ISSUE BRIEF

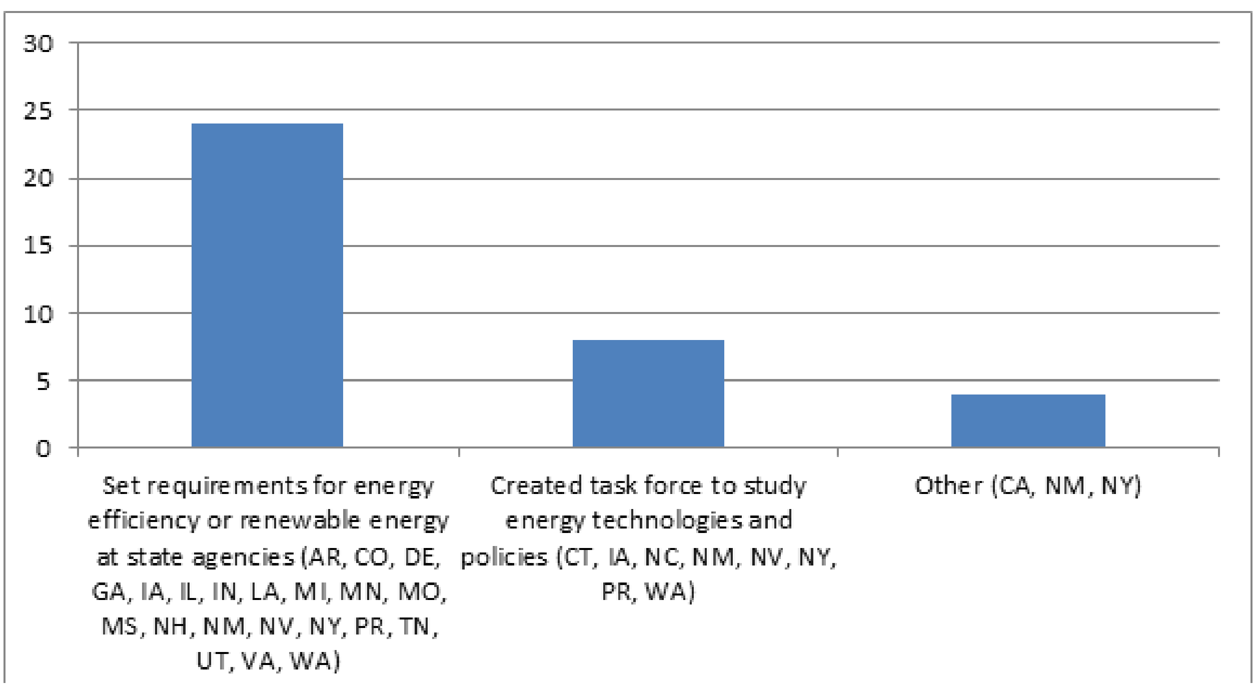
Using Executive Orders to Advance Energy Efficiency and Renewable Energy

Summary

Governors have used executive orders to create, support, and complement policies to expand the production and consumption of energy from renewable resources and to lower the demand for energy by using energy more efficiently. Those efforts are playing a role in making the nation as a whole more energy independent by diversifying each state's portfolio of energy resources. While the exact authority for executive orders and their scope differ by state according to the constitutional and statutory bounds in place in the state,[1] executive orders have proven to be a flexible tool that governors have used to directly affect the direction and implementation of energy policy in a variety of areas.

Since 2008, governors have issued 36 executive orders related to energy efficiency or renewable energy (see figure below).[2]

Governors' Executive Orders on Energy Efficiency and Renewable Energy
Number of Orders (2008–2012)



[1] National Governors Association, "Governors' Powers and Authority," http://www.nga.org/cms/home/management-resources/governors-powers-and-authority.html (accessed December 20, 2012).

[2] Amanda Hoey and Sue Gander, State Clean Energy Actions: 2012 Update (Washington, DC: National Governors Association Center for Best Practices, 2013). A list of all 36 executive orders is available here http://www.nga.org/files/live/sites/NGA/files/pdf/2013/1303GovernorsExecutiveOrders.pdf. A complete list of state policies covering energy efficiency and renewable energy, including executive orders, is available through NGA's State Clean Energy Actions Database.

