHEREAS, the National Association of State Energy Officials (NASEO) and our 56 governor designated State and Territory Energy Office members have long sought to lower operating costs of buildings and contribute to state energy and economic development goals by supporting cost effective, innovative building energy technologies;

WHEREAS, NASEO and our 56 governor designated State and Territory Energy Office members have long recognized the importance of supporting a safe, secure, and reliable electric grid;

WHEREAS, homes, commercial, institutional, and public buildings use 40 percent of the nation's energy and represent a tenth of national water use and, there are significant opportunities to increase operational efficiency, improve affordability, enhance construction quality, and support U.S. building product, technology, and construction innovation;

WHEREAS, high performance homes and multifamily buildings provide equity by reducing utility bills, making energy costs more predictable, and significantly reduce default risks;

WHEREAS, State Energy Offices strongly support American job growth and innovation, increased economic productivity, strengthened infrastructure, and greater resilience by improving systems energy efficiency and better integrating buildings with the grid;

WHEREAS, building products, innovation, technologies, and practices have improved the performance of the country's homes, offices, schools, hospitals, laboratories, recreation and retail spaces, factories, and other facilities;

WHEREAS, innvovation in energy generation, storage, distribution, and management are transforming the nation's electric grid and the broader national energy system;

WHEREAS, approaches such as integrated design and contruction, commissioning, building energy management systems, demand response, distributed energy resources, district energy, transmission, interconnection, combined heat and power, transactive energy, zero energy buildings, microgrids, and smart appliances and devices, are gaining market acceptance and growth;

WHEREAS, further development of policies, programs, practices, and demonstration projects are needed to continue to improve systems efficiency and the integration of buildings with the grid;

WHEREAS, educating states on utility policies and best practices can assist in progressing critically needed programs through enhanced opportunites with utilities, regional grid operators, energy service providers, product and technology providers, building operators, building occupants, and other stakeholders;

WHEREAS, model building energy codes are beginning to consider grid connectivity, such as demand response, smart grid-interactive components, distributed power generation resources, and on-site energy storage;

WHEREAS, State Energy Offices, because of their unequivocal leadership in building energy and grid issues, close relationships to energy utilities, Public Utility Commissions, and providers of energy products and services, and ability to effect progress at amore rapid pace than can be accomplished through regulation, are in a unique position to take leadership of these issue;

NOW, THEREFORE, BE IT RESOLVED THAT NASEO encourages states seeking to improve grid reliability and security, expand economic opportunity, reduce utility costs to consumers and businesses, and enhance resiliency in their buildings sector, to support the policies, programs, and practices that will improve systems energy efficiency and building-to-grid integration by:

- Supporting the development of an integrated buildings to grid frameworks including communications protocols, transactions, and device and building connectivity.
- Continue state leadership and demonstrations in public buildings including: zero energy schools, combined heat and power in hospitals, schools and wastewater treatment plants, and district energy campuses.
- Incorporate systems strategies throughout the building life cycle; from design through construction, commissioning, and operations and maintenance.
- Support the assessment and development of building codes that are meaningful for each state;
- Encouraging optimized systems to improve building performance.

National Association of State Energy Officials
Board of Directors Resolution
Supporting High Performance and Zero Energy Buildings

WHEREAS, the National Association of State Energy Officials (NASEO) and our 56 governor designated State and Territory Energy Office members have long recognized the importance of supporting cost effective, innovative building energy technologies that lower operating costs and contribute to state energy and economic development goals;

WHEREAS, homes, commercial, and public buildings use 40 percent of the nation's energy and one-eighth of our fresh water and, there are significant opportunities to increase operational efficiency, improve affordability, increase construction quality, and support U.S. building product and construction innovation;

WHEREAS, high performance and zero energy buildings are more resilient during energy supply disruptions resulting from storms and other energy system threats and provide citizens places of shelter during emergencies;

WHEREAS, high performance and zero energy buildings greatly reduce the operating and maintenance costs of buildings and reduce building owner and occupant exposure to volatile or increased energy costs;

WHEREAS, high performance and zero energy homes and multifamily buildings provide equity by reducing utility bills, making energy costs more predictable, and significantly reduce default risks;

WHEREAS, high performance and zero energy public buildings – schools, fire and police stations, universities, and office buildings – reduce building operating costs to taxpayers and demonstrate good stewardship and leadership by example;

