



CUTTING CARBON WORKS FOR WISCONSIN

Wisconsin is well-positioned to meet
EPA's Clean Power Plan



A WHITE PAPER BY  cleanwisconsin

Executive Summary

In June 2014, the U.S. Environmental Protection Agency (EPA) announced its Clean Power Plan proposed rule, a comprehensive regulatory proposal to reduce carbon pollution from the electric power sector in the United States. These rules are anticipated to achieve a cumulative 30% reduction in carbon dioxide (CO₂) emissions from the U.S. electric power sector by 2030 from 2005 levels.¹ This includes a 34% reduction of carbon pollution for Wisconsin.

Clean Wisconsin's science department has been analyzing each piece of the EPA's proposal since it was issued and has compiled this report to release some of its findings and recommendations. The report boils down EPA's proposal to the essential pieces to provide a better understanding of how EPA arrived at the budget of a 34% reduction of carbon pollution for Wisconsin and the concept of the "Best System of Emission Reduction." It also examines the various forms of flexibility built into the proposal.

Thanks to gains already made and established programs, policies and processes, Wisconsin is well-positioned to make the reductions required by the EPA in each of the four core areas: coal plant efficiency, utilizing existing natural gas combined cycle capacity, investing in additional zero carbon emission renewable energy and energy efficiency; all these areas are examined in this report. Finally, our analysis looked at the potential economic, natural resource, and health benefits the proposed rule would provide to the state of Wisconsin.

¹ Carbon Pollution Emissions Guidelines for Existing Stationary Sources: Electric Utility Generating Units, 79 Fed. Reg. 34829 (June 18, 2014) (amending 40 C.F.R. Part 60).

Table of Contents

Executive Summary 3

Key Findings & Recommendations 5

Report 6

Introduction 6

What is EPA’s Clean Power Plan? 6

Details: How Targets Were Set 10

Our Goal is Easily Achievable..... 13

Why is it Good for Wisconsin? 14

Clean Wisconsin
Copyright 2014
Updated: April 2015

CREDITS
Matt Landi, Science & Policy Associate
Tyson Cook, Director of Science & Research
Keith Reopelle, Senior Policy Director

Key Findings

1. EPA's proposed budget of carbon emission reductions of 34% by 2030 is reasonable and Wisconsin is well positioned to meet and exceed that goal.
2. The building blocks in EPA's Clean Power Plan that utilize renewable energy and energy efficiency to meet the reduction target are very modest and can be exceeded significantly.
3. The Clean Power Plan will have major natural resource, built infrastructure and public health benefits to the state of Wisconsin.
4. Investments in the renewable energy and energy efficiency building blocks have significant economic advantage to Wisconsin over investments in making existing coal plants more efficient and shifting from coal plants to natural gas combined cycle plants.
5. Increasing the role that energy efficiency programs, such as Focus on Energy, play in meeting the carbon reduction targets eventually set by EPA will provide major energy bill cost savings to home and business owners while simultaneously creating jobs and stimulating economic growth in the state.

Recommendations

1. A robust stakeholder discussion should be convened in Wisconsin to explore in more detail the relative economic benefits and costs of investing in the various carbon emission reduction strategies/building blocks described in the draft Clean Power Plan. An independent outside consultant should be used to produce the analysis.
2. The Wisconsin Department of Natural Resources and Public Service Commission should immediately begin stakeholder discussions about policy recommendations to increase investments in renewable energy and energy efficiency to better position Wisconsin to comply with the Clean Power Plan.
3. The state should hire an independent consultant to lead an analysis of the relative impacts of various implementation plan systems on low-income communities and communities of color.

Introduction

Why is the EPA Acting Now to Limit Carbon Pollution from Power Plants?

Two landmark Supreme Court decisions determined that the EPA had legal obligations under the Clean Air Act (CAA) to regulate carbon pollution in the United States. In 2007, the Supreme Court held that greenhouse gases, including CO₂ meet the definition of an air pollutant under the CAA.² In 2011, the Supreme Court affirmed that it was the statutory duty of the EPA to regulate greenhouse gas emissions from fossil fuel-fired power plants under the CAA.³

As a result of those cases, the EPA has begun working to limit carbon pollution. Its first step was to develop limits on the amount of carbon pollution that new power plants are allowed to emit under the CAA.

