Ten Things You Need To Know

Ten Things You Need to Know: An Advisory Guide for State Energy Office Directors and Staff

1. Learn from your colleagues in the 55 other State and Territory Energy Offices

One of the best ways to leverage your role as a state energy official is to meet with peers in comparable positions at other State Energy Offices. Connecting with your colleagues will help you create a network of resources with years of valuable expertise and experience. Reach out to understand their priorities and goals, learn more about the specific policies and programs they're considering or operating that align with your existing and planned activities, and establish a rapport with them.

Your peers in the 55 other State and Territory Energy Offices across the country have prompted a number of groundbreaking energy policies and initiatives through the years. Some of the most noteworthy achievements include developing the nation's first renewable portfolio standard, pioneering energy savings performance contracting programs a decade prior to similar Federal efforts, leadership on energy emergency planning, and testing and promoting ENERGY STAR before it was introduced widely in the commercial sector. These and other similar policies and programs are being deployed across the nation and you have the leading energy policy and program experts at the ready to enhance your ability to achieve success in your role.

Through your participation in NASEO, you are joining a network of experienced State Energy Officials and NASEO staff with decades of expertise in every energy area and sector – efficiency, natural gas, oil, renewables, transportation, electricity, buildings, and industry. In addition, NASEO has a deep institutional memory and can provide context to help understand evolving energy policies, markets, and programs. In fact, in 1986, then-Governor Bill Clinton recognized the need for a non-partisan, national organization to connect state energy officials and helped establish NASEO for just this purpose (See President Clinton's video from NASEO's 25th Anniversary: http://youtu.be/9uKooXSqvME). NASEO is here to help you make those connections. There are a number of ways to link with your colleagues in other State Energy Offices.

First, consider reaching out directly to the energy office director or staff in an analogous position in neighboring states. NASEO maintains an up-to-date list of the primary contacts in the energy offices on our website. Simply send an email and set a time to discuss your main responsibilities, priority programs and initiatives, and any barriers you're facing. It's likely that person has faced similar issues and may have good ways to overcome any challenges and seize potential opportunities. Alternatively, contact NASEO and allow us to make some introductions and suggestions.

Another useful way to connect with your peers is through NASEO's committees. The committees convene regularly via telephone, webinar, and in-person at our meetings to facilitate peer learning around pressing issues. The purpose of the committees is to take an in-depth look at today's most important energy topics by meeting with experts, sharing data and information across states, and establishing priorities and direction for NASEO. A list of upcoming committee meetings and calls can be found on the NASEO events page: www.naseo.org/events

NASEO also convenes the states regionally. The six NASEO regions meet regularly by phone and in person on specific topics and priorities. NASEO staff moderate the interaction and can help to put you in touch with the right people in each of the states in your region. The regional map is available online: http://www.naseo.org/naseo-regions.

Finally, NASEO's in-person events—annual conferences, topic-specific workshops, and regional meetings—provide the best opportunities to hear firsthand about the initiatives your colleagues are leading in their states, challenges they have overcome, and strategies they're considering for the future. NASEO makes a point of asking states to present on their activities so that you can learn from one another, as well as from external experts. These events allow you to meet directly with and ask the tough questions of your fellow State Energy Officials.

Related NASEO Resources:

- NASEO Online State Energy Office contacts by state: http://www.naseo.org/members-states
- NASEO State Energy Office operations and programs survey results 2014 (Contact NASEO)
- NASEO State Energy Office structures report (Contact NASEO)
- Upcoming NASEO committee meetings and calls: www.naseo.org/events
- NASEO regions: http://www.naseo.org/naseo-regions
- President Clinton's NASEO State Energy Office video: http://youtu.be/9uKooXSqvME

2. Use the Convening Power of State Government

The positions of State Energy Directors and State Energy Offices within state government—largely reporting to the governors' offices or cabinet members—puts you in an ideal non-regulatory role capable of building consensus and moving the energy policy dialogue from ideas to practical solutions. This is accomplished through a range of actions including quiet information gathering and sharing to public stakeholder meetings. Most of the State Energy Offices are at the helm of all things "energy" in their states. From understanding the state's pertinent energy data (e.g., imports and exports, infrastructure location, resource profiles) to knowing who the key players are, the energy offices understand the state's needs and priorities in the energy sector. This makes the State Energy Office role critical in bringing together and convening various stakeholders, from fellow agencies to industry partners to financial institutions to utilities. NASEO has plenty of examples and approaches that have been used for decades by your colleagues...

Energy offices often serve as liaisons and conveners of various state, federal, local, and private entities in order to advance energy technologies, finance projects, grow energy markets, promote economic development, and create jobs. In this role, State Energy Officials actively and effectively inform executive and legislative policy development, and in many states, engage or intervene with the public utility commission. Through your office's convening role and the resulting interaction among external stakeholders and your office, many new ideas and solutions emerge and can be brought to fruition.

