

From: Michelle Wyman [michelle@governorsnewenergyfuture.org]

Sent: Friday, April 08, 2016 9:42 PM

To: adykema@energy.nv.gov; Alexander.Cochran@exec.ny.gov; alexandra.cahill@state.ma.us; Ben [IGOV] Hammes; charles.small@exec.ny.gov; christine.m.hirasa@hawaii.gov; Christopher (DOA) Kearns; cindy.mcmillan@hawaii.gov; Cliff Rechtschaffen; Coit Janet (DEM); COMMONWEALTH OF VIRGIMA; damian.destefano@state.de.us; Dan DeSimone; Deborah Hoffman; Doug.Hoelscher@iowa.gov; Drew Jacoby; Dykes Katie; Elizabeth Norvell; Eric (GOV) Brown; Evan Westrup; Gareth Lacy; garth.spencer@state.de.us; gretherh@michigan.gov; J. David (MPCA) Thornton; Jamie Callahan; jenny.zeng@exec.ny.gov; Jessica (GOV) Brown; jodi.c.leong@hawaii.gov; John (MPCA) Stine; jquigley@pa.gov; julie.yunker@dbedt.hawaii.gov; Johnson, Justin; Katie Wheeler Mathews; Jeff Genzer; Keith (GOV) Phillips; kerry.holmes@nh.gov; Gray, Laura; marion.gold@energy.ri.gov; mark.b.glick@dbedt.hawaii.gov; megan.sabbah@gov.ca.gov; Mike Fitzgerald; Molly Pederson; ned.bartlett@state.ma.us; Richard Kauffman; Ryan McGinness; SADHIR Ruchi * GOV; Sam (GOV) Marullo; sam.ricketts@gov.wa.gov; Samuel Robinson; tiffany.watkinsahern@state.ma.us; TRACT DBSHAZOR; Valerie (GOV) Brader; Wade Crowfoot; wests4@michigan.gov; Framme, Hayes (GOV)

CC: Chris Avery

Subject: Accord Briefing Book for April 12 Planning Meeting

Attachments: Governors Accord Meeting Book.pdf

Colleagues-

In advance of the Accord planning meeting on Tuesday, April 12, please find the attached Accord briefing book. For those of you joining us in person, there will be a printed copy provided to you on Tuesday morning.

If you have any questions on content, timing or feedback in advance of the meeting, please let me know. Best way to reach me in the coming days is by text or call (510-331-0441). A call-in number will be provided to those of you who will be dialing in on Monday.

Looking forward,
Michelle

Table of Contents:

Agenda.....	3
Logistical Information.....	5
Discussion Questions & Initial Implementation Action List	6
Accord Questions – National Frame.....	6
List of Priority Actions by Accord States.....	8
Signed Accord.....	9
Accord Homepage.....	12
Accord Press.....	13
<u>The Guardian</u> – <i>Coalition of US states pledge to accelerate renewable energy efforts</i>	13
<u>CNBC</u> – <i>Governors sign bipartisan green accord</i>	15
<u>Bloomberg</u> – <i>Renewables to Get a Boost From 17 U.S. Governors in Joint Plan</i>	16
<u>The Las Vegas Sun</u> - <i>Nevada’s Sandoval, 16 other governors announce clean energy, transportation agreement</i>	17
<u>UNFCCC Newsroom</u> – <i>17 US Governors Agree to Build Clean Energy Future</i>	18
<u>The Atlantic City Lab</u> – <i>Governors Launch a New Offensive in the Fight for Clean Energy</i>	19
Letters of Support.....	21
BICEP.....	21
Geothermal Exchange Organization.....	22
ITC Holdings Corp.....	25
Technical Briefs.....	29
Challenging the Clean Energy Employment Consensus.....	29
Department of Energy, Federal Funding Guide (2014).....	33
Governor Biographies.....	39
Gov. Edmund G. “Jerry” Brown Jr. (CA).....	39
Gov. Dannel P. Malloy (CT).....	39
Gov. Jack Markell (DE).....	40
Gov. David Y. Ige (HI).....	40
Gov. Terry E. Branstad (IA).....	41
Gov. Charlie Baker (MA).....	41
Gov. Rick Snyder (MI).....	42
Gov. Mark Dayton (MN).....	42
Gov. Brian Sandoval (NV).....	43

Gov. Maggie Hassan (NH).....	43
Gov. Andrew M. Cuomo (NY).....	44
Gov. Kate Brown (OR).....	44
Gov. Tom Wolf (PA).....	45
Gov. Gina M. Raimondo (RI).....	45
Gov. Peter Shumlin (VT).....	46
Gov. Terence R. McAuliffe (VA).....	46
Gov. Jay Inslee (WA).....	47

Governors' Accord for a New Energy Future

9:30 a.m. 5:00 p.m. Eastern Time

April 12, 2016

Hall of States

Room 338

444 North Capital Street NW

Washington DC 20001

AGENDA

Meeting Objectives

- Reach an aligned understanding of what we want the Accord to do (or avoid doing)
- Understand what the form (operations) of the Accord is moving forward; need funding and some type of governance structure
- Determine shared idea of success of the Accord that don't presuppose particular strategies and allow states to consider work based on their state-specific situations

- | | |
|------------|---|
| 9:30 a.m. | Opening remarks and Introductions |
| 10:00 | Review of Action Item List from September 2015 |
| 10:30 | Break |
| 10:45 | Breakout groups to review action items, make additions, create shortlist to present to full group |
| 11:30 | Working lunch: Groups present their shortlist (10 min./group) |
| 12:30 p.m. | Discussion/agreement on list of action items and working groups |
| 1:15 | Break |
| 1:30 | Energy Expert Panel: Industry, Markets and Policy <ul style="list-style-type: none">▪ Reed Hundt, Chief Executive Officer, Coalition for Green Capital▪ Tracy Terry, Director of Energy, Bipartisan Policy Center▪ Lisa Jacobsen, Executive Director, The Business Council for Sustainable Energy▪ Patricia Hoffman, Assistant Secretary, Office of Electricity, US Department of Energy |
| 3:00 | Break |

- 3:15 Accord Infrastructure
- Governance
 - Operational Structure
 - Resources
 - Fundraising
 - Partner/ally development: federal agencies, subject-matter institutions, organizations, firms and individuals
 - Technical assistance
- 4:30 Wrap Up and Review including Next Steps
- 5:00 – 7:00 Refreshments at Johnny's Half Shell
Invitees: Federal agency, businesses/trade group and NGO staff

Accord Meeting

Basic Logistical Information

Location

Hall of States Office Building
444 No. Capital Street NW (at E Street NW)
Washington DC
Rm. 337

Nearby Hotels

Hotel George - 15 E St NW, Washington, DC 20001
Hyatt Regency Capitol Hill - 400 New Jersey Ave NW, Washington, DC 20001
Liaison Capitol Hill - 415 New Jersey Ave NW, Washington, DC 20001
Phoenix Park Hotel - 520 North Capitol St NW, Washington, DC 20001
Washington Court Hotel - 525 New Jersey Ave NW, Washington, DC 20001

Closest Metro Station:

Union Station on the Red Line. 0.3 miles
1. Head north on North Capitol St NW toward E St NW 0.2 mi
2. Turn right onto G St NE 0.1 mi

General Parking Information

Parking Colonial Parking
400 N Capitol St NW
Washington, DC 20001
(202) 298-7299
Type: Underground
Accepted Payments: Coins, Bills, Cards
Mon-Sun 6am-12am
1 Hour \$ 13.00

Walking

7 minutes from the US Capitol
3 minutes from Senate Office Buildings (Russell, Dirksen and Hart)
15 minutes from House Office Buildings (Cannon, Longworth and Rayburn)
2 minutes from Union Station and Metro

Driving

15 minutes from Ronald Reagan National Airport
30 minutes from Washington Dulles International Airport
45 minutes from Baltimore Washington International Airport
10 minutes from Walter E. Washington Convention Center

Accord Questions – National Perspective

In order to better empower discussion, following are answers that reflect input from a number of Accord states and also provides some national context. These may or may not match the needs of individual states, but are offered as a frame to support the breakout sessions on Tuesday morning.

What are the top 3 energy challenges states are facing?

1. Transitioning from a centralized, fossil-based electric grid to a decentralized renewables based one.
2. Providing national policy support and technical assistance to regions and localities with fundamentally different needs and resource bases.
3. Figuring out the economics of deploying clean energy technologies at scale in a wide variety of different policy and resource environments.

List 3 (or more) policy areas in which you'd like to learn from other states' actions.

1. Integration across regions, especially where cities have connected grids that haven't been previously connected.
 - a. Are there local models that could be scaled up to work as examples encouraging interstate collaboration?
2. Surveying financial structures to determine how they have worked to both finance and deploy clean tech.
 - a. Additionally, how can we incentivize experimenting with innovative financing mechanisms to reach untapped regions and populations?
3. From the state's perspective, what has been your biggest success to date?
 - a. What was it about your state that made it successful in that effort, and how can that success be translated to other states interested in similar work?

What are the top 3 policy areas that you think Accord states should explore together, to the benefit of every participating state?

1. Any national policies that have been directly impactful on benefiting deployment and how those have worked in tandem and in opposition with state policies.
 - a. In places where national policies have worked in opposition to state policies, where was the disconnect, why, and how to we prevent that from happening again?
2. How can utilities and oversight organizations be incorporated into the conversation productively?
3. What type of knowledge is actually necessary to overcoming barriers and how do we incentivize that work?
 - a. Both technical and non-technical research (i.e., new financing models).
 - b. Developing models that leverage economic data and tools across multiple states.

Are there particular entities with whom you think Accord states should partner to effectively pursue the group's policy goals? (e.g. business groups, NGOs, academia, federal agencies, etc).

Partners, stakeholders and allies should be identified once the work plan and implementation list have been finalized for the Accord (year one). The capacity and subject matter expertise needed will vary based on the implementation/action items the Accord states agree on moving forward.

It is important that Accord states agree on a process for selecting and formalizing work with different entities to ensure sign off from all involved.

Please provide any feedback on the Initial Implementation Actions list, which was developed over the months preceding launch of the Accord.

The list of actions is well in line with the priorities of the Accord. They are a good blend of policy analysis and resource development.