The Clean Power Plan is the next step for the EPA to meet its CAA obligations to limit carbon pollution by setting standards for existing fossil fuel-fired power plants under Section 111(d). Through a very flexible policy design that allows states to determine the best way to comply with the rule, the Clean Power Plan is the EPA's regulatory plan to protect public health and welfare from climate change-inducing carbon pollution.

What is EPA's Clean Power Plan?

The Clean Power Plan is the EPA's proposal to limit carbon pollution from existing electric generating units (EGUs) in each state around the country, including Wisconsin. To achieve these carbon pollution reductions in each state, the EPA is proposing to set state-specific emission reduction goals based on the state's existing policies, practices, and technical capacity to improve, displace, replace, and otherwise avoid relying on fossil-fuel fired EGUs responsible for carbon pollution. In setting these goals, the EPA wanted to ensure that states have the opportunity to pursue a diverse array of policy options and compliance mechanisms that allow states to meet their emission goals. While the EPA applied its goal-setting methodology uniformly to each state's electric power sector, each state has the opportunity to create its own plan to reduce emissions so long as it meets a few criteria, of which the essential goal is to require that the state meet or exceed its emission goals.

² *Massachusetts v. EPA*, 549 U.S. 497 (2007)

³ *American Electric Power Co. v. Connecticut*, 131 S. Ct. 2527 (2011)

State Emission Goals

The EPA has set two state-specific goals that states must comply with: The Interim State Goal and the Final State Goal. The Interim State Goal is based on an average emissions over a 10-year period between January 1, 2020 and the end of 2029.^{4,5} The Final State Goal is to be achieved by the state by 2030, and must demonstrate a state's ability to at least maintain the emission performance of the Final State Goal on a three-year rolling average basis starting at the end of 2032 and for all years in perpetuity.⁶ During the Interim Goal period, states must report the emission performance achieved by affected EGUs every two years, starting January 1, 2022.⁷

Best System of Emission Reduction

The state emissions goals are based on the EPA's determination of "best system of emissions reduction" (BSER) for carbon pollution, to minimize the emissions of the pollutant. This determination is required by the Clean Air Act and is based on a standard of performance that "reflects the degree of emission limitation achievable through the application of the best system of emission reduction...adequately demonstrated."⁸ In setting the BSER for the Clean Power Plan, the EPA looked for the system of carbon reduction that was technically feasible, comprised of the least cost options, and enabled as much flexibility as possible for states.

Adjusted Emission Rate

Specifically, in order to limit carbon pollution, the EPA will require each state to reduce its adjusted emission rate (AER) from power plants by 2030 to a level in keeping with the BSER. Also referred to as the Adjusted Output-Weighted-Average CO₂ Emissions Rate,⁹ the AER is a rate of carbon dioxide emissions per electricity generated in pounds of CO₂ per megawatt-hour (lb CO₂/MWh), which has been adjusted to take into account energy efficiency measures.

In setting each state's AER, EPA conducted extensive technical and economic analysis of existing generating sources and state policies, as well as the potential for developing affordable, cleaner sources of electricity within each state and enacting policies that ultimately reduce carbon pollution by displacing the need for electricity generated from fossil fuel-fired power plants. The AERs are the basis for each state's emission goals.

Building Blocks

The state-level goals of the Clean Power Plan are based on the four "building blocks" of the BSER. These building blocks represent EPA's determination of the most technically and economically cost-effective systems to achieve carbon pollution reductions and

⁴ *Supra* note 1, at 34905. "The EPA proposes a start date of January 1, 2020 for the interim goal plan performance period."

⁵ *Id.*, at 34953. §60.5775(c)(1).

⁶ *Id.*, at 34906.

⁷ *Id.*, at 34387.

⁸ 42 USC §7411(a)(1)

⁹ *Supra* note 1, at 34893.

represent existing, long-standing policies and practices that states and utilities alike have significant experience in implementing.¹⁰ They are:

TABLE 1. BUILDING BLOCKS IN BEST SYSTEM OF CARBON EMISSIONS REDUCTION

Building Block	Description	Equivalent Used for Setting Adjusted Emission Rate Goal
1	Improve efficiency of coal power plants	6% improvement in heat rate
2	Increase use of low-emission sources	Use natural gas combined cycle (NGCC) plants at 70% capacity
3	Increase generation from renewables and other zero-emission sources	Increase renewable energy development at average pace in region; avoid retirement of approx. 6% of nuclear fleet
4	Increase energy efficiency	Increase customer energy efficiency to 1.5% of retail sales, annually

Flexibility: Achieving Goals

Under the Clean Air Act, states are responsible for the overall implementation and enforcement of emissions reductions. Having used the building blocks to set the state AER goals, the EPA allows states to achieve carbon emission reductions through any measures that meet basic criteria set by the EPA. States will determine which policies best fit their unique circumstances and establish a state plan that includes 12 plan components addressing the actions each state will take, found in Table 2 below.¹¹

¹⁰ *Id.*, at 34855.