State Energy Offices are also uniquely positioned to engage investor-owned, municipal, and cooperative utilities, business leaders, and consumer groups in productive dialogue that takes place outside of regulatory proceedings. This is used to great advantage by governors, legislators, and others in moving state policy forward more rapidly than would otherwise be possible. It is a key element in the success of expanding renewable electricity standards, for example. State Energy Officials conduct their work by balancing a variety of public and private interests in support gubernatorial and legislative energy and economic development goals. The following examples illustrate this dynamic:

- High levels of market penetration of energy savings performance contracting programs have often been brought about by State Energy Offices convening a stakeholder process to seek executive branch or legislative refinement to streamline programs, standardize contracts, and oversee project implementation (e.g., Kansas, North Carolina, Minnesota).
- Increasing involvement of energy offices in multifamily energy efficiency by leveraging partnerships
 with other state agencies and entities (e.g., housing agencies and utility commissions) have occurred
 where State Energy Offices have brought together state and local stakeholder to maximize impact of
 efforts and investments (e.g., Maryland, Pennsylvania).
- State Energy Offices have used their convening power to support and launch innovative energy
 efficiency and renewable energy financing mechanisms and structures. For example, State Energy
 Offices are increasingly at the center of creating statewide energy financing programs (e.g., NY) and
 property-assessed clean energy programs in the commercial sector (e.g., Michigan), which require a
 broad range of stakeholder engagement (including financial firms, state agencies and local
 governments, technical experts) to both develop and operate.
- Convening formal or informal stakeholder processes related to building energy codes. For example, some State Energy Offices (e.g., Texas, Delaware) oversee the stakeholder process identified in legislation to review potential updates to the statewide building energy code. Others (e.g., Nebraska, New Hampshire) convene or are members of energy code collaborative groups that work to address challenges related to energy code adoption, training, and compliance.

3. Advance Energy-Related Economic Development Goals

Energy development can be a catalyst for jobs and economic growth including advances in fossil energy from shale gas and oil development to renewable energy generation and energy efficiency improvements. This development brings or keeps jobs in the United States, strengthens communities and expands the state and local tax bases. The Governor's Office or State Department of Commerce often set agendas for economic growth and these frequently identify energy development as a goal. State Energy Offices often play a role in encouraging energy development by linking potential developers with financial resources through state Departments of Commerce or connecting developers with appropriate permitting contacts in environmental agencies. Energy offices also support state policies such as tax credits designed to directly bring economic development to the state, or policies that incentivize residential energy efficiency improvements, which result in increased jobs in the energy efficiency sector. .

Many State Energy Offices have financing programs targeted at public facilities like schools and state buildings. Some also have financing programs aimed at private sector development, or have established public-private partnerships to aid in financing energy development. While low-cost capital is helpful, collaborative programs created in partnership with the private sector that include technical assistance, education, and policy incentives aimed at market gaps and barriers are most effective.

States' energy efficiency financing efforts more than 30 years ago were focused largely on the public facilities sector, including state office buildings, universities, and local facilities, such as schools. From these early efforts, financing programs evolved to respond to the unique market needs and opportunities in each state. An important differentiating factor among these newer programs is the linkage to state energy policies that seek to open new market opportunities and catalyze investments. Today's successful state energy efficiency and renewable energy financing programs are often linked to broader economic development efforts.

Collectively, the states have a significant opportunity to drive rapid market transformation and realize the economic potential, employment opportunities, and environmental benefits of the \$520 billion market for energy efficiency and renewable energy projects and technologies.

Incentives offered by states can have an impact on where a business will locate, or how much of a resource will be developed. These can be tax incentives or policies like a renewable portfolio standard that require industry to development a certain amount of new resource. A list of incentives and policies can be found on the DSIRE website.

Related NASEO Resources:

- NASEO Financing Committee: http://www.naseo.org/committee-financing
- Unlocking Demand: An Analysis of State Energy Financing Programs: http://www.naseo.org/data/sites/1/documents/publications/Unlocking-Demand.pdf
- NASEO's State Energy Loan Fund Database: http://www.naseo.org/state-energy-financing-programs
- DSIRE Website: http://www.dsireusa.org/

4.Leverage the Link Between Energy and the Environment

Recognize the key linkages between energy and environmental issues, such as energy-air, energy-water, energy-transportation, and energy-climate. Increasingly, the non-energy benefits of sound energy policies are important to businesses and consumers. Developing an approach that leverages these benefits and emphasizes efficiency, reliability, and affordability can produce win-wins for consumers and businesses.

The supply and demand of virtually every type of fuel generates varying degrees of environmental impact that affect public health and the environment. The need to address the environmental impact can provide opportunities for economic development. Understanding the interplay between air, climate, and the changing energy landscape will help State Energy Offices develop innovative and sustainable solutions to improve air quality, use resources efficiently, and address climate issues.