CONFIDENTIAL

Governors' Accord for a New Energy Future

List of Priority Actions by Accord States

The following action items reflect input from the Accord states and are a blend of policy, analysis and resource development to serve the states' interests and priorities.

- Quantify economic benefits and opportunities from states' clean energy and infrastructure investments. Using standard economic tools and with the right technical partner, Accord states could pursue state-level modeling of specific infrastructure and clean energy investments to project impacts to employment, GDP and household income. Track workforce development trends in Accord states specifically skills and training that support clean energy work/markets.
- Shape technical assistance, funding and research to states to better support states' energy pathways toward the Accord's common principles; engage proactively with Federal agencies, select industry and financial sectors, philanthropy and research institutes to accelerate states' energy work.
- Engage states in 'utility of the future' discussions possibly including convening with key utility sector stakeholders on a range of topics e.g., energy storage, increased capacity for renewable energy, status of current energy systems, resilience, etc.
- Review Accord states energy policies or plans and identify areas of mutual focus on energy issues and opportunities across states' for collaboration.
- Convene states for sharing and learning best practices and programs for financing development and deployment of renewable energy, efficiency, and smart grid and energy storage technologies in the electricity grid.
- Examine effective state transportation policies that support diversification of transportation fuel infrastructure including regional partnerships like the West Coast Electric Highway, national freight efficiency or plug-in electric vehicle infrastructure work.
- Support the modernization of the nation's electrical grid. Identify Federal policies and investments to improve transmission and distribution infrastructure that further state energy goals, and help each other build our own in-state capacity to improve our energy grids.

GOVERNORS' ACCORD FOR A NEW ENERGY FUTURE

American prosperity has always depended on embracing new ideas and technologies. By deploying renewable, cleaner and more efficient energy solutions, we can make our national economy more productive and resilient. These technologies help to diversify energy sources that power our economy and reduce dependence on foreign energy sources while securing abundant, domestically produced electricity. Embracing these new energy solutions also modernizes our infrastructure and transportation systems, decreases air pollution, and supports the growth of innovative American companies.

Current challenges also demand these new energy solutions. Extreme weather events, such as floods, droughts, wildfires and sea-level rise, can negatively impact electric reliability and the economy. Embracing new energy solutions can provide more durable and resilient infrastructure, and enable economic growth, while protecting the health of our communities and natural resources. These improvements will help secure a safe and prosperous future for our country.

We recognize that now is the time to embrace a bold vision of the nation's energy future. And to do so, states are once again poised to lead. We join together, despite unique opportunities and challenges in each state, to embrace a shared vision of this future:

Our states will diversify energy generation and expand clean energy sources.

Expanding energy efficiency and renewable energy in a cost-effective way strengthens our states' economic productivity, reduces air pollution and avoids energy waste. Integrating more of these clean energy sources into our electricity grids can also improve the flexibility and stability of these grids. Promoting energy savings through efficiency and conservation programs is the fastest, most reliable and often cheapest way to meet our energy needs. Technologies that capture solar, wind, hydroelectric and geothermal power have become viable and cost-effective to integrate into our states' energy portfolios. These technologies are already providing energy to millions of Americans while reducing energy waste and air pollution. Amidst decreasing costs of renewable energy, and rapid advances in efficiency throughout entire energy systems, our states will diversify our energy portfolios for economic, health and environmental benefits.

Our states will modernize energy infrastructure.

Modern distribution and transmission grids are required to give consumers more control over their own energy use, increase electricity reliability, and integrate more renewable energy and energy efficiency technologies into our energy systems. Electrical grid improvements, advanced in a cost-effective way, can empower utilities and consumers to manage electricity flexibly and efficiently.

Our states will encourage clean transportation options.

Hundreds of thousands of electric vehicles, and tens of millions of vehicles using alternative fuels, are driving on American roads, and fuels such as natural gas, biofuels and hydrogen are increasingly available to power vehicles. Supporting automakers' and fueling companies' market expansion for these new vehicles and fuels expands consumer choice, lessens dependence on petroleum and reduces pollution. By

supporting needed infrastructure development, incentives and policies when appropriate, our states will encourage expanded use of these new technologies.

Our states will plan for this energy transition.

Given the complexity of state-wide energy systems and the scale of modernizing these systems, many states have developed energy plans and strategies to implement energy improvements. These approaches have incorporated best practices and lessons-learned from new technologies, other states' energy policies, consumer programs, and workforce training efforts. These state-by-state approaches enable each state to meet benchmarks it sets for itself in areas such as energy diversification, reduced energy waste, improved air and water, and economic performance. Our states will support each other in developing, refining and implementing these plans through sharing expertise among our policy experts.

Our states will work together to make these transformational policy changes.

Our states are already transforming energy and transportation to be cleaner, more efficient, and more resilient. Many actions taking place in one state can be adapted to meet the needs of other states and scaled across regions. Examples include streamlining siting of environmentally-desirable infrastructure, setting renewable and energy efficiency standards, adopting incentives for clean vehicles and fuels, and diversifying energy portfolios to integrate peak shaving, efficiency and renewable energy into a state's energy mix. Building on current efforts, our states will help each other reach shared energy and transportation objectives. This collaboration will be advanced through periodic meetings and technical convenings of our states.

Our states will help secure a stronger national energy future.

Given the unique energy portfolio and regulatory framework of each state, Governors are uniquely positioned to drive lasting improvements to our country's energy system. Federal agencies lend technical expertise, provide funding, and enable research and development that can help our states make energy improvements. In order to provide effective support, federal agencies must work closely with states to tailor technical support, funding and research to the needs of each state and avoid presupposing the best types of assistance. Strong partnerships among our states and between our states and the federal government will improve our country in the decades to come.

Signed, on the 16th day of February, 2016,

Governor Edmund G. Brown, Jr.
State of California

Governor Dannel P. Malloy
State of Connecticut

Governor Jack Markell
State of Delaware

Governor David Y. Ige
State of Hawaii

Governor Terry E. Branstad
State of Iowa

Governor Charlie Baker
Commonwealth of Massachusetts

Governor Rick Snyder
State of Michigan

Governor Mark Dayton
State of Minnesota

Governor Brian Sandoval
State of Nevada

Governor Maggie Hassan
State of New Hampshire

Governor Andrew M. Cuomo
State of New York

Governor Kate Brown
State of Oregon

Governor Tom Wolf
Commonwealth of Pennsylvania

Governor Gina M. Raimondo
State of Rhode Island


Governor Peter Shumlin
State of Vermont

Governor Terence R. McAuliffe
Commonwealth of Virginia

Governor Jay Inslee
State of Washington

GOVERNORS' ACCORD FOR A NEW ENERGY FUTURE

[THE ACCORD](#) / [GOVERNORS](#) / [NEWS](#) / [CONTACT](#)



Governors' Accord for a New Energy Future

Coalition of US states pledge to accelerate renewable energy efforts

By: Oliver Milman
The Guardian
February 16, 2016

A bipartisan group of governors from 17 states has pledged to accelerate their efforts to create a green economy in the US by boosting renewables, building better electricity grids and cutting emissions from transport.

An accord signed by the governors states that the US must “embrace a bold vision of the nation’s energy future” by reducing emissions, transitioning to clean energy sources and ensuring that infrastructure isn’t risked by extreme weather events such as floods and wildfires.

The agreement sets out commitments to expand renewable energy and energy efficiency and integrate solar and wind generation into electricity grids. These grids will be “modernized”, the accord states, to improve energy reliability.

Companies that offer electric vehicles or vehicles that run on alternative fuels such as hydrogen or natural gas will be provided incentives and help with infrastructure in the 17 states. New standards and benchmarks for energy efficiency and renewables will also be set.

The governors are from California, Connecticut, Delaware, Hawaii, Iowa, Massachusetts, Michigan, Minnesota, New Hampshire, Nevada, New York, Oregon, Pennsylvania, Rhode Island, Vermont, Virginia and Washington. These states are home to around 40% of the US population.

Advisers from the states, which include both Democratic and Republican governors, will meet to set out steps towards meeting these promises.

Jerry Brown, the governor of California, a state that emits around 1% of the world’s greenhouse gases, said the accord builds on his administration’s existing policies, including its goal to reduce petroleum use in cars and trucks by up to 50% within the next 15 years.

“With this agreement, governors from both parties have joined together and committed themselves to a clean energy future,” Brown said. “Our goal is to clean up the air and protect our natural resources.”

Andrew Cuomo, governor of New York, said that the coalition of states can effectively “develop an effective national energy policy to ensure a safer, greener and more sustainable future for all.”

The Republican governor of Nevada, which is set to vote in presidential caucuses for Democratic and Republican candidates in the coming week, said it was important for the state to create jobs in clean energy.

“This bipartisan accord provides a platform for Nevada to leverage new partnerships, gain and share knowledge and an opportunity to introduce our energy advancements to other states,” said Governor Brian Sandoval. “I remain committed to pursue policies that will allow Nevada to continue to lead the nation in renewable energy production, energy conservation, and the exportation of energy.”

Recent figures show that wind and solar accounted for 5.4% of the US’s energy mix last year, up slightly from 2014. Coal, meanwhile, is on a historic slide, accounting for 34% of electricity generation last year, the smallest share since Energy Information Administration records were first kept in 1949.

West Virginia and Kentucky, which have been hit hardest by the decline in coal prices, are projected to continue burning coal. According to Bloomberg New Energy Finance, coal would still account for about 24% of electricity use in 2030.

<http://www.theguardian.com/environment/2016/feb/16/us-states-renewable-energy-green-economy>

Governors sign bipartisan green accord

By: Anmar Frangoul

CNBC

February 17, 2016

Seventeen U.S. state governors have signed a green accord that sees them pledge to push clean energy sources in the United States. Signed on Tuesday, the Governors' Accord for a New Energy Future says that the deployment of "renewable, cleaner and more efficient energy solutions" will make the economy more productive and resilient.

To achieve this states will look to expand clean energy sources, diversify energy generation, modernize infrastructure and encourage people to use clean transport, among other things.

The bipartisan agreement is signed by the governors of California, Connecticut, Delaware, Hawaii, Iowa, Massachusetts, Michigan, Minnesota, Nevada, New Hampshire, New York, Oregon, Pennsylvania, Rhode Island, Vermont, Virginia and Washington.

"With this accord, governors from both parties have joined together and committed themselves to a clean energy future. Our goal is to clean up the air and protect our natural resources," Edmund G. Brown, Jr., governor of California, said in a statement.