WHEREAS, such geographically and politically diverse states across the country have public K-12 zero energy schools constructed at or near the cost of conventional schools and offer exceptional learning opportunities for our children;

WHEREAS, reduced demand on the nation's electric system offers no-cost and low-cost opportunities to support grid reliability and economic competitiveness;

WHEREAS, high performance and zero energy buildings provide healthier learning, living, and working environments with improved comfort and indoor air quality at low costs;

WHEREAS, private sector high performance and zero energy buildings demonstrate American technological leadership and provide citizens inspiration about their communities' and our nation's potential;

WHEREAS, studies have documented students in high performance and zero energy schools achieve better grades, building tenants are more productive, and homeowners are more comfortable while experiencing significantly lower utility bills;

NOW, THEREFORE, BE IT RESOLVED THAT NASEO encourages states seeking to improve grid reliability and security, expand economic opportunity, reduce utility costs to consumers and businesses, and enhance resiliency in their buildings sector, to consider high performance and zero energy building policies and programs that support:

- Reasonable, equitable high performance and zero energy building grid access policies;
- Innovative public-private financing, voluntary recognition programs, lead-by-example initiatives, technical assistance, and incentives;
- Education of building design and construction professionals to encourage systems-based design approaches that offer least-cost and improved performance over a building's life-cycle; Awareness of U.S. manufacturers of innovative building products to speed technology adoption and facilitate export of these products thereby supporting American job growth and state economic development;
- Education of state, local, and community leaders to positively influence the decision making processes that adopt, finance, and construct high performance and zero energy buildings.

National Association of State Energy Officials
Board of Directors Resolution
Supporting Quality Installation of Residential Energy Efficiency Projects

WHEREAS, the National Association of State Energy Officials (NASEO) and our 56 governor-designated State and Territory Energy Office members have long recognized the importance of cost-effective residential energy efficiency;

WHEREAS, most State Energy Offices oversee residential energy efficiency policies, programs, and public-private financing initiatives that encourage the adoption of emerging energy efficiency technologies and underutilized commercially available energy efficiency technologies;

WHEREAS, State Energy Office residential energy efficiency actions rely on each states' private sector home contractors and building product manufacturers, who are crucial partners in recruiting program participants, installing energy-efficient equipment, ensuring customer satisfaction, and increasing the likelihood of program success;

WHEREAS, State Energy Office residential energy efficiency activities help homeowners improve their property values, lower the costs of heating and cooling their homes, and create a more comfortable and healthy living environment for themselves and their families;

WHEREAS, both established and cutting-edge heating, ventilation, and air-conditioning technologies, if improperly installed, may fail to realize important benefits for homeowners;

WHEREAS, the National Institute of Standards and Technology (NIST) found substantial losses of up to 30 percent in heating, ventilation and air-conditioning (HVAC) equipment efficiency due to installation deficiencies and faulty work;

WHEREAS, the repercussions associated with poor equipment installation may: reduce energy cost savings, negatively impact indoor air quality and occupant comfort benefits that would be realized otherwise by a high-quality installation;

WHEREAS, poor equipment installation may make homeowners less likely to pursue energy equipment upgrades in the future and jeopardize the ability of the homeowner to pay for the cost of such projects financed based on expected energy cost savings;

WHEREAS, contractors accredited by professional associations such as Air-Conditioning Contractors of America or Advanced Energy are more likely to install energy efficiency projects according to industry-driven quality installation standards;

NOW, THEREFORE, BE IT RESOLVED, NASEO encourages the State Energy Offices to consider linking HVAC industry-recognized quality installation practices with state programs and policies in the following ways:

- Encouraging homeowners that use State, taxpayer-funded grant, incentive, and financing programs to utilize qualified, trained, and accredited professionals available in the state;
- Informing homeowners, efficiency program operators, and others of the benefits of utilizing qualified, trained, and accredited professionals.
- Engaging the HVAC industry to help educate contractors on quality installation practices such as proper equipment sizing and selection, duct design and sealing, proper refrigerant charges, and airflows; and
- Implementing quality assurance programs that ensure manufacturers' recommended minimum installation procedures are followed.