State Energy Offices often engage with other agencies at the state level to encourage programs and policies that maximize benefit and value across the spectrum of areas that affect or are impacted by energy development, generation, or distribution. Over the past 10 years State Energy Offices were engaged with their environmental counterparts in developing climate change action plans, as well as in developing plans to meet the requirements of the Environmental Protection Agency to reduce greenhouse gas emissions and comply with the provisions 111(d) of the Clean Air Act. To support that effort, NASEO joined forces with the National Association of Clean Air Agencies (NACAA) and the National Association of Regulatory Utility Commissioners (NARUC) to connect state representatives from these different areas of expertise and have discussion about how to meet air quality needs with energy programs. This group was known as the 3N group and provided opportunities for State Energy Office directors to engage through phone calls and occasional meetings. While discussions related to the Clean Power Plan have ended, NASEO continues to collaborate with NACAA and NARUC on other topics of mutual interest, and work to strengthen ties between the State Energy Offices and their environmental and regulatory counterparts. For example, NASEO and NACAA will be launching a "Volkswagen Settlement Clearinghouse" for state agencies in 2017.

The efficiency and renewable energy policies and programs that energy offices administer are a major source of environmental benefit at the state level and nationwide. State Energy Offices have a role in developing and managing energy efficiency and renewable energy programs that are independently delivered and outside of requirements on utility companies. One effective state/private partnership in this area is Energy Savings Performance Contracting to acquire energy savings in buildings and facilities. U.S. DOE recently released an ESPC Toolkit that includes online technical assistance, a data-management tool that provides consistent tracking and reporting of ESPC project data, and an ESPC financing decision tree that enables users to select the forms of financing that best suits their jurisdiction's conditions. The Energy Services Coalition also recently released a toolkit that is designed to guide and promote the standardization of instruments and processes that could assist in bringing the ESPC industry to speed and scale. Links to both the U.S. DOE and Energy Services Coalition toolkits are included below.

Concerns about carbon emissions and climate change have resulted in states in the Northeast and Mid-Atlantic collaborating on a regional basis to evaluate and implement ways to reduce their emissions of greenhouse gases and achieve related co-benefits. The Regional Greenhouse Gas Initiative (RGGI), for example, is the first market-based regulatory program in the United States to reduce greenhouse gas emissions. RGGI is a cooperative effort among the states of Connecticut, Delaware, Maine, Maryland, Massachusetts, New Hampshire, New York, Rhode Island, and Vermont to cap and reduce CO2 emissions from the power sector. States sell nearly all emissions allowances through auctions and invest

proceeds in energy efficiency, renewable energy, and other consumer benefit programs. These programs are spurring innovation in the clean energy economy and creating green jobs in the RGGI states. States in the Midwest and West have attempted similar actions that are no longer being pursued. Conducting greenhouse gas inventories, using the inventory to create a climate change action plan and implementing the plan also can significantly reduce carbon footprints.

Within the energy-water nexus, U.S. security and the economy depend on the inextricable and reciprocal linkages between energy and water; energy production requires large volumes of water and water treatment and distribution requires energy. The states work with utilities, the private sector, and research institutions to identify technical and policy solutions to water usage in the production of energy and electricity (e.g., adequate water for cooling), explore advanced technologies (e.g., dry cooling), enhance efficiency in the infrastructure and irrigation systems in the agricultural and municipal sectors, and encourage residential conservation.

Another cross-cutting area for the State Energy Offices is in alternative transportation fuels and efficient transportation. A number of states work with their Clean Cities or environmental quality/protection counterparts to assess and demonstrate the market potential of new transportation technologies and fuels, encourage adoption of alternative fuels, and evaluate the risks of and opportunities for using alternative fuels in a range of transportation applications. State Energy Offices are also collaborating closely with their state environment and transportation agencies on the Volkswagen Settlement, providing guidance on investment and in some cases leading their state's efforts. From an emissions standpoint, government can also contribute by promoting transit-oriented development, mass transit options, electric vehicles, and other low-carbon measures. Energy offices should note that in a time of uncertainty about the leading vehicle technology to reduce emissions in the transportation sector, looking at the fuel cost brings key information to be considered to keep mobility affordable yet sustainable. Regardless, diversifying the energy mix in the transportation sector will reduce exposure to price volatility and supply disruptions.

State energy offices focusing their energy strategies on improving air quality, reducing greenhouse gas (GHG) emissions, and developing adaptation strategies will achieve co-benefits from a health, environmental, and economic perspective.

Related NASEO Resources:

- NACAA, NASEO and NARUC Meeting: GHG Emissions Standards for Existing Power Plants Under Section 111(d) of the Clean Air Act: http://naruc.org/3n/
- Presentations from the NASEO-NARUC-NACAA Environmental Protection and Clean, Reliable Energy - Governments Working Together Meeting, July 2012: http://www.naruc.org/News/?e=308
- NASEO and NACAA's State Volkswagen Settlement Clearinghouse expected summer, 2017
- U.S. DOE ESPC Toolkit: https://betterbuildingssolutioncenter.energy.gov/espc/home

5. Understand the Current Energy Infrastructure and Strategic Energy Plan for the Future

Understanding energy production, use, supply, and infrastructure, as well as the interdependencies among electricity, oil, natural gas, efficiency, and renewables markets is a primary responsibility of most energy offices and is essential to planning for recovery from energy emergencies and for strong economic development. Energy information is collected at the state level by the Department of Energy's Energy Information Administration and is often used by State Energy Offices in developing energy policies.

