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Challenges and Opportunities for Regulating Greenhouse Gas Emissions at the State, Regional and Local Level

Governor Jim Doyle*

ABSTRACT

Addressing climate change is one of the great challenges of our age. While the current president has signaled that this will be a top priority under his administration, previous administrations have not pursued a comprehensive regulatory or diplomatic strategy to counteract the causes and consequences of climate change. Until recently, the federal government's efforts in this area have been limited almost exclusively to climate-related research, energy research, and voluntary emission reduction programs to curb greenhouse gas emissions. As a result, states such as Wisconsin – as well as tribes and local governments – have taken the lead to explore solutions to the challenges posed by global warming.

Wisconsin, in particular, boasts a nationally recognized, utility funded, statewide energy efficiency program; a renewable portfolio standard; and mandatory carbon dioxide emission reporting. Governor Jim Doyle's Global Warming Task Force has recommended dozens of additional steps to further address climate change at the state level, and Wisconsin's legislature is poised to act on that package of proposals during its current session. Other states around the country are also active in adopting proposals of their own, and several regional efforts are underway, in various stages, to design and implement regional cap-and-trade programs.

^{*} Wisconsin Governor Jim Doyle took office in 2003. The Governor thanks the Public Service Commission of Wisconsin Policy Advisors, John Shenot and Lisa Stefanik, for their help in developing this Article.

With new leadership in Washington, national climate change policy appears poised to catch up with what has already been happening in states like Wisconsin. This emerging federal policy will present new challenges and opportunities for states. Because of the progress it already has made, Wisconsin is in a very good position to help inform the federal debate, and ultimately, decide for itself how best to craft state initiatives going forward in a way that complements a comprehensive and national approach to the challenge of climate change. This Article highlights some of the actions Wisconsin has taken and how we can move forward alongside a more engaged federal government in the area of climate change policy.

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I. Introduction

The challenge of climate change remains a global problem requiring a global solution. While President Obama has signaled his desire to lead on this issue, the previous administration failed to develop a comprehensive regulatory or diplomatic strategy to

counteract its causes and consequences. As a result, states have for years been adopting their own climate change measures. Wisconsin has been one of those states. We have one of the most well-established and successful energy efficiency programs in the country, a renewable portfolio standard that has been on the books since 2006, and mandatory carbon dioxide emissions reporting that has been required for over fifteen years. My Global Warming Task Force last year recommended a package of over fifty additional policy measures that garnered broad support from a variety of sectors, and I look forward to our Legislature acting on that reasonable package this year.

Though progress at the state level is important, federal action is needed—specifically, the enactment of a nationwide, multisector cap-and-trade program. Comprehensive federal action, however, will not obviate the important role that states will play in addressing climate change. First, states must take advantage of what they have already accomplished on climate change policy to help inform the federal debate. Second, as a stronger federal climate change policy emerges, states should endeavor to craft complementary policies of their own that are narrowly tailored to the unique challenges facing different states in combating climate change and will help states transition to a new energy economy.

Part II briefly summarizes some of the steps Wisconsin already has taken to address climate change. Part III will look at how states like Wisconsin can inform the federal debate, and what the appropriate role will be for states in crafting complementary climate change policy as a more robust federal program begins to take shape.

II. Wisconsin's Policy Response To Climate Change

Wisconsin has been addressing energy and climate issues through voluntary incentive programs, mandatory requirements for electric utilities, government leading by example and ground-breaking research. Along the way, we've benefited from advice provided by concerned stakeholders and by collaborating with like-minded governments all around the world.

A. Focus on Energy: Wisconsin's Statewide Energy Efficiency Program

While many states are only now creating energy efficiency programs, Wisconsin began its utility-funded program, now known as Focus on Energy, a decade ago. The program has evolved over the years, and under the law which created it, public utilities in Wisconsin are now required to reinvest approximately 1.2 percent of their annual revenues into energy efficiency and renewable energy initiatives. A majority of Wisconsin utilities have chosen to do so by participating in Focus on Energy. This program administers a \$75 million annual budget that is used to fund energy efficiency and renewable energy projects at farms, businesses, and residences.