NASEO 2017 Annual Meeting

Energy Economy Transformation: States and Communities Take the Helm

September 17 – 20, 2017

PRE-CONFERENCE	MAIN CONFERENCE AND NEER STAKEHOLDERS MEETING	
Sunday, September 17	**Monday, September 18 - Wednesday, September 20**	**Wednesday, September 20**
U.S. Department of Energy's U.S. State Energy Program Competitive Cohort Meeting *(Invitation Only)* National Energy Efficiency Registry Project Team Meeting *(Invitation Only)* NASEO Regional Meetings *(NASEO State and Affiliate Members Only)* NASEO Board and Annual Business Meetings *(NASEO State and Affiliate Members Only)* NASEO Affiliates' Reception *(NASEO State and Affiliate Members Only)*	NASEO 2017 Annual Meeting *(Open to all registered conference attendees)* Plenary Sessions Break-Out Sessions Keynote Luncheons NASEO Committee Meetings: · Buildings · Transportation · Fuels and Grid Committee · Financing Committee · State and Local · Energy Security Networking Reception	NASEO 2017 Annual Meeting *(Open to all registered conference attendees)* Plenary Keynote and Panels National Energy Efficiency Registry Stakeholders Luncheon and Meeting *(RSVP required)*
To learn more about becoming a NASEO member, contact NASEO.	**To participate, register at http://annualmeeting.naseo.org.**	**To RSVP, select 'NEER Stakeholders Meeting' at conference registration.**

Pre-Conference Meetings

Sunday, September 17, 2017

8:00 am – 4:00 pm
Conference Registration *(Third Floor Registration Counter)*

10:00 am – 12:00 pm
U.S. State Energy Program Competitive Project Meeting *(Chart C Room, Riverside Building) (State Energy Offices by Invitation Only)*
The U.S. Department of Energy's Office of Weatherization and Intergovernmental Programs will convene States awarded under the FY'16 U.S. State Energy Program competitive process.

1:00 pm – 2:30 pm
National Energy Efficiency Registry Project Team Meeting *(Bridge Room, Riverside Building) (By Invitation Only)*
The Tennessee Office of Energy Programs will convene a meeting of the National Energy Efficiency Registry project team.

2:45 pm – 4:00 pm
NASEO Regional Meetings *(NASEO State and Affiliate Members Only)*
The NASEO regional meetings provide an opportunity for states to meet in-person with their colleagues to discuss program and policy implementation and share lessons learned. Each region will follow a meeting agenda tailored to the priorities of the states in the region.

NASEO Southeast Region Meeting *(Chart B Room, Riverside Building)*
NASEO Mid-Atlantic Region Meeting *(Steering Room, Riverside Building)*
NASEO Central Region Meeting *(Compass Room, Riverside Building)*
NASEO Northeast Region Meeting *(Bridge Room, Riverside Building)*
NASEO Western Region Meeting *(Chart C Room, Riverside Building)*
NASEO Midwest Region Meeting *(Chart A Room, Riverside Building)*

4:15 pm – 5:30 pm
NASEO Board of Directors Meeting *(Chart B Room, Riverside Building) (NASEO State and Affiliate Members Only)*
NASEO's Board of Directors Meeting is open to NASEO State and Territory Energy Office and Affiliate members only and covers policy, programmatic, and administrative updates of the organization.

5:30 pm – 6:00 pm
NASEO Annual Business Meeting *(Chart B Room, Riverside Building) (NASEO State and Affiliate Members Only)*

NASEO's Annual Business Meeting is open to NASEO State, Territory, and Affiliate members only and includes the election of NASEO's Executive Officers as well as the review and approval of NASEO's FY'18 budget.

6:00 pm – 6:45 pm

NASEO Affiliate Members' Reception *(Compass Room, Riverside Building) (NASEO State and Affiliate Members and Invited Guests Only)*

This reception will provide States with the opportunity to network with NASEO's private sector Affiliate partners. Affiliates are invited to showcase materials and/or a poster to share information about their work. Contact Sandy Fazeli (sfazeli@naseo.org) to learn more.

