

Wisconsin Citizens Climate Lobby
C/o Madeleine Para
1137 Erin St.
Madison, WI 53715

Ms. Angela Dickens
Wisconsin Department of Natural Resources
101 S. Webster St.
Madison, WI 53707-7921

Dear Ms. Dickens:

Wisconsin Citizens Climate Lobby (CCL) appreciates the opportunity to comment on the Environmental Protection Agency's (EPA) draft Clean Power Plan (CPP), and to respond to some of the issues raised by your and the Public Service Commission of Wisconsin's (Commission) questions soliciting a public response. Our comments follow this letter, and will be sent to you electronically as well.

CCL believes that a Carbon Pricing Mechanism (CPM), especially a carbon tax as described in our comments, is essential to successful compliance with the CPP, and creates a real possibility of reducing and stabilizing carbon pollution on a global scale. We are optimistic that a coordinated, beneficial effort among regulators, innovative businesses, utilities and consumers motivated by a CPM can and will find a solution that increases the likelihood of a thriving, sustainable economy in the future.

If you want to know more about CCL, go to our website: <http://www.wisconsincl.com/contact/chapters/> We are a state-wide group with twelve chapters made up of citizen activists who are knowledgeable about state, regional and national climate change impacts.

We would like to meet with you in person at your convenience. Please let us when you are available and we will set up a time to discuss our comments in more detail and answer any of your questions.

Thanks for your consideration.

Sincerely,

Oscar Bloch, Volunteer

Madeleine Para, Regional Coordinator

**Citizens Climate Lobby Comments:
A Response to Certain Questions
Posed by the Wisconsin Department of Natural Resources
And the Public Service Commission of Wisconsin
Concerning the Environmental Protection Agency's
Clean Power Plan**

Wisconsin Citizens Climate Lobby (CCL) appreciates the opportunity to comment on the Environmental Protection Agency's (EPA) draft Clean Power Plan (CPP) and respond to certain related questions posed by the Wisconsin Department of Natural Resources (WDNR) and the Public Service Commission of Wisconsin (Commission). CCL hopes to enhance WDNR and Commission comments to EPA and to broaden the discussion on options that are acceptable for compliance with the CPP. We see the CPP comment process as a rare beneficial convergence of regulation, market-based solutions and the evolving nature of utility business models where turmoil can and should result in a better outcome for all players in the energy world.

CCL is a national citizen's group that advocates for a national revenue-neutral carbon fee and dividend (FAD) as public policy to aggressively reduce carbon pollution in time to make a difference in the severity and longevity of climate change impacts. While we continue to believe that a national carbon tax is preferable, any public policy at any level of governance that implements a carbon pricing mechanism (CPM) like a carbon tax will increase the success of the CPP. It will make it more likely that world governments and people achieve enough reductions in carbon emissions to stabilize global warming due to human-caused carbon pollution at the widely accepted goal of 2°C.

CCL believes that an enforceable and comprehensive FAD carbon tax at a national, regional or state level is essential to the success of the CPP, in whatever forms it finally takes. **Wisconsin, either as an individual state, or as part of a regional partnership, should argue for inclusion of a carbon tax as an option for complying with the final CPP.**

CCL recently contracted with Regional Economic Models, Inc. (REMI) and Synapse Energy Economics, Inc. (Synapse) to study and model the long-term economic and environmental impacts of a revenue-neutral carbon fee-and-dividend (FAD) carbon tax¹. The principal national results by 2025 are as follows:

¹ [The Economic, Climate, Fiscal, Power, and Demographic Impact of a National Fee - and-Dividend Carbon Tax](http://citizensclimatelobby.org/remi-report/), prepared by REMI and Synapse, June 9, 2014. Wisconsin is included in the East North Central Region, pages 80-85.

- 2.1 million more jobs under the FAD carbon tax than in the baseline (reference case)
- 33% reduction in carbon dioxide emissions from baseline conditions
- 13,000 premature deaths avoided by improvements in air quality
- FAD dividends (rebates) return nearly \$400 billion to households
- Total cost of living increase compared to baseline is less than 3%
- Gross Domestic Product (GDP) increases between \$80 billion and \$90 billion

CCL's comments will be presented in two sections: Part I will cover a description of characteristics we consider essential to using CPM successfully as public policy; and Part II will cover some issues relevant to responding to WDNR and Commission questions about Building Blocks 3b: Increased Generation of Renewable Energy; and 4: Increased Energy Efficiency.