¹¹ *Id.*, at 34852.

TABLE 2. 12 COMPONENTS OF A STATE PLAN

1. Identification of affected entities	7. Identification of monitoring, reporting, and recordkeeping requirements
2. Description of plan approach and geographic scope	8. Description of state reporting
3. Identification of state emission performance level	9. Identification of milestones
4. Demonstration that plan is projected to achieve emission performance level	10. Identification of backstop measures
5. Identification of emission standards	11. Certification of hearing on state plan
6. Demonstration that each emissions standards is quantifiable, non-duplicative, permanent, verifiable, and enforceable	12. Supporting material

The EPA will evaluate the approvability of a state plan based on four criteria: (1) uses an enforceable measure that reduces electrical generating unit CO₂ emissions; (2) meets or exceeds the AER goal within the same timeframe; (3) emission reductions are quantifiable and verifiable; and (4) has a process for reporting on plan implementation, progress toward achieving the emission goals, and implementing corrective measures, if necessary.¹²

In setting its state plan to implement the Clean Power Plan, a state can use any combination of the four building blocks or alternative policy mechanisms they deem appropriate and beneficial for their state. Ultimately, any measure that leads to reduced emissions from the electric power sector and complies with the basic plan components and evaluation criteria will be counted toward achieving the state’s AER goal. If a state cannot utilize one of the four building blocks laid out by the EPA, it can develop and implement a different plan as long as it is justified, and the state shows how the other building blocks or alternative policy mechanisms will make up the difference.

Flexibility: Converting to a Mass-Based Goal

Under the Clean Power Plan, states also have the option to convert their rate-based CO₂ emission goal into a mass-based CO₂ emission goal.¹³ This would be a limit on the total amount of CO₂ emitted by fossil fuel-fired power plants in each state, instead of a limit on the pounds of carbon for each MWh of electricity produced.

There are three main requirements states must include in the process of converting their rate-based CO₂ emission goal to a mass-based CO₂ emission goal: (1) the tools, methods, and assumptions used to convert the rate-based goal must be included in the state plan; (2) any data or other technical, supporting materials must be included in the state plan;

¹² *Id.*

¹³ *Id.*, at 34837.

and (3) the mass-based CO₂ emission goal for affected EGUs must be at least as stringent as the rate-based emission goal in tons of CO₂.¹⁴

EPA is proposing to allow two basic approaches to calculating a mass-based CO₂ emission goal: one that is applied only to existing affected sources based on historical 2012 generation data, and one that is inclusive of generation from new fossil fuel-fired sources based on projections from the Energy Information Administration's (EIA) 2013 Annual Energy Outlook.¹⁵

The general formula for converting a state's rate-based CO₂ emission goal into a mass-based CO₂ emission goal is found below in Figure 1 below. The Mass Equivalent Generation includes the adjusted generation from affected fossil fuel sources from building blocks 1 and 2, as well as the incremental and existing generation from building block 3, and the avoided generation derived from building block 4.

$$\text{Mass Equivalent Goal} = \text{Proposed Emission Rate Goal} \times \text{Mass Equivalent Generation}$$

FIGURE 1. MASS-BASED CO₂ EMISSION GOAL CONVERSION FORMULA

Granting states the ability to convert their rate-based CO₂ emission goals into mass-based CO₂ emission goals approach allows regulators, utilities, and other stakeholders to more easily understand their respective emission reduction goals, while also granting them the flexibility to better assimilate plans into multi-state, regional plans, as discussed below.

Flexibility: Multi-State, Regional Plan Compliance

In order to further increase flexibility and recognizing the value of cooperation between states, the Clean Power Plan also allows states to coordinate their efforts and create multi-state, regionally based plans.¹⁶ This also allows more compliance opportunities than would otherwise be available within a single state, since electricity operating systems are regional in scope. The EPA envisions that many states will voluntarily choose to participate in such regional plans, for example, using mass-based CO₂ emission budget trading programs like the Regional Greenhouse Gas Initiative, an existing, voluntary emission budget trading program used by some New England and Mid-Atlantic states.