As Focus on Energy has gained financial strength and continued to grow, it has also earned national recognition. The American Council for an Energy-Efficient Economy rated Wisconsin as one of the top ten states in terms of energy efficiency policies, programs and practices in its 2008 State Energy Efficiency Scorecard. This was in large part due to our Focus on Energy program, which is a three-time winner of EPA's ENERGY STAR® Award for Sustained Excellence. But more important than ratings and awards is the actual energy and money savings and environmental benefits that Focus on Energy has helped Wisconsin residents and business owners realize in its years of operation. In 2007 alone, Focus on Energy helped over 12,800 businesses reduce their energy consumption and generate over \$22.6 million in annual energy savings. Focus on Energy also assisted 214,800 Wisconsin families in finding ways to make their homes more energy efficient, thereby saving them over \$9.9 million dollars in energy costs.² In the midst of our nation's economic downturn, I take comfort in our experienced and established Focus on Energy program, which stands ready to help Wisconsin energy consumers continue to manage their energy costs through energy efficiency and educate them on their energy alternatives.

^{1.} That percentage could increase later this year when the Public Service Commission of Wisconsin has the opportunity to adjust the amount of revenue that utilities must contribute to energy efficiency programs, based on an analysis of what the potential is in our state for reduced usage of electricity and natural gas.

^{2.} Office of the Governor, Clean Energy Wisconsin: A Plan for Energy Independence 15 (2008) [hereinafter Clean Energy], available at http://www.wisgov.state.wi.us/docview.asp?docid=13459.

While I have been pleased with the financial and energy savings Focus on Energy has helped Wisconsin residents and businesses realize in the past several years, I also challenged my government agencies to lead by example. I asked them to reduce the energy used in state buildings by at least 10 percent by 2008 and 20 percent by 2010. I have directed our Department of Administration to develop sustainable building operation guidelines for state facilities.³ I have even asked the Department to look beyond brick and mortar to prioritize the purchase of more energy efficiency equipment for our state agencies. I am confident that by leading by example, all of us in Wisconsin can witness and measure the benefit of energy efficiency and renewable energy use in our daily lives.

B. Promoting Renewable Energy

Wisconsin was one of the first states to establish a mandatory renewable portfolio standard (RPS) through a 1999 law that required electric providers to obtain 2.2 percent of their electricity sales from renewable resources by 2012. In 2006, based on the recommendations of a Task Force I convened, we passed a new law raising the RPS to 10 percent renewables by the year 2015. We are on track to meet our targets. Wisconsin now has nearly 450 megawatts of installed wind power capacity, with numerous additional wind projects in the planning or construction stages. There are also two privately-owned power plants in the state that have announced plans to convert from coal to biomass, and we are still getting reliable, clean electricity from a large number of small hydroelectric facilities.

Just as I did with energy efficiency, I have directed state agencies to lead by example on renewable energy. I have set a goal that by 2010, 20 percent of the electricity used in state facilities would be from renewable resources. In July 2008, I announced that Wisconsin would purchase 92,400-megawatt hours (MWh) of renewable electrical energy each year over ten years from two Wisconsin-based utilities—Madison Gas and Electric Company (40,000 MWh) and Wisconsin Public Power Inc. (33,000 MWh). I further committed to buying the remaining needed renewable electric energy over fifteen years from We Energies (19,400 MWh). Wisconsin's own purchase of renewable energy demon-

^{3.} These guidelines will be based largely on the successful Leadership in Energy and Environmental Design (LEED) Green Building Rating System™.

strates its continued commitment to increase its energy independence through renewable energy use and decrease our dependence on fossil fuels even in our own state buildings. At the time of my announcement, the purchase was one of the largest government purchases of renewable energy in the country. I also announced last year that a state-owned power plant on the campus of the University of Wisconsin would stop burning coal. And we've just recently announced our plan to convert that power plant to run entirely on sustainable, renewable, locally produced biomass fuels.