Common approaches include setting and directing requirements for reducing energy use or increasing renewable energy procurement at state agencies, creating task forces or commissions to study energy technologies, and making energy policy recommendations. Some executive orders have established statewide or sector-specific goals for energy efficiency or renewable energy procurement or have directed state agencies to take regulatory actions that affect the development of energy sources.

Governors can use executive orders to make measurable progress toward their energy goals, particularly if they include clear direction to state agencies, concrete timelines and incentives, and opportunities for gubernatorial leadership. Examples of recent accomplishments or policies spurred by executive orders include:

- Lead-by-example initiatives in **Delaware** and **New Hampshire** reduced energy use in state buildings by more than 12 percent in each state, and a similar initiative in **Colorado** continued under several governors as goals were met;
- A program in **Georgia** challenged state agencies to commit to a 15 percent reduction in energy use and was later broadened to businesses and residents;
- **California** expanded the goals of its renewable energy law, which were later codified by the legislature;
- A task force in **Nevada** developed recommendations for promoting the state's renewable resources and presented them to the governor;
- **Virginia** established public–private partnerships to expand infrastructure for alternative-fuel vehicles; and
- A council in **Connecticut** brought together representatives from the public and private sector to guide the state's policy on energy sector jobs.

Executive Orders for Energy Efficiency and Renewable Energy

Governors can issue executive orders that shape and direct policy in many areas, including energy efficiency and renewable energy. Executive orders are attractive because they are flexible: Although their authority can be limited, executive orders can complement or clarify existing policies and goals or provide new guidance to shape state energy policy. They can spur or leverage legislative efforts, build on the success of previous executive orders, and provide detailed strategies for implementing policy. Governors have used executive orders to shape energy policy in three general categories: leading by example through state government, facilitating the market for renewable energy, and working with the private sector to meet energy policy goals (see sidebar on page 3 for a general definition of this executive authority).

Leading by Example Through State Government

Many governors have used executive orders to jump-start or complement state government–level "lead by example" measures that help them meet their overall energy policy goals. Examples include setting renewable energy procurement goals for state agencies, requiring state buildings to meet new energy efficiency standards, and mandating energy efficiency improvements for state buildings and fleets.

In 2010, **Delaware** Governor Jack Markell issued an executive order setting energy reduction and other environmental targets for state agencies across five areas: energy conservation and efficiency, construction, renewable energy, recycling, and procurement.[3] The order called for a 30 percent reduction in energy use by executive agencies by 2015 and required agencies to meet at least 30 percent of their annual electricity demand from renewable sources by 2013.

[3] Executive Order 18, "Re: Leading by Example Towards a Clean Energy Economy & Sustainable Natural Environment," February 17, 2010, http://governor.delaware.gov/orders/exec_order_18.shtml.

The order also established specific actionable items for agencies in each of the five areas to help them track progress and meet the targets. Since the order was signed, the agencies have been able to reduce their energy use by 12 percent across 230 buildings and facilities. The state's aggregate electricity purchase contract, which covers both state and local governments, now includes 25 percent electricity from renewable resources. That provision has saved the state $13.2 million over a three-year contract period. Through expanded use of energy savings performance contracting and a new electricity purchase contract in 2013, the state expects the savings initiated by the executive order to grow in 2013.[4]

New Hampshire Governor John Lynch signed two executive orders directing state agencies to reduce their energy use, issuing the second order when the goals of the first order had been met. Governor Lynch signed the first order in 2005, directing state agencies and departments to reduce energy use by 10 percent. That order noted that state government was the largest energy user in the state, with a total energy bill of more than $18 million per year. State agencies were instructed to use the U.S. Environmental Protection Agency's ENERGY STAR program, work with the state energy manager, and implement an anti-idling program for state vehicles.[5] By 2010, the state reduced energy use in its buildings by 16 percent, as measured by energy use per square foot, surpassing the 10 percent goal and saving the state $3 million in energy costs.[6]

Based on that success, Governor Lynch signed a law directing state agencies to further reduce fossil fuel use by 25 percent from 2005 levels by 2025 and issued a second executive order providing state agencies with additional implementation steps to help achieve the legislative targets and directing agencies to work with the state energy manager.