I. The following characteristics are considered by CCL as essential to any successful CPM, especially a carbon tax:

1. **Revenue Neutrality:** All revenues collected by a governmental entity with taxation powers must be returned to consumer households. Diverting some or all revenues to purposes managed by government or private corporations, in spite of best intentions, will make it difficult to pass scrutiny by any political decision-making body. Instead, returning all revenues, including border adjustments (see point #3 below), will effectively preserve or increase income and spending power for consumers and businesses.
2. **Protect Low-Income Households:** Revenues collected from the fossil fuel industry, whether upstream at the mine mouth, or mid-stream at the utility level, that are returned to consumers must be ample enough to neutralize any adverse economic impacts on low-income households. Modeling by the REMI/Synapse study and other groups has shown that approximately 63% of all households, including low-income, receive net benefits from return of the tax. This includes any incremental increase in the cost of living due to the tax.
3. **Border Adjustments:** An excise tax or tariff must be enforced to protect American businesses from unfair competition. This neutralizes any price advantage that a foreign company has simply because its government does not pass or enforce carbon pollution rules as aggressively as us. At the state or regional level, this means taxing all fossil fuel imports into a specific region or state. These revenues should be shared equitably among all businesses.
4. **Acknowledge the Externalities:** Accurately pricing commodities that harm society has long been a point of controversy within the economist and free

enterprise communities. A carbon tax effectively creates a CPM that corrects a market failure. When consumers pay the real cost of any source of energy, fossil fuels or not, the appropriate price signal is incorporated into the competitive market. This creates an incentive for consumers and businesses to purchase energy efficiency products and services, clean energy production systems, and any product that is less expensive because the retail cost is lower due to less or no use of high carbon fuels in manufacturing and delivery. The Commission currently monetizes carbon dioxide at a fixed levelized value of \$30/ton.² Focus on Energy (FOE) uses this proxy value to determine cost-effectiveness of its programs. Consumers and businesses already benefit from the increased value of avoided emissions.

The difference between what the Commission has done and a CPM is that consumers and businesses don't experience that programmatic value in the price of all goods and services. It is how inclusive that value is in reflecting the real cost of carbon pollution from all sources, and how systematically and rapidly that value increases that motivates a transformative change in market dynamics. A fixed value will not work in a competitive market that is used to externalizing costs it doesn't like.

5. **Neutral on Winners and Losers:** Create a level playing field for all sources of energy. Eliminate all energy source subsidies, including renewable energy. If the price of purchased goods and services truly reflects the real lifecycle cost of those products, including the type of energy used to make them, there is no need to pick winners and losers. This is true whether you are buying a car, electric service, or a loaf of bread.
6. **Minimize Opt-outs, Exemptions, and Offsets:** Making exceptions for large, energy-intensive businesses and consumers who may be disadvantaged initially by an annually increasing carbon tax is penny-wise from a political perspective, but pound-foolish if we want to rely on a CPM, in tandem with other incentives or not, to aggressively reduce carbon pollution. Offsets, in particular, are a way to potentially game the system and avoid real investment in reducing carbon pollution by businesses and consumers.
7. **Transparency:** One of the weaknesses of poorly designed CPMs is the real-time opacity of CPM markets when prices are not accessible or obvious. Market manipulation can occur when buyers and sellers have incomplete information about what is happening when transactions occur. Below market prices can result in tepid participation by vendors and failure to reduce carbon pollution. Careful design of CPMs can avoid these problems.

² Quadrennial Planning Process-Docket 5-GF-191, Public Service Commission of Wisconsin, Order dated November 9, 2010, page 8.

8. **Predictability:** A carbon tax is a predictable, gradually increasing “sales tax” on fossil fuels. Businesses, utilities and consumers can plan ahead for increasing costs and adapt more easily and cost-effectively.
9. **Reliability:** A carbon tax has no cap on emissions, per se, but does require a legislatively mandated goal for carbon pollution reductions. An accurate baseline of carbon emissions, a realistic, enforceable, and aggressive goal, a timeline that is most likely to afford the best chance for mitigating the worst impacts of climate change, these elements of CPM design are critical to success. Early CPM schemes have learned through experience that market-based carbon emission reduction programs that are poorly designed can result in low reliability and political backlash. The WORLD BANK GROUP and ECOFYS recently completed a study on carbon pricing trends.³ They developed a set of “desirable design features” to increase the probability of success. These guidelines are in most ways similar to the ones described here.
10. **Comprehensiveness:** The CPP is focused on existing power plants and coal as the primary fuel for generating electricity. CCL commends the EPA, WDNR, and the Commission for paying attention to a fundamental source of carbon pollution and trying to effectively regulate emissions. This makes our job both easier and harder. Much of our work and anticipated success depends on not only regulating carbon pollution from existing power plants, but also putting a real, annually increasing price on carbon from all fossil fuel sources, including methane leakage from gas wells and pipelines. We are concerned that the EPA’s necessary initiative to curb carbon pollution from burning coal will put out the mistaken, if unintended message that that’s all we need to do.