C. Governor's Task Force on Global Warming

In February 2007, the Intergovernmental Panel on Climate Change (IPCC) released its fourth assessment in a series of reports that indisputably laid the facts about climate change before us. The undeniable consensus reached by this distinguished panel is that Climate Change is linked to human activities, most notably by behaviors that generate carbon dioxide, the largest contributor to greenhouse gas (GHG) emissions. Wisconsin was well prepared to digest the news of this report, as Wisconsin had prioritized the tracking of carbon dioxide emissions many years ago. The Wisconsin Department of Natural Resources (DNR) promulgated rules more than fifteen years ago that require annual reporting of carbon dioxide emission amounts by any source that emits more than one hundred thousand tons in a calendar year. As a result of those rules, about fifty of our largest manufacturers and utility power plants have been reporting their emission amounts on an annual basis. Wisconsin regulators now have a much clearer picture than most of their counterparts in other states about the total quantity of GHG emissions and the contributions to that total from individual sources. DNR regulators are currently considering whether to modify the reporting rules to include all major greenhouse gases—not just carbon dioxide and whether to lower the reporting threshold to ten thousand tons per year.

However, we know that establishing an inventory of GHG emission sources is only a first step. Knowing where the emissions come from will never by itself lead to reductions. So, joining many of my fellow governors in recognizing the seriousness of global warming and the need to act quickly, I created the Task Force on Global Warming in Wisconsin by Executive Order 191

in April of 2007. The mission of the Task Force included these objectives:

- Present viable, actionable policy recommendations to the Governor to reduce GHG emissions in Wisconsin and make Wisconsin a leader in implementation of global warming solutions;
- Advise the Governor on the ongoing opportunities to address global warming locally, while growing our state's economy, creating new jobs, and utilizing an appropriate mix of fuels and technologies in Wisconsin's energy and transportation portfolios; and
- Identify specific short- and long-term goals for reductions in GHG emissions in Wisconsin that are, at a minimum, consistent with Wisconsin's proportionate share of reductions that are needed to occur worldwide to minimize the impacts of global warming.

The Task Force consisted of twenty-nine stakeholders who represented diverse points of view, including nonprofits, industry, utilities, tribal and local governments, and labor representatives. The Task Force looked at energy efficiency, electric generation, carbon cap-and-trade programming, agriculture and forestry, industry, and transportation, all in an effort to find workable solutions for Wisconsin and our region to reduce our GHG emissions while considering additional impacts to our economy, the environment, and our Wisconsin utility ratepayers. The Task Force's final report contained over fifty viable and actionable policy recommendations that could be utilized in a variety of Wisconsin sectors. The Task Force also completed its mission with its recommended GHG emissions reductions targets for our state, which are as follows:

- A return to 2005 levels no later than 2014;
- A 22 percent reduction from 2005 levels by 2022; and
- A 75 percent reduction from 2005 levels by 2050.

It was within the context of the GHG emissions reduction targets and analyzing the full package of policy options to fight global warming that the Task Force made a recommendation that is especially relevant in the context of this Article: the report recommended Wisconsin's support of a federal or regional cap-and-trade program. Many of the policies aside from cap-and-trade involve expanding once again some of the Wisconsin energy programs already in place and laws that are already on the books,

such as expanding our successful Focus on Energy program or moving our RPS target to generate 25 percent of our electricity from renewable energy sources by 2025.

Wisconsin will need to balance any expansion of our existing policies or the implementation of new policies against the cost and challenges involved. Historically, Wisconsin has generated over 60 percent of its electricity from coal. Wisconsin has chosen to rely heavily on coal in its past because Wisconsin produces no fossil fuels of its own, and coal has been readily available for import into our state. However, the GHG emissions that are produced by using a fuel resource such as coal cannot be denied. Wisconsin is committed to reducing its total GHG emissions and being part of a national and international solution in the fight against global warming. For Wisconsin, part of that commitment is moving towards greater energy independence by increasing its renewable energy use and moving away from our dependence on coal.