Clean energy and the environment is a hot topic right now. In August 2015, President Obama unveiled his Clean Power Plan, which will look to reduce pollution from power plants in the United States. Last week the initiative was dealt a blow when Supreme Court "stayed implementation of the Clean Power Plan pending judicial review," according to the Environmental Protection Agency.

The Governors' Accord comes several months after an historic global agreement was reached at the COP21 summit in Paris. There, world leaders from 195 countries agreed to limit global warming to "well below" two degrees centigrade.

Commenting further on the Accord, Michigan's governor, Rick Snyder, said it was a "great collaborative effort... This partnership will help us further adapt and identify best practices as we work to make energy more affordable, reliable and environmentally protective."

<http://www.cnn.com/2016/02/17/governors-sign-bipartisan-green-accord.html>

Renewables to Get a Boost From 17 U.S. Governors in Joint Plan

By: Joe Ryan
Bloomberg
February 16, 2016

Clean energy is going to be jointly promoted by 17 U.S. governors who say renewables have become key economic drivers for their states.

The governors, including four Republicans, have agreed to work together to better incorporate wind and solar into the electric grid, lobby the federal government for research and development money and undertake other joint efforts, California Governor Jerry Brown, a Democrat, said in a conference call Tuesday. Other states that signed the agreement include Nevada, New York and Massachusetts.

The deal doesn't require states to cut emissions, nor is it an attempt to replace President Barack Obama's Clean Power Plan, which was suspended last week by the U.S. Supreme Court. Rather, the governors said it was an initiative to promote clean energy as the industry has become an increasingly important source of jobs.

"This is a robust driver of economic growth, not a break on economic growth," said Washington State Governor Jay Inslee, a Democrat.

<http://www.bloomberg.com/news/articles/2016-02-16/renewables-to-get-a-boost-from-17-u-s-governors-in-joint-plan>

Nevada's Sandoval, 16 other governors announce clean energy, transportation agreement

By: Cy Ryan and Associated Press
The Las Vegas Sun
February 16, 2016

CARSON CITY — A coalition of 17 governors, including Nevada Gov. Brian Sandoval, have joined to promote clean energy and transportation and to build a better electrical grid. Govs. Jay Inslee of Washington, Jerry Brown of California and Sandoval conducted a telephone news conference to announce the Governors' Accord for a New Energy Future.

The governors intend to work together on energy planning and policies. The accord says the goal is to expand participating states' economies while protecting citizens' health and the environment. Brown talked about a regional grid for states to share green energy resources, and Sandoval said Nevada is building a line to transfer excess renewable energy to California. Inslee said research on batteries to store excess energy is important.

Brown said the states want to "bypass the bureaucracy in Washington" but that the coalition could lobby the federal government for more funds. "We believe that this is a robust driver of economic growth, not a brake on economic growth," Inslee said.

The governors purposely avoided mentioning the divisive issue of climate change and instead concentrated on how states can cooperate, Brown said. He said that includes building more sophisticated, energy-efficient regional electrical grids; pooling buying power to get cheaper clean-energy vehicles for state fleets; and lobbying the federal government for more research and development on energy storage, clean fuels and the electric grid.

Other participating governors are from Connecticut, Delaware, Hawaii, Iowa, Massachusetts, Michigan, Minnesota, New Hampshire, New York, Oregon, Pennsylvania, Rhode Island, Vermont and Virginia.

Senior advisers of the governors expect to meet soon to discuss the initial steps to meet the goals.

<http://lasvegassun.com/news/2016/feb/16/nevadas-sandoval-16-other-governors-announce-clean/>

17 US Governors Agree to Build Clean Energy Future

By: UN Climate Change Newsroom

United Nations Framework Convention on Climate Change

February 18, 2016

Seventeen US governors have agreed to jointly pursue clean energy goals, including better energy efficiency and higher rates of renewable energy, modernizing the electricity grid and promoting electric and alternatively fueled vehicles.

The governors' Accord for a New Energy Future makes an economic case for expanding cooperation between states on renewable energy by supporting the growth of innovative US companies.

The document cites extreme weather events including sea-level rise, droughts, floods and wildfires as reasons to increase resilience of existing electrical grids and the overall US economy with the help of improved energy efficiency and renewable energy from sources such as wind, solar, hydro and geothermal.

The new agreement comes in the wake of last week's Supreme Court ruling that put a hold on the US Environmental Protection Agency Clean Power Plan for greenhouse gas emissions from power plants.

It also comes in the wake of growing climate action on the part of regions around the world.

Last year, California's Governor Jerry Brown convened international leaders from 11 other states and provinces, collectively representing more than \$4.5 trillion in GDP and 100 million people, to sign an agreement to limit the increase in global average temperature to below 2 degrees Celsius.

The agreement, called the Under 2 MOU, provides a template for other states and provinces and played a major role in building momentum for an effective outcome of the UN Climate Change Agreement in Paris last December.

<http://newsroom.unfccc.int/unfccc-newsroom/17-us-governors-aim-for-clean-energy-future/>

Governors Launch a New Offensive in the Fight for Clean Energy

By: Julian Spector
The Atlantic City Lab
February 17, 2016

You don't have to care about climate change to want more clean energy.

That's the message a group of 17 Republican and Democratic governors sent by signing the Accord for a Clean Energy Future on Tuesday. The agreement, which calls for states to work together to modernize their power grids and expand wind and solar energy, doesn't even mention the phrase "climate change." Instead, it touts a slew of other motivations for a greener grid: new jobs, grid resilience, less air pollution, and more choice for consumers. By focusing specifically on the economic benefits of locally sourced clean energy, state-level advocates hope to sidestep the partisan rancor over climate change that has stymied clean policies at the national level.

California Governor Jerry Brown, one of the signatories, said in a call with reporters that the genius of the accord is its ability to appeal to governors of different political philosophies.

"We think we can make major strides forward and bypass all the bickering in Washington, where you see this very toxic partisanship," he said. "We're going to leave that behind and work on what we can work on, and that's the renewable energy accord."

The announcement came a week after the Supreme Court put a hold on President Barack Obama's new clean-energy regulations until the courts weigh in, which could take a few years. With federal government stuck in the mud, some states see a chance to lead the way for themselves. That's fitting, because clean energy ultimately happens at the local level: on rooftops, in community solar gardens, at utility-scale wind and solar plants. Local knowledge matters for choosing the right incentives to adopt clean energy, and states have been experimenting with these approaches for years. For instance, California's clean energy policies have carried it to dominance, with more utility-scale solar than every other state combined.

States can go further down this road by working together, Brown said. Specifically, he said he hopes states can team up for bulk purchases of zero-emission or highly efficient fleet vehicles, lobby the federal government for more research and development funding, and build a sophisticated regional grid for sharing the surplus power that arises when renewables gain a larger share of the energy portfolio.

The governors' messaging could be effective in several ways. Some people will certainly respond to calls to sacrifice for the sake of the environment, but many more speak the language of local jobs and saving money. More importantly, the governors are ditching the language of sacrifice altogether, proposing clean energy as strictly a matter of gains. For Nevada Governor Brian Sandoval, a Republican, this means jobs and revenue coming from the massive

new Tesla battery factory opening near Reno. This neatly anticipates the standard coal and oil industry attacks that clean energy is a war on jobs: coal may be on its way out, but the clean power sector is booming.

Polling data back up this approach. Support for acting against climate change varies markedly based on political affiliation in the U.S., but clean energy manages to evade some of the partisan rancor, says Warren Leon, executive director of the Clean Energy States Alliance. A UT Austin poll from last fall found 52 percent of respondents would favor a candidate who wants to reduce coal usage, but 62 percent would favor a candidate who wants to force utilities to draw more power from renewable sources.

“Different states have different reasons for why they want to support clean energy,” says Leon, whose organization works with state governments on clean energy policy. “They don’t necessarily always agree on the reason for having that goal, and that’s OK, because it allows states to all move forward together while putting aside some of the issues that may be more politically contentious.”

Of course, the initial group of governors have been enthusiastically pursuing clean energy already. Almost all of them are supporting Obama’s Clean Power Plan in court. The outlier is Michigan, where the attorney general is suing the plan even though the governor decided to comply. We’ll see, in time, if their message sways other states that have resisted an energy transition. The accord could also draw flack from environmental groups for ceding the climate change debate to its detractors instead of linking it to the bevy of economic benefits from clean tech investment.

If the message sticks, though, this economic pragmatism could write the script for future clean energy advocacy. At the very least, the strength in numbers will give renewables advocates more of a say in how the country plans for the future of its grid.

<http://www.citylab.com/politics/2016/02/states-accord-for-a-clean-energy-future-governors-solar-wind-power-climate-change/463047/>

March 8, 2016

BICEP Members:

Annie's Inc.
Aspen Skiing
Company
Autodesk
Aveda
Avon Products
Ben & Jerry's
Burton Snowboards
CA Technologies
Clif Bar
Dignity Health
eBay Inc.
Eileen Fisher
Gap Inc.
General Mills
IKEA USA
JLL
KB Home
Kellogg Company
Levi Strauss & Co.
L Brands
L'Oreal
Mars Incorporated
Nestle
New Belgium
Brewing
Nike, Inc.
The North Face
Outdoor Industry
Association
Owens Corning
Patagonia
Portland Trail
Blazers
Seventh Generation
Starbucks
Stonyfield Farm
Symantec
Timberland
Unilever
VF Corporation
Vulcan, Inc.

Governor Charlie Baker
Governor Terry E. Branstad
Governor Edmund G. Brown, Jr.
Governor Kate Brown
Governor Andrew M. Cuomo
Governor Mark Dayton
Governor Maggie Hassan
Governor David Y. Ige
Governor Jay Inslee

Governor Dannel P. Malloy
Governor Jack Markell
Governor Terence R. McAuliffe
Governor Gina M. Raimondo
Governor Brian Sandoval
Governor Peter Shumlin
Governor Rick Snyder
Governor Tom Wolf

Dear Governors:

As a coalition of 38 major companies across the United States, Business for Innovative Climate and Energy Policy (BICEP) applauds your leadership in advancing the transition to a clean energy economy by signing the recent Governors' Accord for a New Energy Future.