Our hope is that the EPA will acknowledge that the CPP is a good start down a path that is more comprehensive, market driven and results in the level of emission reductions that stabilize our environment. There are many reasons why a regional or state approach to compliance with the CPP can include other provisions that address carbon pollution from other sources. CCL believes that a comprehensive CPM, operated concurrently with FOE and a new business model for utility infrastructure and delivery of services, can achieve both EPA’s and more global, long-term goals.

II. The WDNR and Commission questions in sections 3b and 4, concerning renewable energy and energy efficiency, provide a platform for some discussion on the possible synergy between a carbon tax and FOE. Beyond the possibilities of that mutually beneficial arrangement is the growing problem of what to do from a public policy perspective with disruptive competition between regulated utilities and the

³ State and Trends of Carbon Pricing, World Bank Group and Ecofys, May 2014, pages 30-31.

expanding market forces of distributed generation. Rather than utilities in Wisconsin and in other states seeking protection from regulators, CCL suggests that there are opportunities for utilities to form economic partnerships with distributed generation providers and the energy efficiency industry that leverage each other's assets and minimize conflict. Most importantly, a well designed carbon tax, or other CPM, could efficiently and fairly replace the need for significant increases in funding for FOE, and help create competitive markets for low carbon distributed energy sources such as renewable energy.

The following points of information can help in deciding whether a coordinated plan and implementation among FOE, distributed generation providers, regulators, and a CPM can work to reduce carbon pollution based on an aggressive goal and timeline, and comply with the CPP:

1. The Commission established goals for FOE in Docket 5-GF-191. These goals were expressed as a percentage of annual electric sales (ES). Goals increased from .75% of ES in 2011 to 1.5% of ES in 2014. Goals would flatten out after that year at 1.5%. Reference was made to the 2009 "Energy Efficiency and Customer-Sited Renewable Resource Potential in Wisconsin" study conducted by the Energy Center of Wisconsin.⁴ This study estimated that a net⁵ energy efficiency level of savings of 1.6% of ES could be captured cost-effectively each year from 2012 to 2018. Cumulative electric savings from energy efficiency could reach 13% by 2018. One scenario estimated a 2012-2018 goal of 1.9% of ES annually, with a cumulative electric savings by 2018 of 16%. Another source, the Governor's Task Force on Global Warming (GTF) made similar recommendations⁶. By 2015, annual net electric goals would be 2% of ES. With an average annual demand growth rate of 1%, this would mean an average annual net reduction in sales of 1%.
2. Budgets for this gradual increase in goals ranged from \$133 million in 2011 to \$319 million in 2014. The potential study recommended an eventual annual budget of about \$350 million by 2018. A Berkeley National Labs study estimates a budget of \$268 million in 2025 for a high achievement

⁴ Energy Efficiency and Customer-Sited Renewable Resource Potential in Wisconsin, Final Report, conducted by the Energy Center of Wisconsin, August 2009.

⁵ Net means gross energy savings that have been adjusted to account for the attribution rate. Program participants who probably would have installed energy efficiency measures without program incentives have a measurable effect on gross energy savings and reduce the final level of achievement. Savings from those participants are not counted, and that is factored into the final attribution rate. Since 2009, the FOE attribution rate has stayed around 66%.

⁶ Wisconsin's Strategy for Reducing Global Warming, Final Report, prepared by the Governor's Task Force on Global Warming, July 2008.

scenario. The Commission's latest draft Strategic Energy Assessment⁷ shows that gradual budget increases over the life of FOE peak at about \$86 million in 2013. Projections after 2013 seem to show a decline and then leveling out of the budget at about \$75 million from 2015 -2020.