Wisconsin will also be examining energy choices that have not been seriously considered in previous years. In advance of its final report, my Task Force on Global Warming issued an Interim Report describing its progress and making eleven important early action recommendations that were approved unanimously by all Task Force members.⁴ One of those eleven early action recommendations was that the PSC should investigate the feasibility of offshore wind energy projects in our Great Lakes.

The Public Service Commission (PSC) officially opened that investigation early in 2008 and released its final report earlier this year.⁵ To fully inform the investigation, a main group of stakeholders was formed, along with several working groups that represented utilities, customer and community groups, federal and state agencies, and local and tribal government. The groups thoroughly examined the available information on offshore wind and explored the unique legal, economic, environmental, engineering and community barriers that may exist in Wisconsin to evaluate

^{4.} TASK FORCE ON GLOBAL WARMING, PUBLIC SERVICE COMM'N OF WIS., A WISCONSIN STRATEGY FOR REDUCING GLOBAL WARMING 14-18 (2008), available at http://dnr.wi.gov/environmentprotect/gtfgw/documents/interim_report.pdf.

^{5.} Public Service Comm'n of Wis., Harnessing Wisconsin's Energy Sources: An Initial Investigation Into Great Lakes Wind Development (2009), available at http://psc.wi.gov/apps/erf_share/view/viewdoc.aspx?docid=106 801

offshore wind energy feasibility in Wisconsin's portions of the Great Lakes.⁶

The answers gleaned during the course of the investigation were mixed, but promise for offshore wind in the Great Lakes remains. For example, the absence of an actual operating offshore wind project in the United States leaves many questions about cost and the resulting rate impact of an offshore wind project on Wisconsin utility ratepayers. The investigation revealed holes in actual wind speed and environmental impact data and recommended further studies. New variations on working partnerships between our state agencies and federal agencies will have to be fostered explicitly for the purpose of scrutinizing and approving the myriad of necessary permits for offshore wind projects. However, while these issues, and many more, need to be addressed for an offshore wind project in the Great Lakes to be built, the investigation also revealed promise for a new source of energy independence in Wisconsin that we will continue to examine and explore in the coming years.

D. Merging Clean Energy with Economic Development & Energy Security

When considering the impacts of global warming to the state of Wisconsin and to our nation and world, it's easy to focus only on what we must stop doing or what behaviors we need to change in the short-term. We must drive cars that get better gas mileage and emit less carbon dioxide. Our energy sources must burn cleaner and more efficiently. But while we make these changes and move to a cleaner energy economy, we need to look for opportunities for where our states can grow their economies, invest in green jobs and strengthen their energy independence.

In July 2006, joined by our University of Wisconsin System President and other industry and environmental leaders, I signed "Wisconsin's Declaration of Energy Independence," which charts a new course for clean energy in Wisconsin. Shortly thereafter, I issued Executive Order 192 creating a new Office of Energy Independence (OEI) to lead the state's effort to advance clean energy and bioproducts.⁷ This was the beginning of an ef-

^{6.} Id.

^{7.} Exec. Order No. 192, Wisc. Adm. Code Exec. 2003-2007 (2009), available at http://www.wisgov.state.wi.us/journal_media_detail.asp?prid=2611&locid=19.

fort to become the nation's leader in the drive toward energy independence, moving us away from our addiction to foreign oil.

OEI's mission is to lead our state toward three goals that are simple yet ambitious:

- Advance Wisconsin's vision for energy independence by generating 25 percent of our power and 25 percent of our transportation fuels from renewable resources by 2025;
- Capture 10 percent of the emerging bioindustry and renewable energy market by 2030;
- Become a national leader in groundbreaking research that will make alternative energies more affordable and create new, good-paying jobs in Wisconsin.