BICEP members recognize the importance of addressing climate change and the opportunities presented by transitioning to a low-carbon economy. We agree that deploying renewable, efficient energy solutions can help make our economy more productive and resilient, and we are encouraged to see the governors of seventeen states banding together to address the realities of a changing climate and the potential of clean-energy solutions.

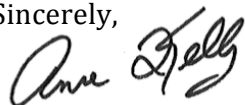
Given the clear market signals afforded by the recent Paris climate agreement and the falling prices of wind and solar, harnessing clean energy makes economic sense. BICEP members and other leading businesses are increasingly looking for opportunities to expand renewable energy and energy efficiency investments. Access to clean energy resources is often a factor when companies choose to grow their business.

Your participation in the Governors' Accord for a New Energy Future sends a clear signal to businesses and investors that your state is committed to investing in the clean-energy economy and providing a higher quality of life and a better future for its citizens.

We encourage you to continue championing policies that spur the adoption of clean energy, encourage innovation and clean energy investment, and deliver the high-quality jobs that ensure our nation's economy will thrive for generations to come.

Thank you for your continued leadership.

Sincerely,



Anne Kelly
Director, Business for Innovative Climate & Energy Policy (BICEP)

RECEIVED

MAR 14 2016

Office of the Governor



Geothermal Exchange Organization

312 South 4th Street • Springfield, IL 62701

Douglas A. Dougherty • President and Chief Executive Officer

March 3, 2016

Governor Jay Inslee
Office of the Governor
P.O. Box 40002
Olympia, WA 98504-0002

RE: Governors' Accord for a New Energy Future

Dear Governor Inslee,

The Geothermal Exchange Organization (GEO)—the national trade association for the geothermal heat pump industry—was pleased to learn on Feb. 16 that the governors of 17 states including Washington formed the Governors' Accord for a New Energy Future.

As you work together on planning and policies to develop clean energy alternatives to create a better environment and a greener economy, GEO urges you to consider programs to promote geothermal heat pumps (GHPs).

GHPs transfer free, renewable heat stored in the surface of the earth to buildings in winter and back to the ground in summer. In doing so, GHPs offer significant savings in energy use and emissions.

Tapping the earth's energy, GHPs reduce power consumption and eliminate fossil fuels onsite. GHPs cut pollution while helping to level utility demand loads. Best of all, this easily scalable technology is widely available and proven efficient in all states.

GHPs are recognized by both the U.S. Department of Energy (DOE) and the U.S. Environmental Protection Agency (EPA) as the single most efficient heating and cooling technologies for buildings of all sizes and purposes. They offer a unique combination of both renewable energy and efficiency offsets that can help your state and the coalition achieve their emission reduction targets.

According to DOE, buildings are the largest single sector of energy consumption, accounting for over 40% of national primary energy use in 2010. And 60% of the energy used in buildings is for "thermal loads," including space heating, cooling and water heating. A third of that load—3.2 quadrillion BTUs—is satisfied with electricity.

Phone (217) 414-0341

Email Doug@geoexchange.org

Website www.geoexchange.org

EPA says that GHPs can reduce energy consumption—and corresponding emissions—up to 44% compared with conventional air-source heat pumps, and 72% compared with electric resistance heating with standard air-conditioning equipment. Recent advancements in GHP efficiencies only enhance the numbers noted by EPA.

More importantly, says DOE, “The biggest benefit of GHPs is that they use 25% to 50% less electricity than conventional electric heating or cooling systems. This translates into a GHP using one unit of electricity to move three units of heat from the earth.”

GEO believes that the lowest cost—and least polluting—unit of energy is one that is not used. A typical 3-ton residential GHP can reduce summer peak electricity demand by ~ 2 kilowatts. Take that times 500 homes equipped with GHPs, and you have a peak power demand reduction of a megawatt.

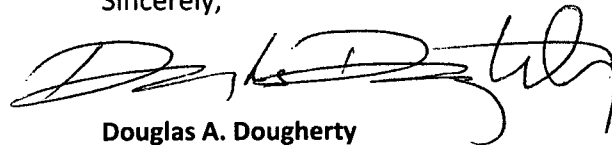
For electric utilities and the transmission grid, GHPs reduce summer peak demand and actually build load (and power sales) during the winter. In doing so, GHPs smooth out the power demand curve, saving utilities and ratepayers money while stabilizing the electrical system. Not only that, GHPs replace heating and cooling systems that rely on polluting natural gas, propane and fuel oil. Elimination of such onsite fossil fuel use can offer an important offset to power plant emissions.

Thermal energy—not just generated electricity—must be part of any equation seeking answers to the total contributions of clean energy options. GEO asks that your state think beyond electricity production to the role that thermal energy savings can play in avoided energy use. That includes renewable thermal energy technologies like GHPs as a way to avoid power generation and therefore cut pollution.

GEO hopes Washington will strongly consider promoting new and/or expanded state and utility sponsored efforts to help homeowners and businesses install geothermal heating and cooling systems to reducing power plant emissions.

Thanks for your consideration. If you have any questions, please contact me.

Sincerely,



Douglas A. Dougherty

President and CEO

GEO – The Geothermal Exchange Organization

Phone (217) 414-0341

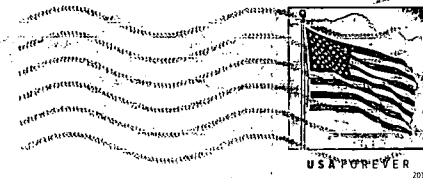
Email doug@geoexchange.org

cc: Michael Furze, Assistant Director
Washington State Energy Office

Geothermal Exchange Organization
312 S. 4th St.
Ste. 100
Springfield, IL 62701

SPRINGFIELD IL 627

10 MAR 2016 PM 1 T



Governor Jay Inslee
Office of the Governor
P.O. Box 40002
Olympia, WA 98504-0002

985040002





RECEIVED

MAR 04 2016

Office of the Governor

March 2, 2016

The Honorable Jay Inslee
Governor of Washington
Legislative Building
416 Sid Snyder Avenue, SW
Olympia, WA 98504-0002

Dear Governor Inslee:

ITC Holdings Corp. applauds your initiative in joining with fellow state leaders to form the Governors' Accord for a New Energy Future. It has never been more important to embrace new technologies and ideas that will strengthen the American economy, advance our domestic energy mix, and ensure we have the needed infrastructure in place to support this vision.

As the nation's largest independent electricity transmission company, ITC has a demonstrated track record of working alongside like-minded companies, organizations, and policy-makers to strengthen the electricity grid. We operate in seven states across the Midwest and Great Plains and have deep expertise when it comes to coordinating and collaborating on large-scale energy projects across state lines.

Like you, we believe a durable and resilient infrastructure is crucial to meet the challenges and opportunities that lie ahead, and needs to be part of the energy conversation. The grid today is stressed as a result of a variety of factors: decades of historical underinvestment, changing generation mix, new technologies coming online, increased security demands, evolving reliability standards, severe weather, and consumers' demands for lower prices and greater capability.

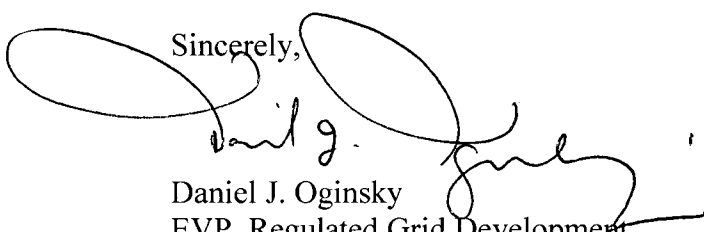
As an independent transmission company, our focus is to facilitate more efficient and functional wholesale market interactions without discriminating in what we connect to our systems, resulting in:

- Maximum flexibility: A modern grid provides optionality that facilitates the connection of new technologies to address changing policy considerations, a variety of fuel sources including renewables, micro grids, and energy efficiency programs – all while providing access to a competitive wholesale energy market.
- Greater resilience: The grid of the future will be more resilient, able to withstand or mitigate the impacts of weather or human-related challenges.

It also is important to note that transmission development is a source of job creation and economic growth that keeps America competitive in the global market. For every \$1 billion in transmission investment, on average 12,500 job-years are created and roughly 29.44 jobs are created for each mile of transmission built.¹ With appropriate investments, a more robust electric grid will prevent blackouts and brownouts, saving American businesses \$126B and households \$71B² by 2020.

We look forward to participating in the important conversation that you have started and hope that our planning and operational expertise can support your effort. ITC stands ready to work alongside the Governors' Accord for a New Energy Future as we collectively build a 21st Century power grid as the foundation for a strong America.

Sincerely,



Daniel J. Oginsky
EVP, Regulated Grid Development
ITC Holdings Corp.

Enclosure: ITC Fact Sheet

cc: David Postman, Chief of Staff

¹ California Clean Energy Future Study on Job Impact, January 2012.

² Failure to Act – The Economic Impact of Current Investment Trends in Electricity Infrastructure, The Economic Research Group, Inc., Copyright ©2011 by the American Society of Civil Engineers, p 9.

ITC Holdings Corp.



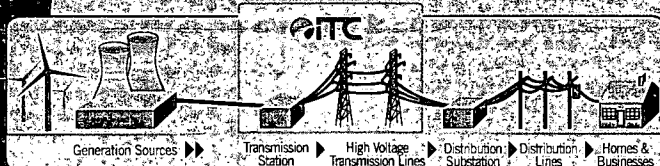
WHO WE ARE:

We are the nation's largest independent electricity transmission company – owner and operator of transmission systems in seven states.

ITC's calling card is operational excellence, turning low-performing systems into top-tier reliability success stories. We leverage our planning, engineering and regulatory expertise to create a 21st century grid.