Developing a comprehensive and strategic State Energy Plan is a vitally important function for nearly all of the State Energy Offices. While every State Energy Office faces different priorities and challenges, each exerts leadership more successfully if guided by an overarching state plan that has been carefully constructed, implemented, and monitored. Governors and legislators increasingly understand the value of a robust approach to energy planning as the best means to develop and anchor sound policy actions.

Most states have conducted some level of comprehensive energy planning to establish a strategy or framework to meet current and future energy needs in a cost-effective and sustainable manner. State energy planning allows states to create a strategy that capitalizes on indigenous resources, infrastructure, and human capital through targeted goals and directives to encourage economic development. This strategy may be identified as a State Energy Plan that stands alone, or be incorporated into executive or legislative policy. These plans need periodic review and revision.

An effective, comprehensive, and strategic energy plan will do the following:

- Clarify and articulate state energy policy;
- Achieve consensus buy-in from critical stakeholders;
- Prioritize goals and objectives for each fuel source and all end use sectors;
- Facilitate greater coordination among multiple policy and programmatic initiatives; and
- Provide a framework for implementation and verification of all programs.

These plans also, to the extent the State Energy Office leads or facilitates them, solidify the role and stature of the office within both the state government structure and the general population. Nearly all 56 State or Territory Energy Offices develop these plans on behalf of their governors and legislatures. This fact accounts, at least in part, for the finding in NASEO's most recent survey of its members (2014) that the position of the State Energy Offices within state governments in general is rising, and that three out of four are Governor's cabinet level agencies compared with only 13% in 2009. An effective comprehensive, strategic energy plan will likewise recognize and comport with those of local jurisdictions within the state, and with neighboring states, when there are goals, objectives, programs, or priorities of mutual interest.

A robust energy plan will also lay out a path forward for the state to meet future energy needs in a cost-effective, sustainable, and efficient manner while fostering viable energy markets, promoting energy diversity, and ensuring affordability. In addition, a comprehensive and well-constructed plan will show the relationship with the state's energy assurance plans, transportation and other plans with linkages to energy and climate plans—separate but closely related efforts in which the energy offices often play a significant role.

A successful state comprehensive, strategic energy plan will achieve cost savings for taxpayers, support private sector job creation, advance industry competitiveness, accelerate economic growth, and

enhance environmental quality, depending on the state's particular vision and circumstances. Not to be discounted is the resultant encouragement for a diverse energy supply and demand portfolio, which will minimize price volatility and economic disruptions and enhance energy assurance. A comprehensive state energy plan should be a priority commitment of the state energy offices and the long-term benefits that result will far outweigh the cost and effort expended.

Related NASEO and Other Resources:

- NASEO State Energy Plans Database and Related Information: http://www.naseo.org/stateenergyplans
- NASEO State Energy Plan Guidelines (expected update: September, 2017): http://www.naseo.org/Data/Sites/1/documents/publications/NASEO-State-Energy-Planning-Guidelines.pdf
- U.S. Energy Information Administration's State level Energy Data: http://www.eia.gov/state/
- U.S. Energy Information Administration's Annual Energy Outlook: http://www.eia.gov/forecasts/aeo/er/index.cfm

6. Be Prepared for an Energy Emergency

State Energy Offices bring a practical policy, planning, and response lens to energy emergency preparedness—energy assurance—that differs from and complements state and federal regulatory, homeland security, emergency management actions. Understanding energy markets, proven public communications and response actions, and private sector roles in advance of an emergency is essential to protecting health and safety and returning to normal economic activity. It's also important to incorporate resiliency (e.g., efficiency, distributed energy) into energy programs to enhance energy assurance over time.

Each year, there are many minor supply disruptions, which the electricity, natural gas, petroleum, and other energy industry players do an extraordinary job of managing—often restoring service without the customers' awareness of a problem. The system currently works; however, major supply disruptions impact health, safety, and the economic livelihood of communities and stretch far beyond a single company or even industry's ability to respond. Sound energy assurance planning and response efforts at the federal, state, and local levels are essential to helping industry mitigate the impacts of these major and unexpected events and impacts.

The formation of the State Energy Offices following the 1970s oil embargo was the start of a formal state and federal partnership in energy emergency response. Over the years, that capability has ebbed and flowed until a series of national disasters and September 11th convinced policymakers that a sustained state, federal, industry partnership capability was essential to America's security and future. Today, all of the states have developed Energy Assurance Plans or energy emergency response plans of some type. Nearly all of the state plans examine the risks to energy infrastructure should it be damaged or destroyed and take an all hazards approach—natural disasters and deliberate attacks—in preparation and response.