Executive Order 192 also established a new Energy Independence Team within my Cabinet consisting of the Chairperson of our Public Service Commission and the Secretaries of Agriculture; Trade and Consumer Protection; Natural Resources; Administration; Commerce; and Financial Institutions. This Energy Independence Team meets at least once a month to cooperatively guide Wisconsin's bioindustry development strategies at the executive level. Policy advisors from these same agencies also meet monthly to follow through on the Team's directives and initiatives. As a result, we now have a more coordinated and cohesive approach on this issue than we could possibly achieve with each agency acting independently.

In March 2008, I continued to move energy policy forward in Wisconsin through the launch of *Clean Energy Wisconsin*, my strategy to strengthen Wisconsin's energy future.⁸ This comprehensive plan moves Wisconsin forward by promoting renewable energy, creating new jobs, increasing energy security and efficiency, and improving the environment. It includes a suite of initiatives that provide a clear direction for Wisconsin's businesses and communities that will help Wisconsin become the leader on renewable fuels.

One of the integral parts of *Clean Energy Wisconsin* is the new Wisconsin Energy Independence Fund (WEIF) which we created in our Department of Commerce last year. Through WEIF we've already awarded \$7.3 million in grants and loans for research and development and commercialization or adoption of new technologies. These awards will expand Wisconsin's clean

^{8.} CLEAN ENERGY, supra note 2.

energy industry, leverage \$44.2 million in outside investments, and create new jobs for Wisconsin families on farms, in forests, in research labs and at manufacturing facilities. The projects we've funded touch at almost every aspect of energy independence, including energy efficiency, renewable electricity technologies, energy storage systems and biofuels.

Another part of Clean Energy Wisconsin is our Energy Independent Communities Partnership. This partnership is the first of its kind in the nation and a crucial strategy in our goal to make Wisconsin the nation's leader in the drive toward energy inde-The partnership includes counties, cities, villages, towns, tribes and schools in the state that have embraced my "25x25" challenge: to advance Wisconsin's vision for energy independence by generating 25 percent of their electricity and 25 percent of their transportation fuels from renewable resources by 2025. Currently, there are more than fifty communities that have passed formal resolutions committing themselves to this partnership, nearly thirty more that have publicly endorsed the idea, and more than two hundred others that have expressed interest. To help ensure that partners follow through on their commitments, we recently launched a competitive grant process that is providing \$400,000 in total funding to twenty-three of these community groups to help them develop "25x25" action plans.

E. Wisconsin's Role in Regional, National and International Climate Change Initiatives and Cooperative Efforts

We are well aware of the fact that Wisconsin's share of global GHG emissions is small and that we can't make any meaningful progress on this issue acting alone. For that reason, I have aggressively pursued opportunities to collaborate with other states and other countries in the search for solutions.

The year 2007 was a significant one in terms of collaboration on climate change solutions. In the early part of the year, Northeastern states began rule development for the Regional Greenhouse Gas Initiative (RGGI). Shortly thereafter, Western states launched the Western Climate Initiative (WCI). And in May 2007, Wisconsin joined thirty other states (plus two Canadian provinces and one Native American sovereign nation) as founding members of The Climate Registry. In the absence of federal action, states, provinces, territories, and Native American sovereign nations were starting to collaborate in earnest on emission reporting and emission reduction policies.

Our next big step came in November 2007, when I hosted the Midwestern Governors Association (MGA) Energy Summit in Milwaukee. This Summit resulted in two historic agreements. First, an Energy Security and Climate Stewardship Platform for the Midwest was endorsed by nine MGA Governors and the premier of one Canadian province.9 The stated goal of the Platform is to maximize the energy resources and economic advantages and opportunities of Midwestern states while reducing emissions of atmospheric CO₂ and other greenhouse gases. The Platform lays out measurable goals, objectives, and policy options for four different themes: energy efficiency; bio-based products and transportation; renewable electricity; and advanced coal and carbon capture and storage. Second, a Midwestern Greenhouse Gas Accord was signed which launched an effort to develop regional GHG reduction targets and a market based, multisector GHG cap-and-trade program.¹⁰ Wisconsin joined five other states and one province in agreeing to participate in the cap-and-trade program.