3. Actual FOE net electric energy savings, including renewable energy, were about .89% of annual ES in 2013.⁸ In 2009, net energy savings were about .63% of ES. According to the Commission, other mid-western states had established goals that ranged from 1.0% in 2012 to 2.0% in 2019. It seems unlikely that Wisconsin FOE will achieve anything close to the range of 1.0% to 2.0% under the current budget limitations. This logic is supported by the fact that the peak year for net energy savings as a percentage of ES was 2013, and that achievement was based on a roughly one-to-one relationship with spending on financial incentives. As mentioned above, there don't seem to be any plans to significantly increase FOE budgets in the near future.
4. The REMI study described earlier in our comments provides some perspective on what the models say will be needed to achieve the carbon pollution reductions projected in the results of their analysis. The reference case or baseline in the analysis assumes average annual incremental savings in the Eastern Midwest Reliability Council area, which is largely Wisconsin, of .4% of ES.⁹ This would represent business as usual. We can see that Wisconsin's actual achievement can be more than twice that amount, but it is not clear whether FOE can sustain or increase that level of net electric savings year after year with current budget constraints.

In the alternative scenario, where the FAD carbon tax is implemented at \$10/year of increasing increments through 2030, the first year (2016) of the tax results in incremental savings from price elasticity of demand and energy efficiency of about 2.0% of ES. Load growth is 1.01% in the reference case and .99% in the alternative case. By 2030, the annual incremental savings are 6.5% of ES. Load growth in 2030 is 1.07 in the reference case and 1.00 in the alternative case. These load growth values are consistent with the Commission projections of average annual load growth through 2020. For FOE, as the sole source of reductions in energy growth, to keep pace with this projected impact would require a major infusion of funding over a long period of time. The Commission's current funding projections and the changing nature of the utility's role in an increasingly competitive energy

⁷ Draft Strategic Energy Assessment, Public Service Commission of Wisconsin, May 2014, page 39.

⁸ Focus on Energy CY 2013 Evaluation, Final Report, July 2014, Appendix H.

⁹ The Future of Utility Customer-Funded Energy Efficiency Programs in the United States: Projected Spending and savings to 2025, Barbose, Goldman, Hoffman, Billingsley, Ernest Orlando Lawrence Berkeley National Laboratory, January 2013.

marketplace makes it unlikely that FOE, by itself, can keep pace.

5. In a recent study by Ceres on benchmarking utility clean energy deployment, three Wisconsin utilities are included: Xcel Energy, We Energies, and Alliant Energy.¹⁰ Xcel far exceeds the other companies, with annual renewable energy sales of 18.11% of ES in 2012. Next are We Energies at 5.67 % of ES and then Alliant Energy at 5.41% of ES. These utilities are in the top 32 companies nationally by size, but they may represent the top utilities in Wisconsin in terms of the current potential for increased renewable energy sales. Any meaningful contribution to CPP compliance would require a significant additional investment in renewable energy that is dedicated to a regional or state specific compliance plan (SIP).
6. The Ceres study also estimates the current cost of installed renewable energy capacity in comparison to energy efficiency, conventional fossil fuels and nuclear energy. Energy efficiency is obviously the most cost-effective source of new energy, being two to three times cheaper than other energy sources. Wind comes in at a competitive level with combined cycle natural gas and most coal plants. Specifically, the levelized costs of wind range from \$.045 to \$.095 per kWh. Xcel was selling about 16 million MWhs a year in 2012. At the current cost of production, and if all Wisconsin utilities were selling that much renewable energy, it would be possible to meet CPP requirements cost-effectively with a combination of FOE, a more aggressive Renewable Portfolio Standard, and the price elasticity, additional energy efficiency and distributed generation inherent in a well designed CPM.

Summary: CCL believes that a CPM, including a carbon tax, is an essential component of both compliance with the CPP, and the long-term stabilization of global warming and climate change. We encourage WDNR and the Commission to seriously consider how a CPM could fit with the future of utility regulation and protecting the environment. Perhaps what is at stake in Wisconsin and nationally can best be expressed by Henry M. Paulson Jr., the former Secretary of the Treasury: "We need to craft a national policy that uses market forces to provide incentives for the technological advances required to address climate change. ... We can do this by placing a tax on carbon dioxide emissions. Many respected economists, of all ideological persuasions, support this approach. ... A price on carbon would change the behavior of both individuals and businesses. At the same time, all fossil fuel – and renewable energy – subsidies should be phased out. Renewable energy can outcompete dirty fuels once pollution costs are accounted for."¹¹

¹⁰ Benchmarking Utility Clean Energy Deployment: 2014, Ceres and Clean Edge, Inc., lead author Joseph Kwasnik, July 2014.

¹¹ The Coming Climate Crash: Lessons for Climate Change in the 2008 Recession, Henry M. Paulson Jr., Opinion, New York Times, June 21, 2014.

We thank WDNR and the Commission for the opportunity to comment and hope that our ideas are helpful to you in responding to the EPA's draft CPP. Please let us know if we can answer any questions, including a face-to-face discussion on any of our comments.