About Executive Orders

Executive orders are directives or declarations issued by governors to implement their constitutional or statutory powers. Executive orders allow governors to direct state government operation and state policy, apart from the legislative process. This allows them to have a direct and immediate impact on state policy development and implementation. In 12 states (Alaska, Hawaii, Illinois, Iowa, Kansas, Kentucky, Maryland, Minnesota, Missouri, North Carolina, Vermont, and Wisconsin), some or all executive orders are subject to legislative review, in categories such as the creation or reorganization of state agencies. Executive orders generally remain in effect until rescinded by subsequent gubernatorial action, but they may be drafted to sunset at a certain point.

The power to issue executive orders may be vested in the governor through the state constitution; by statute, case law, or common law; by virtue of the governor's authority; or some combination of all of those. Although not explicitly enumerated in state constitutions or statutes, executive orders generally fall into one of three categories: general policy statements, directives to state agencies, and operative orders. Of those, only operative orders have the force and effect of law, as long as the governor acts within their explicit authority and the powers granted by the legislature.

No two states are exactly alike when it comes to gubernatorial authority—the above statements about executive orders are generalizations. Governors should consult with their general counsel or attorney general before issuing an executive order that relates to a new policy field or that executes a previously unused authority.

Sources

Colorado General Assembly Office of Legislative Legal Services, "Governor's Power to Issue Executive Orders," Memorandum, August 24, 2011.

The Council of State Governments, *Book of the States, 2011,* Chapter 4: State Executive Branch (Lexington, KY: Council of State Governments, 2011), Table 4.5.

Washington State Office of the Attorney General, "Authority of Governor to Issue Executive Order Having the Force and Effect of Law," Attorney General's Office 1991, no. 21, June 11, 1991.

[4] Rachel Emerson, Delaware Office of Management and Budget, personal communication with the author, January 8, 2013.
[5] Executive Order 2005–4, "An Order for State Government to Lead-by-Example in Energy Efficiency," July 14, 2005, http://sos.nh.gov/WorkArea/DownloadAsset.aspx?id=24529.
[6] Executive Order 2011–1, "An Order For State Government to Continue to Lead-by-Example in Energy Efficiency," April 15, 2011, http://sos.nh.gov/WorkArea/DownloadAsset.aspx?id=24566.

In **Colorado,** a greening government initiative now spans three gubernatorial administrations, with each governor building on past successes. The process began in 2003, when Governor Bill Owens issued an executive order establishing an energy performance contracting program to improve the energy efficiency of state buildings.[7] Governor Owens followed with a 2005 executive order that created additional energy reduction requirements.[8] That order directed state agencies to adopt construction and management practices from the U.S. Green Building Council's Leadership in Energy and Environmental Design (LEED) system in new and existing buildings and to create a Greening Government Coordinating Council to develop and implement programs for reducing energy use.

Governor Bill Ritter continued the effort in 2007 by issuing an executive order that set a target of a 20 percent energy reduction by 2012, directed state agencies to develop energy management plans, and required the state to study the feasibility of performance contracting to reduce energy use.[9] The order also set goals for procuring supplies and materials with reduced environmental impact, improving state fleet management, and developing renewable energy projects at state government facilities. Another executive order issued by the governor in 2010 directed state agencies to update their energy and water reduction, recycling, and environmentally preferable purchasing plans and improve data collection to measure progress.[10] As provisions of the orders have expired and as goals have been met, the Greening Government Coordinating Council produced an updated set of strategies for further reducing state government energy use. Governor John Hickenlooper is expected to issue an executive order incorporating the council's recommendations in the first half of 2013.

