



85 7<sup>th</sup> Place East, Suite 500  
St. Paul, Minnesota 55101-2198  
[mn.gov/commerce/](http://mn.gov/commerce/)  
651.539.1500 FAX 651.539.1547  
An equal opportunity employer

---

**WRITTEN STATEMENT OF**  
**MIKE ROTHMAN**  
**COMMISSIONER OF THE MINNESOTA DEPARTMENT OF COMMERCE**  
**BEFORE THE**  
**SENATE ENERGY SUBCOMMITTEE**  
**“Lessons from state efficiency and renewable programs”**

**FEBRUARY 12, 2014**  
**WASHINGTON, DC**

Chairman Franken and Members of this Committee, thank you for the opportunity to submit this statement for inclusion in the record of the hearing by the Senate Energy Subcommittee on February 12, 2014 entitled, “Lessons from state efficiency and renewable programs.”

As the Commissioner of the Minnesota Department of Commerce, I am one of the energy regulators for the State of Minnesota. The Department’s mission is to protect the public interest, advocate for Minnesota’s consumers and ensure a strong, competitive and fair marketplace on a wide range of industries in Minnesota, including energy, telecommunications, insurance, banking, and securities, among others. The Division of Energy Resources, which includes our state energy office, is contained within the Department of Commerce.

From the outset, I want to applaud Senator Franken for holding this hearing and his leadership on energy efficiency and renewable energy. Today, I want to share some of Minnesota’s successful and innovative programs in energy efficiency and renewable energy and how those programs relate to energy issues that concern the entire nation.

## **ENERGY EFFICIENCY**

### **Conservation Improvement Program**

Energy efficiency is a cost effective means to decrease the amount of energy used. Minnesota instituted substantial energy efficiency programs through its utilities in the early 1990s. In 2007, the Legislature required all electric and natural gas utilities to annually save 1.5 percent of their retail sales starting in 2010. While individual utility performance has varied, collectively Minnesota utilities exceeded the 1.5 percent requirement in 2011, the year of our most recent data. Incremental annual electric and gas savings (first year savings from newly installed energy efficiency measures) over 2010 and 2011 totaled approximately 1.8 million megawatt hours and 5.4 million dekatherms. Combined, these energy savings are equivalent to approximately 11.5 million BTUs—enough energy to heat, cool and power over 102,000 homes in Minnesota for one year. Energy savings through efficiency and conservation also have a sizeable impact on carbon emissions. As a result of the savings in 2010-2011, nearly two million tons of CO2 emissions were avoided annually – equivalent to removing approximately 370,000 cars from the road for one year.

### **Buildings – B3 and SB2030**

Minnesotans recognize the importance of understanding how our buildings work. Starting in 2004, all public buildings were evaluated using an innovative benchmarking tool. During that time, sustainable building design guidelines were also developed for all public buildings that received bond funds. In 2008, the guidelines expanded to become the Sustainable Buildings 2030 program –standards that significantly reduce carbon dioxide emissions by lowering energy use in new and substantially renovated buildings through cost effective, energy efficiency performance standards. The 40 buildings designed to the SB2030 Energy Standard so far are predicted to save approximately 250 million kBTUs per year—saving \$3.25 million each year. These buildings are being built at the same cost as a building built to code.

The benchmarking tool—B3—has become the energy management tool used by all state agencies, allowing them to gauge which buildings are most cost effective to retrofit. Senator Franken’s benchmarking bill reflects the need for all building owners to easily understand how

their buildings are working—the Minnesota Department of Commerce supports the passage of this bill (S.1206 – Benchmarking).

The Minnesota Department of Commerce also supports Senator Franken’s bill (S. 1205 – Local Energy Supply and Resiliency Act) that promotes district heating and cooling—Saint Paul District Energy supplies heating and cooling for the Capitol Complex as well as for much of the Saint Paul downtown area. In addition, last year the Minnesota Legislature passed legislation that allows waste heat recovery projects to count in utility efficiency programs.