The U.S. Department of Energy's (DOE) Office of Electricity Delivery and Energy Reliability (OE) provided funding and technical support to the State Energy Offices to develop or update energy assurance plans in 2010-2012 so plans are up to date. NASEO partners with OE and several national organizations, such as the National Association of Regulatory Utility Commissioners, to provide technical support and training to help with planning activities, including the following:

- Providing background information to the states on infrastructure interdependencies, cybersecurity, smart grid technologies, and energy supply systems.
- Developing tools and resources to help state and local officials meet their energy assurance planning objectives.
- Holding regional and national training exercises, tabletops, and conferences to promote the peer learning, information exchange, and innovative and well-developed plans and capabilities.
- Promoting information sharing and the coordination of disaster preparedness activities.
- Helping state and local officials to develop new plans or refine existing ones, and encouraging the revision of policies and procedures to reflect these plans.
- Encouraging officials to develop comprehensive, uniform energy assurance plans across
 jurisdictions and to integrate them into broader emergency preparedness planning and
 homeland security activities.

All State Energy Offices should have a copy of the plan and understand their roles and responsibilities. The efforts of State Energy Offices are coordinated with other key state agencies including public utility commissions and emergency management and homeland security equivalents. The update and implementation of plans is generally a shared responsibility with the energy office providing support. However, NASEO stresses to all states that while electricity and natural gas delivery systems have an extensive history of regulatory oversight and allow the industry to coordinate response efforts, non-regulated fuels such as gasoline, propane, and diesel fuel are far more complex in terms of their delivery systems and federal law limits their ability to collaborate due to historic federal anti-trust restrictions. Often, State Energy Offices are designated by governors to lead the energy aspects of a state response for these liquid fuels. Preparing for these events remains critical.

Another important role the State Energy Offices play in energy assurance is working with industry and local governments to improve resiliency through a range of state efficiency and distributed generation programs and actions. For example, ensuring the efficient use of energy in buildings through codes, availability of distributed generation in mission critical facilities (e.g., hospitals, schools), and alternative transportation resources for fleet vehicles are just a few of the many mitigation leavers available to State Energy Offices. NASEO has many examples and recommendations to offer in this area.

Related NASEO and Other Resources:

- DOE's Energy Assurance Program and Resources: http://energy.gov/oe/services/energy-assurance
- NASEO-NARUC State Energy Assurance Guidelines: http://www.naseo.org/eaguidelines
- NASEO's Smart Grid and Cybersecurity for State Energy Assurance
 Plans: http://www.naseo.org/data/sites/1/documents/publications/NASEO_Smart_Grid_and_C
 yber Security for Energy Assurance rev November 2011.pdf
- NASEO's Ensuring Fuel Diversity in Long-term State Energy Assurance
 Plans: http://www.naseo.org/Data/Sites/1/documents/committees/transportation/kate-marks-clean-cities-presentation.pdf
- NASEO's Petroleum Shortage Supply
 Management: http://www.naseo.org/data/sites/1/documents/publications/Petroleum Shortage

 e Supply Management.pdf
- NASEO's Combined Heat and Power Resource
 Guide: http://www.naseo.org/data/sites/1/documents/publications/CHP-for-State-Energy-Officials.pdf

7. Understand how the US State Energy Program (SEP) Creates State-Federal Partnership Modest, flexible funding through the U.S. Department of Energy (DOE) State Energy Program (SEP) offers high-value to states with both large and small budgets. The program not only provides cost-share funding, it also creates an important policy and program linkage among state energy priorities, other DOE programs, national initiatives, and in-state private-sector opportunities.

SEP is important to both states with significant financial resources and those without because of the program's role in catalyzing new ideas. The flexibility of the program allows states to create innovative solutions with their private sector partners, test new ideas and policies, and advance the most successful energy solutions over a period of time. This is in contrast to most state and federal funding with a narrower scope and limited innovation potential. Moreover, ensuring a foundational level of energy activities in every state helps to encourage multistate energy coordination and continuous improvement of energy policies and markets. SEP is the only DOE program that provides the states with the flexibility to strategically target their energy priorities and then share and replicate results through other states and the private sector.

Funding for SEP is considered and approved annually by Congress, provided to the DOE, and allocated to the states using a formula grant mechanism based primarily on population and energy consumption. A cost-share from the states is required to obtain these funds. The DOE also has acted to distribute a portion of SEP funds through competitive project solicitations for State Energy Offices. SEP funds are used by states for the development of energy policies the development and deployment of energy efficiency and renewable energy projects. These project activities are defined in state plans submitted by state and territory energy offices and approved annually by DOE. The specific citations for the SEP program are as follows:

- Energy Policy and Conservation Act, Public Law 94-163, 42 U.S.C. 6321-6326;
- Department of Energy Organization Act of 1977, Public Law 95-91, 42 U.S.C. 7101;
- Balanced Budget Down Payment Act II of 1996, Public Law 104-134;
- National Energy Conservation Policy Act of 1978, Public Law 95-619, Public Law 101-440;
- American Recovery and Reinvestment Act of 2009; and
- SEP is further governed by program rule 10 CFR 420.

Within DOE, the Office of Weatherization and Intergovernmental Programs (WIP) oversees SEP. The mission of the program is to provide leadership through the states to maximize the benefits of energy efficiency and renewable energy through communications and outreach activities, technology deployment, and new partnerships and resources. Through the program State Energy Offices address long-term national goals to:

- Increase the energy efficiency of the U.S. economy;
- Reduce energy costs;
- Improve the reliability of electricity, fuel, and energy services delivery;
- Develop alternative and renewable energy resources;
- Promote economic growth with improved environmental quality;
- Reduce reliance on imported oil; and
- Help states prepare for energy emergencies resulting from, for example, natural disasters, and develop approaches to improve the security and resiliency of the energy infrastructure.