Conference:

Monday, September 18, 2017 - ***Harnessing Planning, Innovation, and Partnerships for Energy and Economic Security***

The opening day of the NASEO 2017 Annual Meeting will explore several interrelated themes, including:

- ***Cyber and Physical Security****: hardening energy systems against threats and understanding evolving risks from cyberattacks, changing climate, and economic changes*
- ***Intelligent and Resilient Energy Systems:*** *advancing grid and economic benefits through smart, interconnected energy systems, distributed energy resources, and the utility of the future*
- ***Technology Innovation:*** *understanding cutting-edge innovations and systems, and what they mean for our energy policy future*

7:00 am – 4:00 pm
Conference Registration and Exhibitor Hall *(Third Floor Registration Counter)*

7:00 am – 8:00 am
Continental Breakfast *(The District, Third Floor)*

8:00 am – 8:15 am
Welcome and Opening Remarks *(St. Charles Ballroom, Third Floor)*
The 2017 NASEO Annual Meeting convenes state, local, and private sector leaders of breakthrough, innovative, and effective energy policies and programs for a series of discussions on the future of U.S. energy systems and technologies. This opening session sets the stage for our conference.

8:15 am – 8:45 am
Keynote: Energy in the Pelican State *(St. Charles Ballroom, Third Floor)*
Rich in energy resources, industry, and innovation, Louisiana is an established hub for agriculture, oil and gas production, and manufacturing. This session will explore the myriad energy opportunities and challenges facing Louisiana, and the state's creative approaches to ensuring reliable, affordable, and clean energy for Louisianans.

8:45 am – 9:30 am
Panel Discussion: Expanding Markets and the Role of Liquified Natural Gas *(St. Charles Ballroom, Third Floor)*
Worldwide natural gas consumption is expected to increase 50 percent by the year 2035. While this potential for growth has signaled opportunities for U.S. producers to expand into untapped markets, domestic oversupply coupled with limited export options may limit this growth potential by applying downward pressure on the price of natural gas. This panel will discuss the economic implications of expanding natural gas markets and the opportunities for expanding production through the export of liquified natural gas.

9:30 am – 10:15 am

Panel Discussion: **Our Changing Energy Resource and Demand Mix, Grid Impacts, and Implications for Regional, State, and Local Markets: Mid-Atlantic Perspectives** *(St. Charles Ballroom, Third Floor)*

The falling price of renewables combined with low natural gas markets is producing rapid shifts in the nation's generation mix as utilities work to take advantage of these new trends. Speakers will discuss how these changes are affecting grid reliability and electricity markets as traditional generation is put under strain.

10:15 am – 11:00 am

Panel Discussion: State Energy Office and Public Utility Commission Perspectives on Energy Markets and Policy Innovations *(St. Charles Ballroom, Third Floor)*

State Energy Officials and Public Utility Commissioners each serve a crucial and complementary role in framing their states' energy policy and regulatory landscapes. This session will feature insights from former state energy office leaders who now use their policy expertise to lead regulatory utility commissions.

11:00 am - 11:45 am

Panel: State Regional Energy Assurance and Resilience Planning and Coordination *(St. Charles Ballroom, Third Floor)*

The U.S. Department of Energy's Infrastructure Security and Energy Restoration Division (ISER) and Office of Energy Policy and Systems Analysis (EPSA) have teamed up to support states' regional energy assurance and resilience planning. This session will provide an introduction and explore how states can engage with ISER and EPSA in this new effort.

12:00 pm – 1:00 pm

Keynote Lunch: Disaster Intelligence: A Key Strategy for Energy Emergency Preparedness and Response *(St. James Ballroom, Third Floor)*

Disaster intelligence combines data, technology, and human expertise to mitigate and best prepare for a wide variety of events and disruptions. This session will explore ways to apply disaster intelligence to states' energy emergency preparedness and response strategies.

1:15 pm – 1:45 pm

Pecha Kucha: Energy Policy and Technology Ideas Shaping our Economy and Future *(St. Charles Ballroom, Third Floor)*

In the Pecha Kucha presentation style, there will be a total of 20 slides shown for 20 seconds each to tell a concise, curated, and dynamic story of new energy ideas.

1:45 pm – 2:15 pm

U.S. State Energy Program Update *(St. Charles Ballroom, Third Floor)*

This session will present an update on guidance and priorities, as well as technical assistance offerings from the U.S. Department of Energy's Office of Weatherization and Intergovernmental Programs, which oversees the U.S. State Energy Program and Weatherization Assistance Program.

2:30 pm – 3:30 pm

Concurrent Breakout Sessions

Breakout 1: The Energy-Water Nexus *(Canal Room, Third Floor)*

States are becoming increasingly aware of the linkages between energy use and water use and are taking steps to explore opportunities to develop symbiotic relationships between the two sectors. This session will feature State Energy Officials acting to optimize the energy-water nexus in different sectors of their economies, including pumped storage projects, electricity generation from water infrastructure, and improving the efficiency of irrigation systems and wastewater treatment plants.