Members of my cabinet and staff in their agencies have been working hard to implement both of the MGA agreements. The Greenhouse Gas Accord is particularly notable because it put the Midwest for the first time squarely in the middle of an ongoing national and global debate about mandatory GHG reductions. While I applaud the efforts of Northeast states for the RGGI and Western states for the WCI, I am particularly proud of this bold step by Midwestern governors. The economies of our Midwestern states are much more dependent on energy-intensive manufacturing than those of our northeastern and western counterparts, and our current electricity supply depends very heavily on coal as a fuel source. What this means is that the Midwest may face tougher challenges in transitioning to a carbonconstrained economy. Nevertheless, the Midwestern Greenhouse Gas Accord marks a bold step in that direction and I am very proud that Wisconsin is helping to lead its progress.

^{9.} MIDWESTERN ENERGY SEC. AND CLIMATE STEWARDSHIP SUMMIT, MIDWESTERN GOVERNORS ASS'N, ENERGY SECURITY AND CLIMATE STEWARDSHIP PLATFORM FOR THE MIDWEST (2007), available at http://www.midwesterngovernors.org/Publications/MGA_Platform2WebVersion.pdf.

^{10.} MIDWESTERN ENERGY SEC. AND CLIMATE STEWARDSHIP SUMMIT, MIDWESTERN GOVERNORS ASS'N, MIDWESTERN GREENHOUSE GAS ACCORD 3-4 (2007), available at http://www.midwesterngovernors.org/Publications/Greenhouse%20gas%20accord_Layout%201.pdf.

III. An Emerging Role for States in the Face of Federal Action

All of the examples of state-level policy that I've cited have added to the climate change debate and the search for solutions, but the truth is that our country is still not doing nearly enough to address this defining issue. Emissions in the country as a whole have continued to climb, and the limits of state policy are sorely evident. For example, my Task Force on Global Warming concluded that even if Wisconsin implemented more than fifty specific policy recommendations at the state level, we would only get half of the GHG reductions needed to meet our medium-term target for the year 2022. Ultimately an international solution is required, and it is more obvious than ever that such a solution is impossible without a strong federal climate policy in the United States.

Today we have a new President and a new Congress. President Obama has called on Congress to pass an economy-wide capand-trade program and is including revenue projections from such a program in his ten-year budget plan. His administration is also revisiting several decisions of the previous administration that shied away from mandatory GHG regulations. In Congress, Senate Majority Leader Harry Reid and Speaker of the House Nancy Pelosi have both pledged to hold debate and votes on capand-trade legislation before the end of this year.

As we enter this new era in the evolution of climate change policy, timeless questions about federalism and the appropriate roles of states will once again be central to the policy debate. Until now, in the absence of any meaningful federal regulation, states were limited in terms of the *scope* of what they could do, but within their authority they did not have to worry so much about the interplay between state and federal policy. That time appears to be nearing an end. For the sake of our residents and businesses, it is critically important that we develop a coordinated, efficient, and most of all effective synthesis of state and federal policy. I'd like to use the remainder of this Article to offer my perspectives on what this future role for states should be, with particular attention to how states can shape federal climate policies and continue to innovate and lead in the development of solutions.

A. The Role of States in Designing a Federal Cap-and-Trade Program

My Task Force on Global Warming was very clear in expressing its preference for a federal cap-and-trade program rather than a regional program, and it dismissed the idea of a Wisconsin-only program. I have taken its recommendations to heart. State and regional cap-and-trade programs will have limited diversity and liquidity and thus will be less cost-effective in reducing emissions. They may also create competition issues with neighboring states and regions. Simply stated, in this policy area, a federal solution is by far the best. A single, national cap-and-trade program will provide for a diverse market with maximum liquidity; achieve the greatest reductions at least cost; help ensure a level playing field for sources and states; and provide a simpler system for all.