States must submit annual plans to DOE that outline their vision for addressing energy issues within their state. DOE reviews, approves, and provides the allocated formula funds to these efforts annually. In addition, DOE's WIP managers work with the states to help improve program design, encourage robust measurement of results, and identify potential collaborative actions with other DOE offices. NASEO also works in partnership with WIP and the states to encourage multistate programs and sharing of best practices to leverage resources.

Because SEP is the only program operated by the U.S. Department of Energy that provides funding directly to the states to utilize the energy priorities the states identify and set, SEP is a core priority of NASEO. As such, NASEO works closely with the states to continuously improve the quality of data from the program in order to better inform Congress and federal officials. While DOE has opted to distribute a portion of the SEP appropriation on a competitive basis over the past several years, NASEO encourages DOE to provide the maximum amount SEP funds possible to the formula grant program—allowing states to target their highest energy priorities within the national goals under the program.

The SEP is under the oversight of the federal State Energy Advisory Board (STEAB) that is appointed by the Secretary of Energy and includes State Energy Office Directors and Weatherization Program Directors.

Related NASEO and Other Resources:

- SEP overview and facts: http://www.naseo.org/state-energy-program
- SEP success stories: http://www.naseo.org/sep-success
- SEP funding allocations by state and year (through 2015): http://www.naseo.org/Data/Sites/1/sep-allocations 2005---2015 12-17-13.pdf
- WIP's SEP overview and resources: http://www1.eere.energy.gov/wip/sep.html
- U.S. DOE's State Energy Advisory Board (STEAB): https://energy.gov/eere/steab/state-energy-advisory-board

8. Understand the Responsibilities of Key Congressional Committees

Understand the roles of key Congressional legislative and funding committees, their structure, and how they impact your State Energy Office.

There are a number of key Congressional committees that impact energy policy and funding at the national, state, and local levels. It is important to understand the roles and responsibilities of the energy-focused Congressional committees because of the impact of their actions on the states and because of the potential of State Energy Officials to inform Congress on energy issues from your state's perspective. One of the most overlooked facts is that energy legislation is typically developed over a period of years with smaller bipartisan initiatives rolling up into larger energy bills over time. This makes a constant awareness of legislation essential to ensure state views and priorities are reflected in Congressional and Administration actions. Actions by Congress to provide funding through the federal appropriations process is equally complex and requires constant monitoring and state input. NASEO's Government Affairs Committee serves as a forum through which the State Energy Offices can learn about Congressional and Administration actions and engage when appropriate for your state. Even if your position does not allow direct interaction on these issues, understanding what's happing on energy policy at the federal level will inform your state's own policymaking process.

Before engaging with Congressional offices, it's important to verify with your Governor that you are authorized to provide input on energy related policy and budget issues and work with NASEO to inform your Congressional delegation. With that approval, we recommend getting to know your state's delegation on an informal basis and let them know about your energy programs and successes before you begin requesting support for priority programs and actions. Gather information about your Congressional members, learn their policy positions and proposals, and find issues that you think will resonate with them.

One way to increase effectiveness with Congress is to enlist the help of individual businesses in your state that have received benefit from your energy programs or from potential federal actions. Encourage these businesses to contact the state's Congressional delegation directly to provide feedback about the value of programs, such as SEP, and the related economic benefits.

In the U.S. Senate, most energy actions occur in the Senate Energy and Natural Resources Committee, Senate Environment and Public Works Committee, and the Senate Appropriations Committee. Within the Senate Appropriations Committee, the Energy and Water Development Subcommittee funds most energy federal programs. In the U.S. House, the committees and subcommittees with authorization over energy issues include the Energy and Commerce Committee, Natural Resources Committee, and the Appropriations Committee; and the Science, Space, and Technology Committee. NASEO provides regular updates on relevant state and budget actions under these Committees and various subcommittees through its Energy Action in Washington emails and monthly Government Affairs Committee calls. The House and Senate Appropriations Committee members are key players in providing funding for the U.S. State Energy Program and other energy-related priorities.

9. Understand Responsibilities of Key Federal Agencies

Become familiar with the responsibilities, roles, and information available from major energy-related divisions and departments within key federal agencies.

There are a number of key federal agencies and offices that State Energy Offices regularly engage with. NASEO can be helpful to State Energy Offices in navigating programs, opportunities, and points of contact.