Breakout 2: Point-Counterpoint: What State Energy Officials Should Know About Beneficial Electrification *(Royal Room, Third Floor)*

Buildings, vehicles, and other non-traditional end-uses are increasingly switching to electricity as their primary power source. While "beneficial electrification" is gaining traction among electric cooperatives and utilities, other industries champion other fuel sources as more efficient. This debate-style session will offer divergent viewpoints and highlight the pros and cons of widespread electrification.

Breakout 3: Carbon Capture, Utilization, and Storage Technology Innovations *(Commerce Room, Third Floor)*

According to a recent U.S. Department of Energy paper, fossil fuel-fired power plants account for 30 percent of total greenhouse gas emissions in the United States and will continue to be a major part of global energy consumption for decades to come. This session will look at how carbon capture, utilization, and storage technologies can provide a key pathway to address the need for affordable, secure, resilient, and reliable sources of clean energy and highlight two innovative projects currently underway.

Concurrent Committee Meetings

3:45 pm – 5:45 pm

Energy Security Committee *(Canal Room, Third Floor)*

The NASEO Energy Security Committee provides a forum for State Energy Offices, Affiliate members, and key partners to discuss how states are partnering with federal agencies and the private sector to advance energy risk assessment, emergency response, and resiliency policies and programs. This meeting will explore opportunities for states to better coordinate reliability, response, and resiliency efforts.

Transportation Committee *(Royal Room, Third Floor)*

With the growing popularity of electric vehicles, states are exploring new ways to identify and resolve pending barriers to EV adoption in order to meet their energy security, economic development, and environmental goals. At the same time the Volkswagen Settlement has provided states with a significant opportunity to support alternative fuel vehicles and "fill gaps" within the alt fuel market. This

Transportation Committee session will present the latest research on EV consumer behavior and the impact of EVs on electricity rates, and will explore current initiatives to incorporate alternative fuel vehicles into emergency planning. In addition, attendees will engage in a roundtable discussion on state-led activities under the VW settlement and other AFV initiatives.

Financing Committee *(Commerce Room, Third Floor)*
Even as government purse strings tighten, opportunities exist for state governments to finance and invest in energy efficiency, renewable energy, and energy infrastructure upgrades for both the public and private sectors. In some states, State Energy Offices may be well-equipped to run energy financing programs; however, in other states it may be necessary for State Energy Officials to forge strategic partnerships with other state and local agencies specialized economic and community development finance. This session will explore those successful partnerships and highlight strategies for replication.

5:45 pm – 6:30 pm
Networking Reception *(The District, Third Floor)*

<u>Tuesday, September 19, 2017</u> - *Greater Impact through Coordination: State and Local Solutions for Distributed Energy Resources, Access, and Resiliency*
The Annual Meeting will continue with an examination of best practices from states, counties, and cities across the country on:

- ***Equity:*** *Addressing grid valuation concerns, access to mobility, and clean power to advance access to reliable, affordable, and local energy for all consumers*
- ***State and Community Energy Planning****: promoting multi-faceted, multi-sector planning, policies, and programs for greater efficiency, resiliency, and impact*

7:00 am – 4:00 pm
Conference Registration and Exhibitor Hall *(Third Floor Registration Counter)*

7:00 am – 8:00 am
Continental Breakfast *(The District, Third Floor)*

8:00 am – 8:30 am
Keynote: Infrastructure Challenges and Opportunities *(St. Charles Ballroom, Third Floor)*
The U.S. transportation system is under considerable strain: infrastructure across the country is in need of updates, and there is a significant lack of funding available to make necessary improvements. As infrastructure does evolve, however, there is an opportunity to build robust, resilient, efficient systems that improve the travel experience and save energy. This keynote address will share insights on the challenges and opportunities for our transportation system from the U.S. Department of Transportation.

8:30 am – 9:15 am
Panel Discussion: Intelligent Transportation and its Energy Impacts: Improving Efficiency While Meeting Demand *(St. Charles Ballroom, Third Floor)*

Intelligent transportation systems (ITS) are being implemented in communities throughout the country, often in concert with autonomous vehicle pilots and other "smart mobility" applications. These connected systems allow vehicles and infrastructure to communicate with one another, and may enable more efficient travel and energy savings. This panel will share insights from states and companies that are leading the mobility revolution.