Details: How Targets Were Set

In setting the respective state goals, the EPA calculated the amount of emissions that can be reduced at existing fossil fuel-fired EGUs and in each state through the application of the four building blocks that comprise the BSER. While the calculations resulted in significant differences between states, the EPA's use of BSER as a standard ensured that its

¹⁴ *Id.*, at 34953

¹⁵ See TSD 'Translation of the Clean Power Plan Emission Rate-Based CO₂ Goals to Mass-Based Equivalents', at 4.

¹⁶ *Supra* note 1, at 34833.

methodology was uniformly applied and each state’s unique characteristics were considered.

The EPA used 2012 state-level data from the Emissions & Generation Integrated Resource Database (eGRID) to determine each state’s AER.¹⁷ eGRID is a comprehensive inventory of environmental attributes of the electric power sector in the United States, where EPA compiles plant-specific data from the EIA, North American Electric Reliability Corporation (NERC), Federal Energy Regulatory Commission (FERC), among others. The EPA subsequently applied the assumptions of each of the four building blocks to this 2012 state-level, eGRID data and calculated the Interim State Goals and the Final State Goals. The basic formula used by the EPA to calculate the emission performance level in 2012 and for the Interim and Final State Goals is seen in Figure 2 below.

$$\text{Adjusted Emission Rate} = \frac{\text{CO}_2 \text{ Emissions from Affected EGUs (lb CO}_2\text{)}}{\text{Electricity Generation from Affected EGUs (MWh)} + \text{Renewable Generation (MWh)} + \text{Nuclear Generation Avoiding Retirement (MWh)} + \text{Energy Efficiency Adjustment (MWh)}}$$

FIGURE 2. EPA’S ADJUSTED EMISSION RATE FORMULA

This formula results in what EPA refers to as the aforementioned Adjusted Output-Weighted-Average CO₂ Emissions Rate,¹⁸ or more simply, the Adjusted Emissions Rate. The resulting AER is in terms of pounds of CO₂ emitted per MWh of electricity generated.

The EPA used the 2012 Fossil Fuel Emission rate (“FFER”) for Wisconsin as its starting point to calculate EPA’s Proposed State AER Goals, then factored in Wisconsin’s 2012 renewable generation data and the percentage of Wisconsin’s 2012 nuclear generation that avoids retirement to arrive at the 2012 AER.

Wisconsin’s 2012 Fossil Fuel Emission Rate (FFER) was calculated to be 1,988 lb CO₂/MWh. Figure 3 shows how this figure was calculated:

$$\text{Fossil Fuel Emission Rate} = \frac{\text{CO}_2 \text{ Emissions from Affected Fossil Fuel EGUs (lb CO}_2\text{)}}{\text{Electricity Generation from Fossil Fuel Affected EGUs (MWh)}}$$

FIGURE 3. WISCONSIN’S FOSSIL FUEL EMISSION RATE FORMULA

¹⁷ See TSD titled ‘Goal Computation Technical Support Document’, at 4.

¹⁸ *Supra* note 1, at 34893.

Wisconsin's 2012 FFER, 2012 AER, and EPA's Proposed State AER Goals are found in Table 3 below.

TABLE 3. WISCONSIN'S 2012 EMISSION RATES AND CLEAN POWER PLAN GOALS

2012 FFER lb CO ₂ /MWh	2012 AER lb CO ₂ /MWh	2020-2029 Interim AER Goal lb CO ₂ /MWh	2030 Final AER Goal lb CO ₂ /MWh
1,988 lb CO ₂ /MWh	1,827 lb CO ₂ /MWh	1,281 lb CO ₂ /MWh	1,203 lb CO ₂ /MWh

To arrive at these figures, the EPA determined the total CO₂ emissions from affected EGUs in Wisconsin in 2012 and divided that amount by the electricity generated from the affected EGUs, renewable energy generation, 5.8% of Wisconsin's nuclear energy generation, and electricity consumption avoided by energy efficiency measures, such as Wisconsin's Focus on Energy program.