At the time of this writing, it is impossible to say whether the design details of a federal cap-and-trade program will be specified in legislation or in regulations. Either way, states from all parts of the country need to share our knowledge, experience and perspective. For example, the RGGI states have already addressed almost every aspect of cap-and-trade program design. Their voice must be heard at the federal level. States participating in the Midwestern Greenhouse Gas Accord and the WCI have also been grappling with detailed design questions, and they too should influence this debate.

The primary reason why state and regional approaches differ on some aspects of cap-and-trade program design is that states and regions differ significantly in terms of their economies. Federal lawmakers should be cognizant of these differences. Wisconsin, like much of the Midwest, has a very different energy and industrial makeup than the RGGI and WCI states, as well as those states taking individual action on climate change, such as California. For example, Wisconsin's economy is particularly reliant on large, energy-intensive manufacturers. As Figure 1 shows, we are among the top three manufacturing states and nearly twice as dependent on manufacturing as the U.S. average. The discrepancy is even greater when Wisconsin is compared to the WCI or RGGI states.

FIGURE 1 Contribution of Manufacturing to Gross State Product¹¹

Wisconsin	20.6%
MGA States	16.4%
U.S. Average	11.8%
WCI States	10.2%
California	9.9%
RGGI States	7.8%

Many of our energy-intensive manufacturers (e.g., those in the paper industry) face tough international competition, particularly from businesses located in countries that have not committed to regulating GHG emissions.

Wisconsin is also heavily reliant on coal for fuel. We derive more of our electricity from coal than the average state and much more than the WCI and RGGI states.

FIGURE 2
Use of Coal to Generate Electricity¹²

MGA States	70.6%
Wisconsin	63.1%
U.S. Average	48.5%
WCI States	23.4%
RGGI States	21.8%
California	1.1%

Although Wisconsin is already taking steps to reduce its coal dependency, and assist its industrial sector in becoming more energy efficient, a federal cap-and-trade program should acknowledge the decades of decisions and billions of dollars of investment that have gone to support existing energy infrastructure in Wisconsin and much of the industrial Midwest. The economic impacts associated with quickly transitioning to a carbon-constrained world are likely to be very different for Midwestern states like Wisconsin.¹³ This underscores the importance of plan-

^{11.} Based on 2007 U.S. Department of Commerce statistics.

^{12.} Based on 2007 U.S. Department of Energy statistics.

^{13.} The Public Service Commission of Wisconsin staff recently analyzed the potential economic impact of two plausible scenarios for GHG regulation in the year 2015. They concluded that the total cost to Wisconsin utility ratepayers and/or shareholders under one scenario could be \$600 million per year by 2015, while in the other scenario the costs could exceed \$1.5 billion per year. The difference between a program that minimizes costs and one that does not could be \$1 billion per year for our average-sized state.

ning for those impacts and trying to account for them while designing a strong federal system.

I know that it's impossible to get different states to agree on the finer points of a federal cap-and-trade program, but I offer a few points for consideration as this debate moves forward:

- 1. Any federal program should try to be fair to all regions of the country. The design of the program will dictate both the magnitude of economic impacts and who pays for those impacts. We know that the extent of those costs will vary from state to state, and region to region, based on relative differences in climate, the prevalence of energy intensive industries, the types of fuels and technologies that are used for power generation, and the extent of public utility regulation over the price of electricity. States must weigh in and make sure that the federal solution does not unduly reward or punish any region of the country.
- 2. We must ensure that the federal program does not punish those states that have shown leadership by acting in advance of federal legislation. For instance, provisions must be included for a smooth and equitable transition of existing state and regional cap-and-trade programs like RGGI, WCI, or the MGA Accord into the mandatory federal program over a reasonable period of time.
- 3. Similarly, the design of the program must not punish regulated entities for reducing their emissions in advance of federal requirements. If anything, those entities should be rewarded for early actions.
- 4. Finally, the federal program should not be designed in ways that might promote cutthroat competition between states to retain or attract manufacturing facilities.