The U.S. Department of Energy (www.energy.gov)

The primary federal agency the states interact with is the U.S. Department of Energy (DOE). A complete list of the opportunities and programs within DOE that may be of interest to the states and their private sector partners (e.g., companies, universities) is extensive. However, the major offices include:

- The Office of Energy Efficiency and Renewable Energy (EERE) accelerates development and facilitates deployment of energy efficiency and renewable energy technologies and marketbased solutions that strengthen U.S. energy security, environmental quality, and economic vitality. The U.S. State Energy Program resides within EERE's Office of Weatherization and Intergovernmental Programs.
- The Office of Electricity Delivery and Energy Reliability (OE) provides national leadership to ensure that the Nation's energy delivery system is secure, resilient and reliable. OE works to develop new technologies to improve the infrastructure that brings electricity into our homes, offices, and factories, and the federal and state electricity policies and programs that shape electricity system planning and market operations. OE also works to bolster the resiliency of the electric grid and assists with restoration when major energy supply interruptions occur.
- The Office of Fossil Energy is responsible for several high-priority initiatives including
 implementation of the \$2 billion, 10-year Clean Coal Power Initiative to develop a new
 generation of environmentally sound clean coal technologies, the Fossil Energy elements of the
 American Recovery and Reinvestment Act of 2009, and the nation's Strategic Petroleum Reserve
 and Northeast Home Heating Oil Reserve, both key emergency response tools available to the
 President to protect Americans from energy supply disruptions.
- The Office of Science is the lead in supporting fundamental scientific research for energy and the
 Nation's largest supporter of basic research in the physical sciences. The Office of Science
 portfolio has two principal thrusts: direct support of scientific research and direct support of the
 development, construction, and operation of unique, open-access scientific user facilities. These
 activities have wide-reaching impact. The Office of Science supports research in all 50 States and
 the District of Columbia, at DOE laboratories and more than 300 universities and institutions of
 higher learning nationwide.
- The U.S. Energy Information Administration (EIA) collects, analyzes, and disseminates independent and impartial energy information to promote sound policymaking, efficient markets, and public understanding of energy and its interaction with the economy and the environment. EIA is an independent office within DOE.
- The Advanced Research Projects Agency-Energy (ARPA-E) is an innovative and collaborative
 government agency that brings together America's best and brightest scientists, engineers, and
 entrepreneurs. ARPA-E catalyzes transformational energy technologies that could create a more
 secure and affordable American future. ARPA-E empowers America's energy researchers with
 funding, technical assistance, and market readiness to accelerate the pace of energy innovation.

Other Energy-Related Federal Agencies

Other federal commissions and agencies that have important energy-related functions include:

- Federal Energy Regulatory Commission (www.ferc.gov). The Federal Energy Regulatory
 Commission (FERC) is an independent agency that regulates the interstate transmission of
 electricity, natural gas, and oil. FERC also reviews proposals to build liquefied natural gas (LNG)
 terminals and interstate natural gas pipelines as well as licensing hydropower projects. The role
 of FERC in energy infrastructure actions at the state level is an important and complex. NASEO
 recommends close coordination with state utility commissions in dealing with FERC issues.
- U.S. Department of Agriculture (www.usda.gov). The U.S. Department of Agriculture (USDA)
 aggressively pursues investments in renewable energy and energy efficiency through a number
 of programs such as Renewable Energy for America Program, and targeted support for
 production of renewable energy feedstocks and investments energy efficiency and on-farm
 energy generation. NASEO worked with states and a range of stakeholders to help create many
 these programs over a decade ago and it has provided tremendous opportunities for rural
 energy-related economic development.
- U.S. Department of Commerce (www.commerce.gov). The Economic Development
 Administration (EDA) within the U.S. Department of Commerce plays a critical role in fostering
 regional economic development efforts in communities across the nation. Through strategic
 investments that foster job creation and attract private investment, EDA supports development
 in economically distressed areas of the United States.
- U.S. Department of Defense (www.defense.gov). The Department of Defense (DOD) is the largest government agency and accounts for 80% of total Federal Government energy consumption at a cost of \$20.4 billion annually. DOD has worked diligently to advance energy efficiency and renewable energy efforts over the past three Administrations. State Energy Offices and military installations often work together to ensure the successful implementation of energy projects that promote economic growth and environmental stewardship. NASEO has prepared a briefing document on recent State Energy Office DOD projects and initiatives.
- U.S. Department of the Interior (www.doi.gov). The U.S. Department of the Interior (DOI) protects America's natural resources and heritage, honors our cultures and tribal communities, and supplies the energy to power our future. One example of the Department oversees leasing and siting issues for conventional and renewable energy facilities on federal lands and off shore.
- U.S. Environmental Protection Agency (www.epa.gov). The mission of the U.S. Environmental Protection Agency (EPA) is to protect human health and the environment. The State Energy Offices mainly engage with the Office of Air and Radiation (OAR), which develops national programs, policies, and regulations for controlling air pollution and radiation exposure. OAR is responsible for administering the Clean Air Act, the Atomic Energy Act, and other applicable environmental laws. The agency also oversees transpiration fuel quality, administers the renewable fuel standard, and leads voluntary programs such as ENERGY STAR and combined heat and power partnerships. EPA maintains regional offices across the country that work with the state air agencies and interact with State Energy Offices as well. NASEO works closely with a number of EPA offices on energy-related programs to more cost-effectively address air and water quality issues.
- *U.S. Department of State (www.state.gov).* Within the U.S. Department of State (DOS), the Under Secretary for Economic Growth, Energy, and the Environment leads the DOS's efforts to develop and implement economic growth, energy, agricultural, oceans, environmental, and