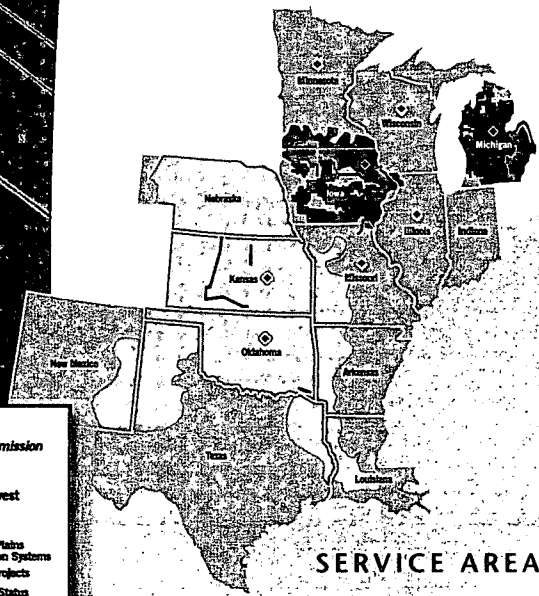
OUR CAPABILITIES:

- Own and operate transmission infrastructure
- Build greenfield transmission projects that solve energy challenges
- Partner with local utilities
- Tie generation to the grid
- Develop contracted transmission projects
- Acquire and integrate transmission systems



WHAT IS TRANSMISSION?

Transmission is the bulk delivery of electrical energy from power generating plants along high voltage lines to the local distribution systems of utilities serving communities.



QUICK FACTS:

- Established in 2003
- Operates in seven states: Michigan, Iowa, Kansas, Oklahoma, Illinois, Minnesota, Missouri; utility status and pending project in Wisconsin
- Member of four Regional Transmission Organizations: Midcontinent ISO, Southwest Power Pool, PJM Interconnection, New York ISO
- System-peak load: ~26,000 MW
- Transmission circuit miles: ~15,600
- Stations and substations with ITC assets: ~560
- Workforce composed of approximately 600 employees and 500 skilled labor contractors
- ITC's transmission systems routinely perform among the top 25% of utilities nationally for reliability, according to the SGS Statistical Services Transmission Reliability Benchmarking Study, a national benchmark. This is a true reflection of our ongoing investments and focus on maintaining the grid.

FINANCIAL DATA

Year ended December 31, 2015

Operating Revenues:	~\$ 1.0 billion
Capital Investments:	~\$ 771 million
Net Property, Plant & Equipment:	~\$ 6.1 billion
Total Assets:	~\$ 7.6 billion

BUILDING AMERICA'S ENERGY FUTURE

ITC's mission is to build a 21st Century electricity grid that will:

- Enable a more clean and diverse energy mix
- Ensure reliable electricity supply
- Lower electricity costs for homes and businesses
- Improve the security of vital power infrastructure
- Grow the U.S. economy

877.ITC.1TC9
(877.482.4829)
itc-holdings.com

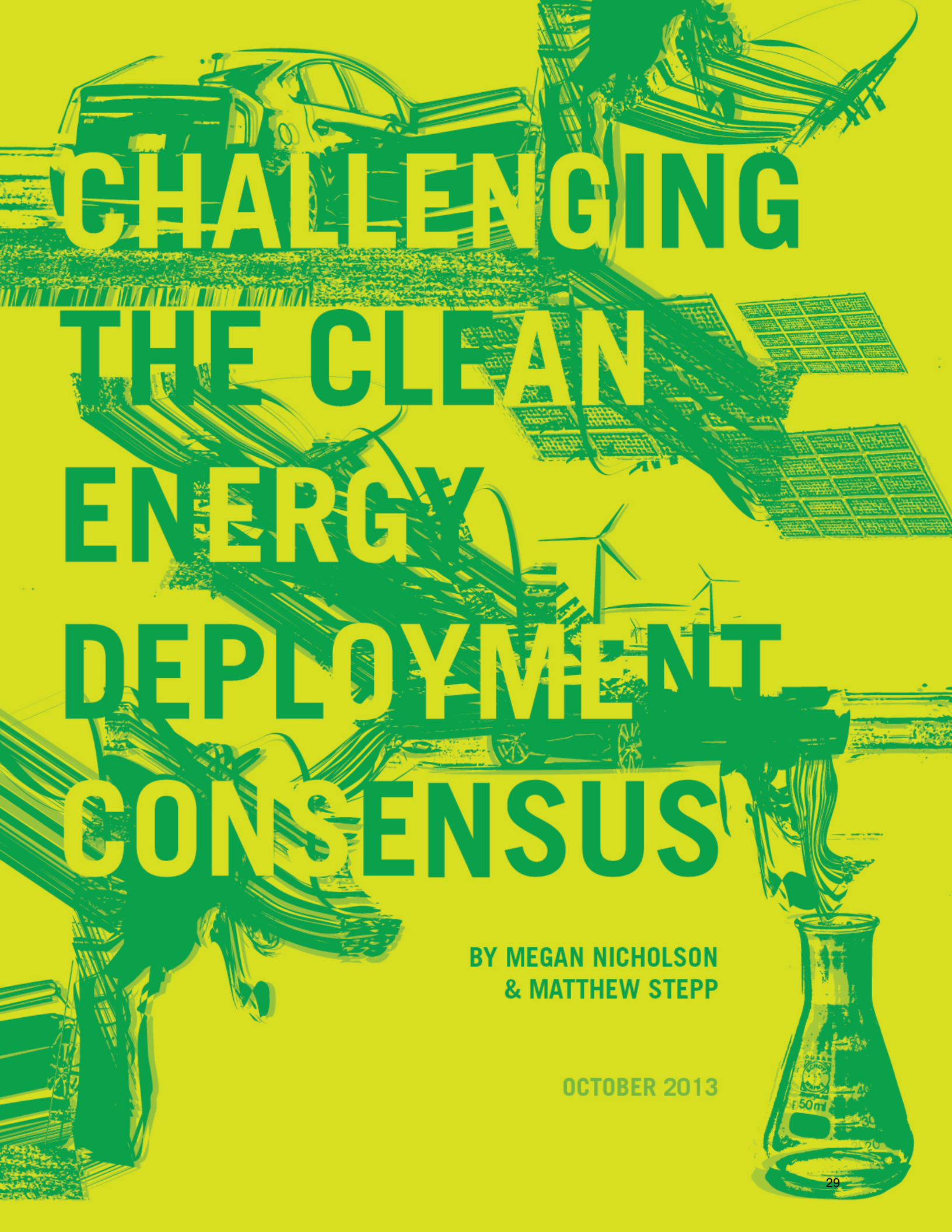
Facebook: ITHoldingsCorp
Twitter: @ITCGrid
YouTube: ITHoldings



ITC HOLDINGS CORP.
27175 Energy Way • Novi, MI 48377

The Honorable Jay Inslee

we're your energy superhighway



CHALLENGING THE CLEAN ENERGY DEPLOYMENT CONSENSUS

BY MEGAN NICHOLSON
& MATTHEW STEPP

OCTOBER 2013

EXECUTIVE SUMMARY

Most clean energy advocates believe that the world has all the low-carbon technologies needed to effectively address climate change. In their view, we don't need technology breakthroughs; we need political breakthroughs that will establish regulatory mandates, subsidies for clean energy, and taxes on "dirty energy" that will drive widespread deployment of clean energy technologies. Unfortunately, this widely held "Deployment Consensus" is largely misguided: existing technologies still cost more, often substantially more, than fossil fuels, while exhibiting sub-optimal performance. Only when clean energy is cheaper than fossil fuels will it be massively deployed globally because countries, companies, and individuals will want to adopt it—not out of civic mindedness, but out of self-interest. And the only way for that to happen is through a robust global clean energy innovation strategy.

The Deployment Consensus is pervasive among environmentalists and climate advocates who contend that the urgency of climate change necessitates rapid deployment of existing renewable energy technologies. Citing a number of studies projecting the necessary scale-up of renewable energy capacity nationally and globally, supporters of the Deployment Consensus claim to have evidence that existing clean energy technologies can in fact meet total energy demand within the next 20 to 40 years. In fact, a careful analysis of these studies identifies four key problems with the Deployment Consensus interpretation of the literature:

- The Deployment Consensus downplays significant and possibly infeasible renewable power generation capacity scale-up in order to meet projected energy demand, often ignoring the high costs of infrastructure and systems changes the studies claim are needed.
- The Deployment Consensus overlooks or misrepresents persistent storage and integration challenges that will pose significant costs to consumers at high levels of renewables penetration.
- Some of the reviewed studies limit the technology options of a renewable future to wind, solar, and water resources, instead of incorporating other low- and zero-carbon solutions into the projections to maximize cost-effectiveness.
- The Deployment Consensus interpretation of the studies generally assumes that regulations and incentives are appropriate policy tools for encouraging the adoption of renewable energy technologies, and that these policies will likely induce the innovation necessary for a renewable future over time.

While Deployment Consensus advocates are correct to assume climate change is one of the most significant challenges of this century and action is needed now, the suggested costly—and in many cases infeasible—approaches to quickly mitigating the problem will not be effective in the short or long term for the simple reason that the world will not widely adopt more expensive energy sources or the policies needed to implement them, regardless of how loud the climate alarm bells are.

While Deployment Consensus advocates are correct to that we need urgent action on climate change, the idea that the world has all the clean energy technologies it needs is fundamentally wrong.

Rather, the key to mitigating climate change is to make clean energy cheap enough to replace conventional energy without mandates, subsidies, or carbon taxes. And the key to making this ideal a reality is to strategically invest in a comprehensive clean energy innovation ecosystem in the United States and internationally.

Unfortunately, most governments, including the United States, have prioritized policies supporting regulation and subsidies over clean energy innovation policies. Indeed, energy innovation policy—basic science, research and development, demonstration, prototyping, and “smart” deployment—is weakly supported in most nations, including in the United States. One key reason for this is that the dominant Deployment Consensus neglects the need for innovation and innovation policy at worst, or pays lip service for innovation at best. To the extent that the Deployment Consensus acknowledges the need for better technology, it emphasizes support for deployment alone as an innovation strategy; deploying more, they claim, will be enough to get clean energy cheaper than fossil fuel. But this assumption ignores the complexities of clean energy innovation. While deployment policies can incrementally lower costs of existing technologies, obtaining the dramatic cost declines necessary to make clean energy as cheap as fossil fuels requires an innovation strategy that invests throughout the innovation ecosystem, with a particular focus on significantly more funding for applied clean energy research. Policies supporting deployment can help support innovation, particularly if these policies tie the deployment of next-generation, breakthrough technologies to cost and performance improvements, called “smart” deployment. In short, advancing globally cost-competitive clean energy solutions to climate change requires a shift from a Deployment Consensus to an Innovation Consensus.