9:15 am – 10:00 am

Panel Discussion: Volkswagen Settlement *(St. Charles Ballroom, Third Floor)*

The Volkswagen (VW) Settlement offers states an opportunity to invest in a variety of projects and programs that will decrease emissions and support alternative fuel use. This session will offer views and news from several states as they work toward responding to the VW Settlement opportunity and implement alternative fuel projects, and will also offer updates from Electrify America on their National Zero Emission Vehicle Investment Plan.

10:00 am – 10:45 am

Panel Discussion: Energy Burden: Transportation, Mobility, and Housing Challenges for Low-Income Households *(St. Charles Ballroom, Third Floor)*

Energy and transportation costs pose a major obstacle to affordability in communities and neighborhoods across the United States. The energy burden, defined as the proportion of household gross income used for energy expenditures, may be caused by low income, high energy bills, and lack of access to low-cost transit options. According to the American Council for an Energy-Efficient Economy, this energy burden is especially acute for low-income, African-American, Latino, and renter households. This session will explore how energy efficiency, location efficiency, and coordinated, multi-sector planning can alleviate this problem.

11:00 am – 12:00 pm

Concurrent Breakout Sessions

Breakout 1: Advancing Affordability, Equity and Health through Energy-Efficient Housing *(Canal Room, Third Floor)*

Investment in energy efficiency can yield positive energy and non-energy benefits, including bill savings, health improvements, and greater equity for underserved and minority members of the community. This session will explore strategies states and communities can advance for the housing market.

Breakout 2: The Role of Microgrids, Solar Energy, and Storage in Community Resiliency *(Royal Room, Third Floor)*

States and communities across the country are investing in new technologies to promote resiliency in the face of extreme weather events and other disruptions to "mission-critical" energy infrastructure and facilities. This session will explore on-the-ground applications and technologies used in community energy resiliency.

Breakout 3: Grid Valuation Strategies and Impacts on Low-Income Consumers and Underserved Markets *(Commerce Room, Third Floor)*
Utility regulators are continuing to work to accurately value the impacts of distributed energy resources, energy efficiency, and smart grid improvements to the electric grid. However, the different valuation strategies they propose may disproportionately impact lower-income communities and energy users. Speakers on this panel will discuss strategies to ensure that low-income communities will benefit from proper pricing and market signals in the electric grid.

12:15 pm – 1:15 pm
Keynote Lunch: From Consumer to Prosumer: Transforming Energy Use and Production *(St. James Ballroom, Third Floor)*
The advancement of smart, interconnected energy technology and two-way power has given rise to the "prosumer"- an energy user who is also able to produce and store power. This paradigm shift creates new opportunities for demand management, local and distributed generation, and consumer education, but also underscores the financial and operational challenges utilities face in updating the grid.

1:30 pm – 3:15 pm
Concurrent Breakout Sessions

Breakout 1: State Energy Planning Roundtable *(Canal Room, Third Floor)*
As states grapple with new trends and advances in energy technology, states are creating forward-thinking energy plans that set aggressive energy policies, and provide data-driven metrics to measure progress toward achieving state goals. During this panel, representatives from states with recently-updated State Energy Plans will discuss the planning process and their energy priorities.

Breakout 2: Home Energy Labeling: A Market Transformation Opportunity *(Royal Room, Third Floor)*
Home energy labeling offers the promise of giving value to energy efficiency in our homes. For too long, it has been impossible to compare the efficiency of one home to another. With home energy labels, such as the U.S. Department of Energy's Home Energy Score, that is no longer the case. The Home Energy Score is similar to an automobile's miles per gallon sticker. Home energy labeling will provide home buyers and renters the opportunity to compare energy costs and make informed decisions based on what can be one of the largest costs of a home- the energy bill.

Breakout 3: Solar Technical Assistance Team: Opportunities for States and Local Governments *(Commerce Room, Third Floor)*
The Solar Technical Assistance Team (STAT) Network gathers NREL solar technology and deployment experts to provide unbiased information on solar policies and issues for state and local government decision makers. This session will provide an overview of the STAT program and the technical assistance resources available to states through an interactive demonstration of tools and a presentation of case studies and best practices on a low- to moderate-income community solar pilot project, and a facilitated discussion around state needs and priorities.