## **RENEWABLE ENERGY**

### **Solar Electricity Standard/RES**

In 2013, the state adopted a solar electricity standard to obtain 1.5 percent of investor-owned utility retail electricity sales from solar electricity by the end of 2020. This solar standard is on top of Minnesota’s Renewable Energy Standard passed in 2008, which requires all electric utilities in the state to generate at least 25 percent of their electricity from renewable energy resources 2025 and 30 percent by 2020 for the state’s largest incumbent utility Xcel Energy (altogether about 27.5 percent by 2025). This will result in six-to-seven thousand megawatts of renewable capacity by 2025. All Minnesota utilities have complied with the standard to date—18 percent for Xcel Energy and 12 percent for all other utilities.

### **Value of Solar Tariff**

The Legislature also directed my agency to establish a Value of Solar methodology. The methodology (developed by the Department and submitted to the state’s Public Utilities Commission (PUC) at the end of January) included the value of energy and its delivery, generation capacity, transmission capacity, transmission and distribution line losses, and environmental value. We expect Value of Solar to provide an innovative alternative to net metering by providing fair compensation to solar customers while also allowing utilities to recover the reasonable costs of grid services. Investor-owned utilities may apply to the PUC for a Value of Solar Tariff that compensates customers through a credit (i.e., moving the netting from

the meter to the bill) for the value to the utility, its customers, and the environment for operating distributed solar PV systems interconnected to the utility and operated by the customer primarily for meeting their own energy needs.

### **Renewable Energy Integration Study**

Minnesota utilities and transmission companies, in coordination with the Midcontinent Independent Transmission Service Operator (MISO) are conducting an engineering study on increasing the state's Renewable Energy Standard to 40 percent by 2030, and to higher proportions thereafter, while maintaining system reliability. The Commerce Department is directing the study; we appointed a Technical Review Committee comprised of individuals with experience and expertise in electric transmission system engineering, electric power system operations and renewable energy generation technology to review the study's methods, assumptions, ongoing work and preliminary results. The study will be completed in November 2014.

### **LINKS WITH FEDERAL PROGRAMS**

#### **State Energy Program**

Much of the work that I have described has been completed utilizing resources from the U.S. State Energy Program (SEP). This federally-funded program has been instrumental in the last two decades as Minnesota has progressed in the deployment of its energy efficiency and renewable energy programs. The State Energy Program has provided the opportunity to have technical experts in energy efficiency and renewable energy technologies as those technologies have matured in the state. For example, these technical experts helped shape the Value of Solar tariff and are participating in the Renewable Energy Integration Study.

The State Energy Program also has a history of success working across all sectors of the economy and supporting cost-effective energy efficiency improvements. The last comprehensive study of the program by Oak Ridge National Lab showed that each federal dollar invested in the State Energy Program is leveraged by nearly \$11 of state and private funds and

results in more than \$7 in annual energy savings. These SEP-supported projects and programs include a wide-range of activities, such as school and public building energy efficiency programs, energy efficiency financing activities, industrial and commercial programs, and energy efficiency for homeowners, and agricultural projects.

### **Energy Assurance – Propane Situation**

State Energy Program staff also leads the Commerce Department's energy assurance program, working with Homeland Security staff to ensure they have up-to-date information on Minnesota's energy system. This has been particularly important these past several weeks as a critical propane situation has developed in our state. Minnesota, like many other states, has been gripped by a prolonged shortage of propane. Over 15 percent of homes in rural Minnesota are heated with propane, and many poultry and livestock farmers depend on propane to keep animals from freezing during our coldest winter in 30 years.