Building a new innovation consensus for climate and energy policy will not be simple, but it will be significantly easier than convincing nations to spend trillions of dollars more on high-cost clean energy than they would otherwise on “dirty” energy, if for no other reasons than nations want to build competitive clean energy industries. This goal would be even more accessible if environmental and climate advocates put their considerable political weight behind an innovation agenda. The report concludes with a number of recommendations for creating an innovation-driven energy policy strategy aimed at making a clean energy future a reality, including:

- Increase public investments in research, development, and demonstration globally. In the United States this would mean tripling existing investment to \$15 billion annually.
- Create dedicated revenue streams to support public investment in energy innovation, such as through a carbon tax and/or re-directing revenue from oil and gas drilling on federal lands.
- Reform national laboratory systems to better support clean energy innovation. In the United States the Department of Energy National Laboratory system needs to better link federally funded research to the market to accelerate commercialization.

-
- Enact policies that address the “valleys of death” by strengthening regional energy innovation ecosystems and improving government clean energy demonstration and prototyping programs.
 - Increase government procurement of next-generation clean energy technologies. In the United States this can be done through agencies such as the Department of Defense and the General Services Administration.
 - Reform deployment incentives so that cost reductions and performance improvements are a prerequisite for obtaining incentives.

STATE AND LOCAL RESOURCES FOR A CLEAN ENERGY FUTURE

Winter 2016



ENERGY EFFICIENCY AND RENEWABLE ENERGY

is a win-win-win for state and local governments. Investing in clean energy creates **vibrant** and **healthy communities**, provides a **secure, reliable and resilient source of energy** for homes and businesses, and produces well-paying, local jobs. As centers for innovative policies and programs, **state and local governments are valued partners** to the Department of Energy (DOE). And they are critical to powering the nation's economic engine with clean energy.

One of DOE's primary forums for engaging state and local governments is the Office of Energy Efficiency and Renewable Energy's (EERE) **Weatherization and Intergovernmental Program Office** (WIP). WIP strategically coordinates with state and local leaders to accelerate the adoption of energy efficiency and renewable energy technologies and best practices. These partnerships help American communities, businesses, and industries overcome barriers to a viable clean energy economy. In particular, WIP is responsible for administering the **Weatherization Assistance Program** and the **State Energy Program**. WIP also helps state and local governments meet their energy goals by sharing resources, peer learning opportunities, and best practices on the **State and Local Solution Center**.

On the following pages, you will find resources organized into **four action areas**:

- **Develop a Clean Energy Plan**
- **Design and Implement Clean Energy Programs**
- **Pay for Clean Energy**
- **Access and Use Energy Data**

You will also find four targeted opportunities for impact in your jurisdiction, and information regarding initiatives and resources in the areas of **renewable power, sustainable transportation, and energy-saving homes, buildings, and manufacturing**.



Contact us

stateandlocal@ee.doe.gov

WIP.energy.gov/solutioncenter

TAKE A CLOSER LOOK

ENERGY SAVINGS PERFORMANCE CONTRACTING

1 Energy Savings Performance Contracting (ESPC) is a **budget-neutral** strategy that can help public sector organizations mobilize clean energy projects despite limited budgets. ESPC projects have the potential for significant energy savings:

- A typical ESPC project in the MUSH (municipalities, universities, schools, and hospitals) market **saves approximately 13% to 31% annually** compared to its baseline consumption
- Total estimated **annual energy savings potential** in the MUSH market: **199.5-262.3 trillion BTU**

More than 20 state and local partners are working closely with DOE to catalyze public sector **energy efficiency investments of \$2 billion** and apply best practices to enhance energy savings performance contracts.

For more information on these efforts, visit <http://energy.gov/eere/slsc/espcc>

BENCHMARKING AND TRANSPARENCY POLICIES AND PROGRAMS

2 Buildings account for **40 percent** of the total energy used in the U.S., and potential savings of about **\$80 billion annually** in energy costs.

Benchmarking building energy use is the foundation of **smart energy management** and a **best practice** in the real estate industry. Benchmarking measures energy use of a building and compares its performance to similar buildings. This information helps building owners identify savings opportunities and track the results of their energy efficiency efforts over time.

State and local governments are increasingly benchmarking their own buildings as standard practice and **encouraging the private sector** to do the same through voluntary programs and mandatory policies. **Twenty-two** cities have recently **worked with their utilities and DOE** to develop best practice approaches for **streamlining data access** for benchmarking

For more information, visit <http://energy.gov/eere/slsc/benchmarking>

HIGH PERFORMANCE STREET AND OUTDOOR LIGHTING

3 Outdoor lighting **consumes a significant amount of energy—about 1.3 quadrillion Btu annually—**costing about **\$10 billion per year**.

In the last five years, municipalities have switched to new LED technologies, which can **reduce energy costs by approximately 50%** over conventional lighting technologies and provide **additional savings of 20% to 40%** with advanced lighting controls.

In addition, LED lights reduce carbon emissions, reduce light pollution, and improve nighttime safety in public spaces.

To see tools DOE has developed to assist public and private organizations, visit <http://energy.gov/eere/slsc/outdoor-lighting>

ENERGY EFFICIENCY SAVINGS OPPORTUNITIES AND BENEFITS

4 **Energy efficiency** could **save** consumers and businesses **up to 1 billion MWh of electricity** by 2030, and bring cost savings, economic development, affordability, reliability, and other air quality and environmental benefits to the U.S. With these benefits, efficiency can be used to help meet state, local, and corporate climate and energy strategies, goals, and air regulations.

An important step for most energy efficiency planning efforts involves **identifying and quantifying savings opportunities**. DOE has developed numerous resources that show economic **energy efficiency potential nationally and state-by-state**, along with information that speaks to diverse audiences about the opportunities, and technical resources to support understanding the **energy and carbon savings from efficiency**.

To access these resources, visit <http://energy.gov/eere/slsc/eeopportunities>

KEEP THE *conversation* GOING

- Sign up to receive the State and Local Spotlight WIP.energy.gov/solutioncenter
- Explore resources on the State and Local Solution Center <http://energy.gov/eere/slsc/explore>
- Check out Federal Funding for State and Local Clean Energy Programs <http://energy.gov/eere/wipo/federal-funding>
- Register for upcoming State and Local webinars WIP.energy.gov/solutioncenter
- Contact us for additional information or assistance: stateandlocal@ee.doe.gov



WIP.energy.gov/solutioncenter

TAKE ACTION

The State and Local Solution Center provides resources to advance successful, high-impact clean energy policies, programs, and projects for states and local governments across the country. By championing state and local leadership, addressing specific market barriers, and promoting standardized approaches, the State and Local Solution Center aims to help states and local governments take clean energy to scale in their communities. The resources are organized into four actions leaders can take to accelerate the transition to a clean energy economy:

DEVELOP A CLEAN ENERGY PLAN



Developing a long-term blueprint toward a clean energy future is a critical planning measure that assures sound energy management and accelerates the transition to a clean energy economy. Available resources include:

- [NASEO Statewide Comprehensive Energy Plans](#) – Energy plans from 38 states and DC establish a baseline of energy planning processes, plan elements, and market implications.
- [Guide to Community Energy Strategic Planning](#) – Introduces a step-by-step process for creating a robust strategic energy plan for your government and community that can help save money, create local jobs, and improve our national security.
- [Implementation Model: Municipal Action Plan for Sustainability in Cleveland](#) – See a local energy plan with proven results.

DESIGN AND IMPLEMENT CLEAN ENERGY PROGRAMS



State and local governments are uniquely positioned to advance clean energy goals through programs that leverage their roles as both facility/infrastructure owners and governing authorities. This section provides states and local governments with resources for designing and implementing effective clean energy programs to help achieve the goals put forth in their strategic energy plans. Available resources include:

- [Energy Audits and Retrocommissioning: State and Local Policy Design Guide and Sample Policy Language](#) – Provides guidance and sample policy language to help state and local governments enact and implement policies addressing energy assessments of or improvements to existing commercial buildings.
- [Operations and Maintenance Best Practices: A Guide to Achieving Operational Efficiency](#) – Highlights O&M programs targeting energy and water efficiency that are estimated to save 5% to 20% on energy bills.
- [Implementation Model: North Carolina's Utility Savings Initiative](#) – Outlines how the State of North Carolina designed and implemented a comprehensive energy and water management program.



PAY FOR CLEAN ENERGY

An important component of a clean energy strategy is finding a way to pay for key energy initiatives. Many state and local governments have found ways to use both innovative financing mechanisms as well as traditional finance tools to support their strategic energy goals. Some of these mechanisms include bonding tools, Energy Savings Performance Contracting, on-bill finance, and PACE, among others. Available resources include:

- [Implementation Model: Milwaukee's Property Assessed Clean Energy \(PACE\) Program](#) – Details Milwaukee's policy, planning and partnership efforts to set up their PACE program.
- [Energy Investment Partnerships: How State and Local Governments are Engaging Private Capital to Drive Clean Energy Investment](#) – Outlines how state and local governments have created partnerships to leverage private funds to invest in the jurisdictions' clean energy goals.
- [State and Local Energy Efficiency Action Network-Credit Enhancement Overview Guide](#) – Provides considerations for state and local policymakers and energy efficiency program administrators designing and implementing successful credit enhancement strategies for residential and commercial buildings.



ACCESS AND USE ENERGY DATA

Whether for a single building, campus, or municipality, any energy efficiency improvement or energy data management program should include activities such as benchmarking, establishing an energy baseline, and verifying and measuring results to identify impacts and effectiveness. The foundation for all of those actions is having access to your energy data. Available resources include:

- [Benchmarking and Transparency Policy and Program Impact Evaluation Handbook](#) – Provides both a strategic planning framework and standard methodologies to determine the energy and non-energy benefits of benchmarking and transparency policies and programs.
- [Fact Sheet: Benefits of Evaluation, Measurement, and Verification](#) – Summarizes the benefits of performing evaluation, measurement, and verification activities.
- [A Utility Regulator's Guide to Data Access for Commercial Building Energy Performance Benchmarking](#) – Offers policy options and considerations to state utility commissions in providing access to energy use data to help commercial customers manage energy costs through building energy benchmarking.

ENGAGING WITH EERE

The Office of Energy Efficiency and Renewable Energy (EERE) works with states and local governments to accelerate deployment of energy efficiency, renewable energy, and sustainable transportation technologies and market-based solutions. States and local governments can draw on EERE's [education and workforce development activities](#) to build a technical staff to support market deployment and enhance economic vitality.