3:30 pm – 5:30 pm
Concurrent Committee Meetings

Buildings Committee *(Canal Room, Third Floor)*
NASEO's Buildings Committee is a forum for discussing the future of energy use in buildings and the impact they will have on the economy, health and environment of the people who live and work in them. The Buildings Committee will discuss the future of energy code adoption, opportunities for participation in the ICC process, high-performance buildings (including zero-net energy), energy savings performance contracting (ESPC), and other topics including buildings-to-grid, combined-heat and power.

State-Local Committee *(Royal Room, Third Floor)*
NASEO's newly-launched State-Local Committee provides a forum for SEOs and local government representatives to exchange information and discuss energy policy issues of common interest.

Fuels and Grid Integration Committee *(Commerce Room, Third Floor)*
The NASEO Fuels and Grid Integration Committee examines state, regional, and federal initiatives to provide direction for NASEO's projects related to the production, distribution, and consumption of electricity and liquid and gas fuels.

Wednesday, September 20, 2017
Climate and Air Partnerships: U.S. State and Local Governments in a Shifting Global Landscape
The Annual Meeting will conclude with a focus on ***environment and sustainability issues*** *from local, state, and international perspectives.*

7:00 am – 10:00 am
Conference Registration and Exhibitor Hall *(Third Floor Registration Counter)*

7:00 am – 8:00 am
Continental Breakfast *(The District, Third Floor)*

8:00 am - 11:00 am
Optional Tour: Entergy's Integrated Grid *(Location TBD)*
New Orleans-based Entergy is one of the few utilities in the country to have integrated its utility-scale solar system with state-of-the-art battery technology. Offered in partnership with the Electric Power Research Institute (EPRI), which has worked with utilities like Entergy to realize the "Integrated Grid" (i.e., a grid that effectively integrated central and distributed energy resources), this tour will allow participants to view and learn about Entergy's cutting-edge system and the EPRI research and analysis that helped make it a reality. This tour is offered to conference attendees free of charge. Space is limited and available on a first-come, first-served basis. To sign up, indicate your interest during conference registration.

8:00 am – 8:30 am

Keynote: Clean Disruption *(St. Charles Ballroom, Third Floor)*

Advancements in energy and transportation technology are disrupting major parts of the U.S. economy, including energy generation, transmission and distribution; vehicles, highways, and parking infrastructure; and many of the legal and financial frameworks that support these activities. This session will explore how governments, corporations, and individuals can navigate this transition.

8:30 am – 9:45 am

Panel Discussion: Corporate Climate Change and Clean Energy Commitments

Many large corporations, recognizing the economic value of energy efficiency and renewable energy, have made firm commitments to clean energy and greenhouse gas emissions reductions. This session will explore the rationale and business case for their investments.

9:45 am – 10:30 am

Panel Discussion: The Role of States and Cities in International Energy Collaboration *(St. Charles Ballroom, Third Floor)*

Cities and regions representing nearly one-fifth of the world's population, among them U.S. states and communities, have committed to concrete actions, commitments, and plans in response to climate change. This panel discussion will explore opportunities for greater sub-national and international cooperation in support of climate, energy, and economic development goals.

10:30 am – 11:15 am

Panel Discussion: The Global Challenge with Local Implications: Climate Change Partnerships *(St. Charles Ballroom, Third Floor)*

Addressing global climate change will require concerted action and partnerships at the state, local, national, and international levels. This session will explore how states, communities, and organizations are meeting this need.

11:15 am – 11:45 am

Washington Update *(St. Charles Ballroom, Third Floor)*

This discussion with NASEO's General Counsel will provide the latest news on Congressional and federal agency priorities and the outlook for post-election energy policy.

11:45 am

Closing Remarks and Conference Adjourn *(St. Charles Ballroom, Third Floor)*

12:00 pm – 4:00 pm

NEER Stakeholders Luncheon and Meeting *(Royal Room, Third Floor) (RSVP Required; Space Limited)*

The National Energy Efficiency Registry Stakeholders meeting will feature updates and interactive discussions on the National Energy Efficiency Registry project, a multi-sector, multi-state initiative promoting the documentation of energy efficiency programs and measures in a consistent, transparent, and credible way. To RSVP for this meeting, visit http://annualmeeting.naseo.org/registration.