A 2008 executive order issued by **Georgia** Governor Sonny Perdue created the Governor's Energy Challenge, an innovative program that encourages state agencies to make public commitments to reduce their energy use by 15 percent from 2007 levels by 2020.[11] Programs that incorporate public commitments, like the Governor's Energy Challenge, can help motivate consumers to reduce their energy use.[12] Once agencies signed up for the pledge to reduce their energy use, the state provided technical assistance to help agencies create an interactive energy modeling tool to track their energy use and developed a resource kit covering energy management basics. Local governments and businesses were encouraged to follow the state agencies' lead and make similar public pledges to reduce their energy use. By 2011, seven state agencies had met the energy challenge goal. Under Governor Nathan Deal, the Georgia Environmental Finance Authority expanded the challenge statewide, making the same tools available to all residents and businesses in the state and challenging them to meet the energy conservation goals.[13]

Facilitating the Market for Renewable Energy

Expanding both the production and consumption of energy from renewable resources such as wind, solar, and geothermal continues to be a part of many governors' energy policy. Thirty-one states and territories have a renewable portfolio standard in place requiring retail electricity providers to generate a certain percentage of electricity from renewable or alternative sources. Another 10 states and territories have less

[7] Executive Order D014 03, "Energy Performance Contracting to Improve State Facilities," July 16, 2003.
[8] Executive Order D005 05, "Greening of State Government," July 15, 2005, http://www.colorado.gov/dpa/doit/archives/govowens/eos/eo-05/d00505.pdf.
[9] Executive Order D0012 07, "Greening of State Government: Detailed Implementation," April 16, 2007.
[10] Executive Order D2010–006, "Greening of State Government: Earth Day 2010," April 22, 2010.
[11] Executive Order 4.24.08.02, "Launching the Governor's Energy Challenge 2020," April 24, 2008, http://sonnyperdue.georgia.gov/vgn/images/portal/cit_1210/20/11/11234071804_24_08_02.pdf.
[12] Andrew Kambour, Enhancing State Energy Efficiency Efforts Through Information and Outreach to Consumers (Washington, DC: National Governors Association Center for Best Practices, May 30, 2012), http://www.nga.org/files/live/sites/NGA/files/pdf/1205ENERGYPAPER.PDF.
[13] Georgia Energy Challenge, http://www.georgiaenergychallenge.org (accessed December 20, 2012).

binding policies in place regarding renewable energy goals. Governors have used their executive authority to establish state renewable energy goals and to study strategies for facilitating the increased use of renewable energy.

In 2008, **California** Governor Arnold Schwarzenegger used an executive order to lay the groundwork for expanding the state's renewable portfolio standard (RPS). At the time, the state's RPS required that, by 2010, 20 percent of the electricity consumed in the state come from renewable generators, including wind, solar, geothermal, and certain biomass and hydropower plants. The executive order required that retail sellers of electricity in the state generate at least 33 percent of their electricity from renewable resources by 2020. Following the executive order, Governor Schwarzenegger began working with the legislature to formally codify the change in law. The next year, he signed an order directing the California Air Resources Board to enact regulations to achieve the 33 percent goal. In 2011, the legislature passed and Governor Jerry Brown signed a bill establishing the 33 percent RPS requirement, including interim targets.[14] The law made the standard easier to enforce and expanded the requirements of the RPS to municipal utilities. As of 2011, 14.5 percent of electricity sold in California comes from renewable sources eligible under the RPS, including 20.1 percent of the electricity supplied by the state's three large investor-owned utilities.[15]

Gubernatorial action in **Nevada** provided a legislatively-created task force on renewable energy and energy efficiency with a new and specific focus and established an advisory committee to assist the task force's effort. Created in 2009, the New Energy Industry Task Force, chaired by the state Energy Director, has the broad mission of advising the state on measures to promote the development of renewable energy and energy efficiency projects. After taking office in 2011, Governor Brian Sandoval issued an executive order directing the task force to develop a set of policy recommendations on expanding transmission capacity to bring Nevada's renewable energy resources to market.[16]