- science and technology policies to promote economic prosperity and address global challenges. One way that State Energy Offices can engage with DOS is to collaborate on promoting the export energy products and services though peer-exchange opportunities. NASEO has worked with DOS to facilitate informational and peer exchanges with states and U.S. trading partners.
- U.S. Department of Transportation (www.dot.gov). The U.S. Department of Transportation (DOT) mission is to ensure a fast, safe, efficient, accessible and convenient transportation system. There is an existing DOT connection with the State Energy Offices, through state departments of transportation, under the Congestion Mitigation and Air Quality Improvement (CMAQ) Program. Jointly administered by Federal Highway Administration and the Federal Transit Administration, CMAQ has provided nearly \$30 billion for nearly 29,000 transportation-environmental projects overseen by state departments of transportation and implemented by other state agencies and local partners. NASEO recommends coordination across the energy and transportation sectors at the state level, and the NASEO's Transportation Committee is a great resource for guidance.

10. Build Relationships With Private Sector Partners and Leverage Their Expertise

Every facet of state energy policy and program development and implementation can be enhanced through robust cooperation with the private sector. Energy business and nonprofit leaders ranging from new technology companies to traditional energy producers to affordable housing advocates know their markets and can offer important insights to catalyze investment, create jobs, bolster energy efficiency, and save taxpayers money. Creating stakeholder engagement processes and building relationships over time will pay dividends when your office needs help moving important policies and delivering priority programs. NASEO's Affiliate Members are a great resource in this area.

The State Energy Offices manage strategic programs to support the private sector in increasing energy efficiency, developing domestic and renewable energy resources, promoting economic development, delivering emergency planning and response, and modernizing infrastructure. By leveraging private sector expertise and capital, State Energy Offices can enhance their services, expand their reach, and effectively augment the state's policies and programs. With tightening budgets and constrained state grants and other direct funding for State Energy Offices, increasing private sector involvement in energy programs through the State Energy Offices makes good economic sense. As important, market knowledge and expertise offered by the private sector when combined with the public policy lens and considerations of the State Energy Offices will produce better results.

States often work with utilities, industry, and other state agencies or organizations to operate or administer public benefit funds and oversee utility efficiency programs. This coordination serves to provide a cohesive strategy to address a range of energy market issues, complement other state policies, and support long-term goals in the public and private sectors. The major public benefits fund stakeholders—utilities, industry, and states—each have concerns about the funds and their impacts, so it's important to work together toward a shared goal.

On a project-specific basis, private sector partners can offer guidance and expertise and vice versa, states can share their experience and advice with the private sector, to learn from one each other and avoid duplication of efforts. This exchange will also help to ensure complementary efforts that balance the public's needs with private sector priorities. When competing for federal grants and other funding opportunities, private sector partners can also provide additional value to a proposal from a financial and technical perspective.

States have found great success in leveraging private sector investment through their U.S. State Energy Program efforts. A report on the impacts of SEP found that the states leverage every \$1 in SEP funding with nearly \$11 in private sector funds. Private sector companies also serve as influential supporters when they advocate on the states' behalf with Congressional leaders and DOE officials on the benefits and economic value achieved through SEP funding.

Energy savings performance contracting (ESPC) is a great example where State Energy Offices are working closely with the private sector to expand the market and increase investments. Through ESPCs, government agencies are able to shift some of design, construction, operations, and finance risks associated with developing new efficient buildings and upgrading existing facilities to the private sector in exchange for fixed payment terms and service levels. This relationship overcomes the upfront capital barriers for the states making efficient buildings an achievable goal even during difficult economic times. This is just one example of a state-industry partnership.

There are also public-private sector partnerships in energy financing. This approach to financing energy efficiency and renewable energy projects may take many different forms, including credit enhancement mechanisms, such as loan loss reserve, loan insurance, and interest rate buy-down programs; third party-administered and -marketed direct lending programs; and sales of loan portfolios into the secondary market, among others. In all cases, engaging the private sector in energy financing enables the state to increase program volume by leveraging public funds with private capital and expertise, building investor confidence and comfort in energy efficiency and renewable energy assets, and marketing their financial products to a broader customer base than they may otherwise be able to reach.

Public-private coordination helps to advance technology research and demonstration that might prove too risky for industry to undertake alone. Industry and government partners can focus on identifying actions to encourage early adopters, conduct coordinated technical and market analysis, and evaluate infrastructure that enables cost reductions and economies of scale. From research and development through demonstration and deployment, these partnerships help to expand economic opportunities and promise broad benefits by providing technologies, tools, and practices that save energy and stimulate growth.

Finally, an important aspect of State Energy Offices' work with the private sector is the informal exchange of information and ideas. As energy issues emerge in the state, it's essential to have solid relationships with key private sector energy industry representatives. They can be the best mechanism to refine ideas, advance concepts informally with other stakeholders, and be at the ready to support policy and program change when the State Energy Office needs their help the most.

Related NASEO Resource:

NASEO Affiliates Program: http://www.naseo.org/members-affiliates