EERE cross-cutting initiatives such as the [Better Buildings Initiative](#), [SEE-Action Network](#), and [Cities-LEAP](#) provide state and local decision-makers technical assistance and resources to lead in clean energy innovation.

Below are a few examples of EERE initiatives and resources for state and local governments in the areas of energy efficiency, renewable energy, and sustainable transportation. To learn more about these areas and other opportunities, visit the [State and Local Solution Center](#).

RENEWABLE POWER



SOLAR

- [Race to 7-Day Solar](#) is a competition to slash the time it takes to go solar by 75% by motivating communities, solar companies, and utilities to work together to streamline the process.



GEOTHERMAL

- [Regulatory and Permitting Information Desktop Toolkit for Geothermal](#) is a suite of tools to facilitate efficient permitting of new geothermal projects at the federal, state, and local levels.



WIND

- [WINDEXchange](#) is a hub that helps communities weigh the benefits and costs of wind energy, understand the deployment process, and make wind development decisions.



WATER

- [Water Power Resource Assessment and Characterization](#) webpage offers reports and maps that assess the technically recoverable energy available in the nation's waterways and oceans.

ENERGY-SAVING HOMES, BUILDINGS, & MANUFACTURING



BUILDINGS

- [Standard Energy Efficiency Data Platform](#) allows cities and states to streamline the complex process of standardizing disparate building energy data. Users can combine, clean, store, compare, and share large amounts of building data from multiple sources using this free open source database.



HOMES

- [Home Energy Score](#) is a national standardized tool that state and local governments can use to collect building energy-related metrics to inform energy goals and milestones, demonstrate sustainability leadership, and guide energy-related investments.



ADVANCED MANUFACTURING

- [Industrial Assessment Centers](#) provide no-cost technical assistance to small- and medium-sized municipal waste and water utilities by helping them identify ways to reduce energy and water use and increase productivity.

SUSTAINABLE TRANSPORTATION



VEHICLES

- [Clean Cities](#) supports public-private coalitions dedicated to minimizing petroleum use in transportation.



BIOENERGY

- [Integrated Biorefineries Interactive Map](#) showcases biorefineries by state at pilot, demonstration, and pioneer scales.



HYDROGEN AND FUEL CELLS

- [H2USA](#) is a public-private partnership to reduce the barriers to hydrogen infrastructure and increase the widespread adoption of fuel cell electric vehicles.

Governor Edmund G. “Jerry” Brown Jr. – California

Edmund G. “Jerry” Brown Jr., was born in San Francisco on April 7, 1938. He attended both public and parochial schools, graduating from St. Ignatius High School in 1955. He completed freshman year at the University of Santa Clara before entering Sacred Heart Novitiate, a Jesuit seminary in August 1956. In 1960, he left the Society of Jesus and enrolled at the University of California at Berkeley. He received his B.A. degree in Classics the next year and then entered Yale Law School, where he graduated in 1964.

Following law school, Brown worked as a law clerk at the California Supreme Court, traveled and studied in Mexico and Latin America and then took up residence in Los Angeles, working for the prestigious law firm, Tuttle & Taylor. In 1969, Brown was elected to the Los Angeles Community College Board of Trustees, placing first in a field of 124. In 1970, he was elected California Secretary of State. Brown was elected Governor in 1974 and reelected in 1978, by a margin of 21%.

After his governorship, Brown lectured widely, and spent many years working in local government before being elected California’s Attorney General in 2006. Brown was elected to a third term as Governor in 2010.

Governor Dannel P. Malloy – Connecticut

Dannel P. Malloy is serving the people of Connecticut for a second term as Governor. Since 2011, his administration’s top agenda items have included creating jobs, improving public education, stabilizing the state’s finances, making long-overdue investments in the state’s transportation infrastructure, and protecting the environment. Malloy graduated Magna Cum Laude from Boston College and continue on to Boston College Law School. After graduation, he became a prosecutor in Brooklyn, New York, serving for four years as an Assistant Attorney and winning 22 convictions in 23 felony cases.

Malloy has taken every opportunity to preserve and protect Connecticut’s environment. Recognizing that energy and the environment are inextricably linked, the Governor created the Department of Energy and Environmental Protection, and charged the agency with implementing the state’s first ever Comprehensive Energy Strategy. This strategy revolves around the mantra of “cleaner, cheaper and more reliable energy” and makes major investments in solar energy and other clean energy alternatives.

He has received honorary degrees from several higher education institutions, including the University of New Haven, the University of Saint Joseph, the University of Bridgeport, and Nichols College.

In 1982, he married his wife, Cathy, whom he met while they were students at Boston College. They have three sons, Dannel, Ben and Sam.

Governor Jack Markell – Delaware

Jack Markell has served as Governor of Delaware since 2009, and was re-elected in 2012. He is term-limited and will complete his time as Governor in January 2017. Prior to being elected Governor, Markell was elected three times as Delaware's State Treasurer, when he created the Delaware Financial Literacy Institute and its signature program, the Delaware Money School. Markell was born and raised in Newark, Delaware and graduated from Newark High School with his wife, Carla. He went on to receive an undergraduate degree in economics and development studies from Brown University and an MBA from the University of Chicago. Markell is a Henry Crown Fellow and a Rodel Fellow at the Aspen Institute.

Markell has promoted quality of life initiatives that include major investments in libraries and bicycle and walking paths. Delaware has moved from 31st to 3rd in the annual rankings of bicycle-friendly states by the League of American Bicyclists. Thanks to his statewide recycling initiative, Delaware has nearly doubled its recycling rate since 2006. The state also reduced dirty air emissions faster than any other state, serving as a national model for improving the environment through efforts that also boost the economy.

Markell has been recognized by his fellow governors, having been elected to serve as Chair of both the Democratic Governors Association and the National Governors Association. In that latter role he chose as his Chair's initiative A Better Bottom Line: Employing People with Disabilities.

Governor Y. David Ige – Hawai'i

Governor Ige was born and raised in Pearl City and is the fifth of six sons of Tokio and Tsurue Ige. Governor Ige attended public schools in Pearl City – Pearl City Elementary School, Highlands Intermediate School, and Pearl City High School. Governor Ige then attended the University of Hawaii at Manoa, where he earned a Bachelor of Science degree in Electrical Engineering.

Prior to being elected governor of Hawai'i, he served as Program/Project Manager with Robert A. Ige and Associates, Inc., Vice President of Engineering at NetEnterprise, and Project Engineer/Senior Principal Engineer at Pihana Pacific, which established the first world-class data center and carrier-neutral Internet exchange in Hawai'i and the Pacific.

Governor Ige began his political career in 1985 after being appointed by then Governor George Ariyoshi to fill a vacant seat in the Hawai'i House of Representatives. In 1994, then

Representative Ige was elected to the Hawai'i Senate where he represented his home district of 'Aiea / Pearl City until 2014. During his legislative career, Governor Ige served as the chairman of nine different committees which included the committees on Education, Health, and Ways and Means.

Governor Terry E. Branstad – Iowa

Governor Terry Branstad was born, raised and educated in Iowa. A native of Leland, Branstad was elected to the Iowa House in 1972, '74 and '76, and elected as Iowa's lieutenant governor in 1978.

Branstad was Iowa's longest-serving governor, from 1983 to 1999. As the state's chief executive, he weathered some of Iowa's worst economic turmoil, during the farm crisis of the '80s, while helping lead the state's resurgence to a booming economy in the '90s.

Following his four terms as governor, Branstad went on to serve as president of Des Moines University (DMU). During his 6-year tenure, he was able to grow the university into a world-class educational facility. Its graduates offer health care in all 50 states and in nearly every Iowa county. While there, he grew enrollment, increased the endowment and integrated new buildings, programs and initiatives.

In 2014, Iowans re-elected Branstad as Governor. In his first session after being re-elected, Gov. Branstad signed historic investments in Iowa's infrastructure into law. The result is significant investment in Iowa's roads and bridges, as well as the innovative Connect Every Acre Plan that will work to expand high-speed broadband internet to Iowa's agriculture industry, schools, businesses and homes.

Governor Charlie Baker – Massachusetts

Charlie Baker was inaugurated on January 8th, 2015 as the 72nd Governor of the Commonwealth of Massachusetts.

Elected in November of 2014 on a platform of making Massachusetts great for everyone, Governor Baker's arrival in the Corner Office continues a long, successful career in both the private sector and public service where he has worked hard to put the people of Massachusetts first.

As Chief Executive Officer of Harvard Pilgrim Health Care from 1999 to 2009, Baker led the company out of receivership to become the top healthcare plan in the country for member satisfaction and clinical effectiveness. During Baker's tenure, Harvard Pilgrim was named one of Boston Business Journal's "Best Places To Work" for seven years in a row.

Raised in Needham, Baker attended Massachusetts public schools and is a graduate of Harvard College. He went on to earn a Master's of Business Administration from the Kellogg Graduate School of Management at Northwestern University.

Governor Rick Snyder – Michigan

Rick Snyder was first elected as Michigan's 48th Governor in 2011. With the self-proclaimed moniker "one tough nerd," Governor Snyder has focused on making government more efficient and effective for Michigan's citizens. Raised in a Battle Creek home known for a strong work ethic and service to others, Governor Snyder's upbringing has aided in leading the state's comeback. A homemaker and a small business owner, his parents demonstrated the value of hard work.

After graduating the University of Michigan, he joined accounting firm PwC (formerly Coopers & Lybrand). There, he met his wife Sue. They are the proud parents of Jeff, Melissa and Kelsey. Following a successful career as partner at Coopers & Lybrand, Governor Snyder joined Gateway as President and COO. He later returned to Michigan to cofound an Ann Arbor-based venture capital fund.

The Governor's background as a successful job creator has helped him better serve Michigan, producing results that earned him 'Public Official of the Year' in 2014 from GOVERNING magazine.

In Governor Snyder's first term, Michigan created nearly 400,000 new private sector jobs. Today, Michigan's unemployment rate is at its lowest point in 14 years.

Governor Mark Dayton – Minnesota

Mark Dayton is Minnesota's 40th Governor. He was born in Minneapolis and raised in a house in Long Lake. Mark attended Long Lake Elementary School and Blake School in Hopkins. He loved hockey, and it was his childhood dream to be the starting goalie on the U.S. Olympic Hockey Team. He didn't make it, but he was named an All-State goalie his senior year in high school. He graduated, cum laude, from Yale University, where he also played Division I hockey.