The important thing for states to do now is engage. For years, states like Wisconsin have been crafting their own climate change policy. We've signed bills into law, developed programs, issued directives to government agencies, formed task forces and conducted investigations. All of those efforts should be used to help inform our federal debate on climate change and to help craft a strong, responsible federal cap-and-trade program.

B. States Should Innovate on Complementary Policies

In Wisconsin, we don't expect that a federal GHG cap-and-trade program—or even a comparable international program—

will be sufficient by itself to achieve the emission reductions needed to stabilize our global climate. What is needed is a more comprehensive approach to the problem, one in which cap-andtrade is the policy foundation but by no means the entire blueprint.

Complementary policies can and should be developed that supplement and reinforce the cap and trade program. These policies could address any of the following topics: energy efficiency and renewable energy programs; transportation; land use, agriculture and forestry; workforce development; mitigation of economic harm caused by climate regulations; and adaptation of communities to unavoidable climate change impacts. In all of these topic areas and in others that are equally valid, I believe that states have earned their reputation as laboratories for policy innovation.

We do not need a national program for each and every aspect of energy and climate policy, as long as we have the cap-andtrade foundation and federal support for complementary state policies. States are uniquely able to tailor complementary programs to meet the specific needs and circumstances of our residents and businesses.

C. States Should Play a Role in Investing Cap-and-Trade Program Revenues

A federal cap-and-trade program is almost certain to generate sizeable amounts of revenue through some combination of auction proceeds, fees and penalties. While some portion of cap-and-trade revenues will go to address national priorities, a significant share of those revenues could be well used by states to fund complementary policies such as those I've outlined above.

It is important for states to have a role in investing cap-and-trade revenues, because it allows states to innovate and experiment at the regional level within the context of different energy economies. That is, the best use of cap-and-trade revenues in a coal-heavy state will differ dramatically from a best use of the revenue in a state like California that uses almost no coal to generate its electricity. Additionally, my Task Force on Global Warming clearly indicated that, for Wisconsin, investments in energy efficiency and conservation will have the biggest positive impact on emission reductions at the lowest cost. Our previous investments and acknowledged accomplishments in this area have taught us much about the best ways to invest energy effi-

ciency and renewable energy dollars in Wisconsin. So, as an example, we might welcome the opportunity to add federal capand-trade program revenues to our already successful Focus on Energy program and build upon the fine work that program already has accomplished.

D. States Should Share Lessons Learned

The last thing I want to briefly mention is the importance of learning from each other. There isn't much of a point in encouraging states to innovate if they don't share the lessons that they learn. States have an obligation to be transparent and accountable in how they spend cap-and-trade revenues on complementary policies. But we also have an obligation to be open and honest about how those policies are working or not working. We face a tremendous challenge that will require incredible human and fiscal resources. We have to be smart and adaptive in how we approach that challenge, and that requires us to enhance communications, technology transfer, and educational programs. We cannot afford to repeat each other's mistakes, and we desperately need to replicate our successes.

IV. Conclusion

I am terrifically proud of the energy and climate policy leadership that Wisconsin has shown for more than a decade, and I am grateful for the support and partnerships we have forged with leaders in other states and other countries. But it is clear that states cannot meet this challenge without federal leadership. Fortunately, that leadership appears to have arrived.

As our nation moves forward to more aggressively address climate change, the states and federal government should work as partners. The responsibility for an economy-wide federal capand-trade program ultimately rests with the federal government. States in turn should draw on our experience to help inform the development of that program. Once that foundation is in place, the United States can be a credible advocate for effective international agreements, and states can get to work doing what we've always done: listening to our stakeholders, innovating, and solving problems. We still have a lot of work to do in Wisconsin, and I have confidence in our ability to get this job done.