Governor Sandoval's order included instructions to the task force to develop a business case for renewable energy resources in the state and to make transmission planning recommendations in line with activities already underway in the state and region. The order also established a non-voting technical advisory committee, also led by the Energy Director, to provide technical support to the task force. The task force members will provide the Energy Director with recommendations in March 2013 that include changes to state law and investigations by the Public Utility Commission of Nevada dealing with utility reporting requirements, equality among renewable energy technologies, the state's renewable portfolio standard, economic development, and net metering options for renewable energy systems.[17]

Working With the Private Sector to Meet Energy Policy Goals

Governors can issue executive orders designed to spur greater private-sector participation in public policy or that give the private sector a larger role in tasks traditionally managed by the state. Such orders often seek to leverage public funding to support partnerships and pilot programs, with the goal of enhancing ongoing state energy programs with private-sector resources or technologies.

[14] Office of Governor Edmund G. Brown, Jr., "Governor Brown Signs Legislation to Boost Renewable Energy," Press Release, April 12, 2011, http://gov.ca.gov/news.php?id=16974.
[15] California Public Utilities Commission, "California Renewables Portfolio Standard (RPS)," http://www.cpuc.ca.gov/PUC/energy/Renewables (accessed November 20, 2012).
[16] Executive Order 2011–18, "Providing Direction to the New Energy Industry Task Force and Establishing a Technical Advisory Committee Thereto," November 21, 2011, http://gov.nv.gov/news/item/4294972898.
[17] "New Energy Industry Task Force," Nevada State Office of Energy, http://energy.nv.gov/Programs/New_Energy_Industry_Task_Force (accessed November 21, 2012).

Virginia Governor Bob McDonnell issued an executive order in 2011 to spur the establishment of a public–private partnership for alternative fuel vehicles and fueling infrastructure. The order directed the release of a public–private partnership solicitation to further the commonwealth's interest in partnerships with and among alternative fuel source providers, infrastructure developers, vehicle manufacturers, and other industry leaders. By fostering those partnerships, Virginia aimed to expand the fueling infrastructure for alternative fuel vehicles and increase the number of alternative fuel vehicles in its vehicle pools and fleets.[18] In October 2012, Governor McDonnell announced that the state had entered into contractual agreements with two private companies to provide alternative fuel infrastructure in the state. That announcement was made in conjunction with the governor's decision to join a 22-state memorandum of understanding to promote the development of affordable natural gas vehicles for use in state fleets.[19]

Connecticut established a Green Jobs Council by executive order for the purpose of developing green job opportunities, public–private partnerships, and job training programs.[20] The Green Jobs Council brought together multiple state agencies and representatives from Connecticut businesses to help align state and private-sector goals. In 2010, the council successfully competed for a $3.36 million grant from the U.S. Department of Labor to help build capacity in the state in education and workforce development, develop career pathways for green jobs, and connect green workforce priorities with statewide economic development goals. The council has been renamed the Connecticut Green Jobs Partnership and continues to set strategic workforce policies related to green jobs.

Conclusion

Executive orders are one of several tools that governors can use to shape state policy to promote energy efficiency and renewable energy. Although the authority for such orders varies, there are opportunities in every state. The most effective orders provide clear direction to state agencies or other affected parties; contain concrete timelines, incentives, or penalties; and provide opportunities for governors to show leadership and proactively address important policy issues.

Andrew Kambour
Senior Policy Analyst
Environment, Energy & Transportation Division
NGA Center for Best Practices
202-624-3628

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[18] Executive Order 36, "Moving Toward Alternative Fuel Solutions for State-Owned Vehicles," July 11, 2011, http://www.governor.virginia.gov/PolicyOffice/ExecutiveOrders/viewEO.cfm?eo=36.
[19] Office of Governor Bob McDonnell, "Governor McDonnell Announces Agreements and Signs Executive Directive to Advance Conversion of State Vehicle Fleet to Alternative Fuels," Press Release, October 2, 2012, http://www.governor.virginia.gov/News/viewRelease.cfm?id=1446.
[20] Executive Order 23, February 2, 2009, http://ct.gov/governorrell/cwp/view.asp?A=1719&Q=433292.