After college, Mark taught 9th Grade general science for two years in a New York City public school. He still tells how it was the toughest job he ever had! It was here where he realized the terrible injustice that his students had so little, while he had been given so much; and he decided that he would devote his life to improving social equality and economic opportunity for all Americans.

For most of the past 37 years, Mark has served Minnesotans, as Commissioner of the Minnesota Departments of Economic Development and of Energy and Economic Development, as State Auditor, and as United States Senator. Mark currently serves on the Executive Committee of the National Governor's Association. In 2015, President Obama appointed Mark to serve on the Council of Governors, which is responsible for advising the Secretary of Defense, Secretary of Homeland Security, and the White House Homeland Security Council on matters related to the National Guard and civil support missions.

Governor Brian Sandoval – Nevada

Brian Sandoval was elected Governor of Nevada on November 2, 2010. He took the oath of office before Chief Justice Michael Douglas shortly after Noon on January 3, 2011. A member of the National Governors Association and the Western Governors Association, Sandoval serves as Vice-Chair of the NGA Education and Workforce Committee and as Vice-Chairman of the WGA. He is currently serving as Chair of the Education Commission of the States. Sandoval is a member of the Republican Governors Association and the Hispanic Leadership Network.

Governor Sandoval comes to his office after a long career in public service. He was appointed United States District Judge for the District of Nevada by President George W. Bush in October 2005, becoming the state's first Hispanic federal judge. He was elected Attorney General of Nevada in 2002.

Prior to his election as Attorney General, Sandoval served as a member and chairman of the Nevada Gaming Commission, which oversees Nevada's gaming industry. At age 35, Sandoval was the youngest person ever to serve as the state's chief gaming regulator. Before his Gaming Commission and Tahoe Regional Planning Agency ("TRPA") Governing Board appointments, Sandoval served two terms in the Nevada Legislature. As a legislator, he also served on the Nevada Legislative Commission, the Advisory Commission on Sentencing, the Juvenile Justice Commission, the Advisory Council on Community Notification of Sex Offenders and the Tahoe Regional Planning Agency Oversight Committee.

Governor Sandoval received his Bachelor of Arts degree from the University of Nevada in 1986 and his law degree from The Ohio State University Moritz College of Law in 1989.

Governor Maggie Hassan – New Hampshire

Governor Maggie Hassan was sworn in as the 81st Governor of New Hampshire on January 3, 2013. Hassan began her career in public service in 1999 when then-Governor Jeanne Shaheen asked her to serve on the Advisory Committee to the Adequacy in Education and Finance Commission. In 2004, Governor Hassan was first elected to the New Hampshire Senate, serving the people of the 23rd District, which included numerous Seacoast towns. During her six years in office, she was selected by her colleagues to serve as both President Pro Tempore and Majority Leader of the State Senate.

The Governor earned her B.A. from Brown University and her J.D. from the Northeastern School of Law. Governor Hassan and her husband, Tom, the former principal of Phillips Exeter Academy, are the proud parents of two children, Ben (27) and Meg (22). They live in Newfields along with the family dog, Honey Mae.

Governor Andrew M. Cuomo – New York

Prior to his election as Governor, Andrew Cuomo served four years as New York's Attorney General. As the state's top legal officer, he made restoring public trust in government and protecting New York taxpayers the top priorities of his administration.

As Attorney General, Andrew Cuomo brought national reform to the student loan industry, uncovered fraud within the largest health insurers in the country, protected investors from abuses on Wall Street, and made the Internet safer for children nationwide. Cuomo established Housing Enterprise for Less Privileged (HELP) in 1986, which became the nation's largest private provider of transitional housing for the homeless. Based on his pioneering work through HELP, Cuomo was appointed by New York City Mayor David Dinkins in 1991 to lead the New York City Commission on the Homeless.

In 1997, Cuomo was appointed by President Clinton to serve as Secretary of Housing and Urban Development (HUD). As secretary, Cuomo made fighting racial discrimination a key focus and brought 2,000 anti-discrimination cases all across the country.

Cuomo first practiced law as an assistant district attorney in Manhattan. He has also worked as a partner in a New York City law firm and was of counsel at Fried, Frank, Harris, Shriver & Jacobson. Cuomo graduated from Fordham University in 1979 and Albany Law School in 1982.

Governor Kate Brown – Oregon

With more than 25 years of service to the people of Oregon, Kate Brown is well-prepared to serve as Oregon's 38th Governor, making government more accountable and standing up for working families.

From 2008 to 2015, Brown served as Oregon's Secretary of State, where she was a leader in increasing government transparency and accountability. Prior to serving as Secretary of State, Brown served for 17 years in the state legislature: five years in the Oregon House of Representatives and 12 years in the Oregon State Senate. In 2004, Brown made history when she became the first woman in Oregon history to serve as Senate Majority Leader, after being elected by her colleagues.

Prior to running for public office, Brown practiced family and juvenile law. She taught at Portland State University, worked with the Juvenile Rights Project and co--founded the Oregon Women's Health and Wellness Alliance, which has been leading efforts to support women's health for more than 20 years.

Brown grew up in Minnesota and earned her undergraduate degree from the University of Colorado-Boulder. Brown came to Oregon to attend Lewis and Clark's Northwestern School of Law, where she received her law degree and Certificate in Environmental Law.

Governor Tom Wolf – Pennsylvania

As Pennsylvania governor, Tom is focused on three simple goals: jobs that pay, schools that teach, and government that works. Tom is not a product of the political system. He grew up in a small south central Pennsylvania town in York County and still lives in the house he was brought home to from the hospital. Tom left York County to attend college at Dartmouth, but he interrupted his studies to join the Peace Corps and served two years in a small village in India before returning to finish his undergraduate degree. He later earned graduate degrees from the University of London and the Massachusetts Institute of Technology.

In 2007, Wolf was appointed Secretary of Revenue in Governor Ed Rendell's cabinet. In early 2009, in the depths of the recession, Tom returned to The Wolf Organization — the family company he had spent more than two decades building and growing — when it was on the brink of bankruptcy. Through innovation and smart investments, Tom was able to turn the company around. H

On January 20, 2015, Tom was sworn in as Pennsylvania's 47th governor.

Governor Gina M. Raimondo – Rhode Island

On January 6, 2015, Gina M. Raimondo became the 75th Governor of Rhode Island and its first woman governor.

Gina grew up in Smithfield in a tight-knit Italian-American family, the youngest of Joseph and Josephine Raimondo's three children. Gina's family history and her childhood experiences shaped her core beliefs in hard work, opportunity for all, and the importance of financial security.

Raimondo graduated with honors from Harvard, where she was recognized as the top economics student in her class. She won a Rhodes Scholarship to Oxford University where she earned a doctorate and later graduated from Yale Law School. Gina clerked for US District Judge Kimba Wood, and served as founding employee and senior vice president at Village Ventures, a venture capital firm that invested in high-growth start-up companies in at least 10 emerging cities across the country.

In November 2010, Gina was elected to serve as General Treasurer of Rhode Island, receiving the largest number of votes of any statewide candidate. As General Treasurer, Raimondo shepherded passage of the Rhode Island Retirement Security Act of 2011, which passed with overwhelming bi-partisan support in both chambers of the General Assembly, has been hailed as national model.

Governor Peter Shumlin – Vermont

Peter Shumlin is a small business owner, public servant and father of two from Putney, Vermont.

A committed entrepreneur, Shumlin was the longtime co-director, along with his brother, of Putney Student Travel and National Geographic Student Expeditions, a company that sends students on educational programs and service projects across the globe. He is also a partner in several real estate companies that provide housing and commercial space in Southeast Vermont.

His career in public service began more than 30 years ago when at the age of 24 he was elected to serve on the town's select board. In 1990, Governor Madeleine Kunin appointed Shumlin to fill an empty seat in the Vermont House of Representatives, where he served for 3 years. He then served Windham County for 8 terms in the VT Senate and was elected by his colleagues to lead the Senate as President pro tem the majority of that time.

Shumlin is the 81st Governor of Vermont.

Governor Terence R. McAuliffe – Virginia

Terry McAuliffe is the 72nd Governor of Virginia. Born in New York on February 9, 1957, Terry McAuliffe entered politics at the age of 23 as the national finance director for Jimmy Carter. He was named Democratic National Committee chairman in 2000 and served until 2005. He co-chaired President Bill Clinton's 1996 campaign for reelection and was chairman of Hillary Clinton's 2008 Presidential campaign. In 2013, he was elected governor of Virginia.

McAuliffe graduated from Catholic University and later attended Georgetown Law School. Upon graduating from Georgetown, he started a law firm and opened Federal City National Bank.

Governor McAuliffe understands that in order to compete for the jobs of tomorrow, it is essential that we make key investments today. The Governor signed legislation increasing the amount of Virginia qualified research and development expenses that can now be claimed as a tax credit. This legislation is important because it encourages private companies to invest in the jobs of the future.

In July 2014, Governor McAuliffe signed Executive Order 23 Establishing the New Virginia Economy Workforce Initiative. With a goal of an additional 50,000 credentials, aligning the workforce supply with demand and giving experience credit to our veterans, Governor McAuliffe wants to redesign our current workforce system to work with the needs of our communities and businesses.

Governor Jay Inslee – Washington

Jay Inslee is a fifth-generation Washingtonian who grew up in the Seattle area. Inslee first became involved in public service in 1985 when he and Trudi helped lead the effort to build a new public high school in Selah. Jay went on to represent the 14th Legislative District in the state House of Representatives. He continued serving communities in the Yakima Valley when he was elected to Congress in 1992. The Inslees later moved back to the Puget Sound area where Jay was elected to Congress in 1998, serving until 2012.

During his time in Congress, Jay became known as a forward-thinking leader, especially on issues of clean energy and the environment. He co-wrote a book, "Apollo's Fire: Igniting America's Clean-Energy Economy," about the job-creating potential of the clean tech industry. As governor, Jay's top priority is growing Washington's innovative industries such as clean energy, IT and life sciences, and strengthening existing industries such as aerospace, agriculture, maritime and military. Since 2013, Washington has experienced a seven-year low in unemployment rates, record exports and notable growth in Washington's key industries.