Our State Energy Program and state-supported energy assurance efforts, in conjunction with the technical and analytical resources of DOE are our nation's first line of defense in limiting the health and safety impacts of energy supply emergencies—big and small—that happen every year from weather, cyber, and other market disruptions. Importantly, more rapid restoration of liquid fuel, natural gas, and electricity services also means a faster return to normal economic activity, which makes a real difference in communities across the country every year. Increasingly, energy supply disruptions are impacted by interdependencies among energy infrastructure (electric, gasoline, and diesel) and other market sectors (e.g., rail, water, cyber, food supplies). The state-federal-private energy emergency and interdependencies efforts led by DOE and the states need your support and elevation with regard to the great value they deliver to consumers and businesses and their relevance to the nation's economic and energy security.

In addition, we are doing all we can to provide assistance through the Low Income Home Energy Assistance Program (LIHEAP) during this emergency, but will need additional funds to get through the rest of the winter. Governor Dayton has called on the President to ask Congress to make more funding available and I join him in urging the members of this Committee to heed his call.

## **Weatherization Assistance Program**

The Weatherization Assistance Program (WAP) has helped low-income families, seniors, veterans, and individuals with disabilities make lasting and cost-effective energy efficiency improvements to their homes and reduce the burden of high energy prices for more than three decades. To date, more than 7.4 million homes have been weatherized in the nation, providing as much as \$450 in savings on a household's annual energy bill. Weatherization also supports thousands of high quality jobs. The National Association of State Community Services Programs estimates that there are approximately 10,000 highly skilled jobs in the weatherization network, with countless more supported in related businesses including materials suppliers, vendors, and manufacturers who make more than 90 percent of the products used in weatherization. The Weatherization Assistance Program has helped the construction industry and given a boost to American manufacturers and small businesses during challenging economic times. In addition, electric and gas utilities in many states depend on the WAP delivery network to carry out low-income residential efficiency initiatives, leveraging scarce resources and measurably increasing the impact of WAP in these states. As the program's funding has declined in recent years, both the state-level and private sector programs that rely on the WAP network and infrastructure have been impaired.

These two federal programs provide important links to ongoing state work. We strongly encourage you to restore funding for the Weatherization Assistance Program to pre-Recovery Act levels. The \$174 million provided for Weatherization in FY'14 is a good step in the right direction. This equals the FY'11 funding level. We are hopeful that Congress could head towards a more sustainable level of at least \$230 million this coming year. For SEP, the \$50 million is certainly an improvement, but a more sustainable level, consistent with expanded responsibilities, would be \$75 million this coming year.

We also support the Coons (D-DE), Collins (R-ME), Reed (D-RI) bill (S.1213) to reauthorize State Energy Program and Weatherization Assistance Program—two programs that are essential in helping states further energy efficiency and renewable energy at home.

## **EE/RE as 111(d) Compliance Options**

In a letter to EPA Secretary McCarthy on December 16, 2013, Minnesota expressed its view on the proposed Greenhouse Gas Rules for existing sources that energy efficiency resource standards and renewable portfolio standards provide some of the most cost-effective options to reduce carbon pollution, reduce electricity costs to ratepayers, increase local economic activity, and create jobs. As noted above, Minnesota has a target of reducing energy use by 1.5 percent per year through energy efficiency measures and requires its electric utilities to generate 27.5 percent of their power from renewable sources by 2025. Carbon dioxide emissions savings from our Conservation Improvement Program have been increasing in recent years, reaching more than 800,000 tons in 2010. From 2005-2011, Minnesota reduced overall CO<sub>2</sub> emissions by 6.9 million tons, lowering its CO<sub>2</sub> rate by 17.5 percent, even while power generation increased slightly. Minnesota is committed to continuing its transformation of the generation mix for electric power and look to this federal rulemaking to help meet our commitments.

## **CONCLUSION**

Minnesota is a national leader in the areas of energy efficiency and renewable energy. We continue to innovate to meet the growing need to find alternatives to fossil fuels while maintaining reliable energy services at affordable rates. We are eager to work closely with this Committee and Congress, as well as the Administration to achieve our shared goals.

Thank you, Chairman Franken and Members of this Committee, for the opportunity to submit this written statement.

I look forward to your questions.