Table 4 shows how the EPA applied the BSER to Wisconsin and what impact each building block was calculated to have on Wisconsin's AER. The EPA applied the building blocks to Wisconsin as follows, summarized in Table 4:

- (1) an improvement of the heat rate efficiency of each coal-fired power plant of 6%;
- (2) an increase of the capacity factor of natural gas generation to 70%;
- (3) an increase in renewable energy to 11% of total generation; and
- (4) increasing energy efficiency to avoid approximately 1.50% of retail sales of electricity annually, and 12.17% of retail sales of electricity cumulatively.¹⁹

¹⁹ See TSD 'Regulatory Impact Analysis for the Proposed Carbon Pollution Guidelines for Existing Power Plants and Emission Standards for Modified and Reconstructed Power Plants', Table 3-3 at 3-16 and 3-17.

TABLE 4. BSER “BUILDING BLOCKS” APPLIED TO WISCONSIN²⁰

BUILDING BLOCK		GOAL-SETTING ASSUMPTIONS	IMPACT ON AER		OPPORTUNITIES IN WISCONSIN
			Impact	Resulting AER	
1	Improve plant efficiency	Heat rate improvement of 6%	2012 Adjusted Emission Rate: 1,827 lb CO ₂ /MWh		Retire or retrofit older coal-fired units; re-dispatch to more efficient units; add combined heat and power capacity
			(98)	1,728	
2	Increase dispatch to low-emission sources	Increase capacity factor of NGCC to 70%	(241)	1,487	Technical potential to increase capacity factor to at least 80% ²¹
3	Increase generation from renewables and other aero/low emission sources	Avoid 5.8% of nuclear capacity retirement	(22)	1,465	No announced plans to decommission Point Beach Nuclear Power Plant
		Increase from 5% to 11% of electricity generation from In-state Renewables ²²	(86)	1,379	Increase Renewable Portfolio Standard, 3rd-party ownership of RE systems; continue pace of RE development
4	Increase energy efficiency	1.50% annual EE Savings; 12.17% cumulative EE savings by 2030 ²³	(176)	1,203	By 2018, Wisconsin can achieve 1.60% annual EE savings; 13.0% cumulative EE savings ²⁴

The last column in Table 4 above shows opportunities Wisconsin has available to meet for most of the building blocks that go well beyond the budget EPA set for that building block. (The level of achievement assumed for each building block in determining Wisconsin’s reduction target of 34%.)

²⁰ See Appendix 5 of TSD Spreadsheet ‘Goal Computation – Appendix 1 and 2’ for Wisconsin-specific data EPA used in the calculation of Wisconsin’s State Goals.

²¹ Synapse Energy Economics, “Displacing Coal: An Analysis of Natural Gas Potential in the 2012 Electric System Dispatch,” p. 1. August 2013.

²² See TSD titled ‘GHG Abatement Measures’, at 4-28. Table 4.8. Proposed and Alternate State Targets for RE Generation as a Percentage of Total Generation, with 2012 Historical RE Generation. Excludes existing hydroelectric generation capacity.

²³ *Id.*, See Table 5-4 at 5-17. Wisconsin achieves this by 2020. EPA calculates Wisconsin’s incremental savings from EE as a percentage of retail sales in 2012 is approximately 1.05%. Assuming a 0.2% increase per year starting in 2017 (see Table 5-12 at 5-39), Wisconsin achieves 1.50% annual incremental EE savings of retail sales by 2020.

²⁴ Energy Center of Wisconsin, “Energy Efficiency and Customer-Sited Renewable Resource Potential in Wisconsin.” August 2009.

Our Goal is Easily Achievable

Wisconsin is well-positioned to comply with the Clean Power Plan and even has the technical and economic potential to far exceed its requirements. Current carbon pollution levels in Wisconsin are calculated by the EPA to be around 38.39 million metric tons.

In converting Wisconsin's rate-based CO₂ emission goal to a mass-based CO₂ emission goal would require Wisconsin to reduce its Interim Goal CO₂ emissions to 26.916 million metric tons between 2020 and 2029, and reduce its Final Goal CO₂ emissions to 25.275 million metric tons by 2030.²⁵ The alternative approach outlined by the EPA, which is inclusive of generation from new fossil fuel-fired sources projected by the AEO 2013²⁶, the respective goals would be to reduce emissions 29.091 million metric tons between 2020 and 2029, and by 28.102 million metric tons by 2030.²⁷ Wisconsin is positioned to readily meet these goals, as demonstrated by existing practices and by our potential for emission reductions.

Investor-owned utilities in Wisconsin have already had measured success in reducing overall CO₂ emissions, decreasing emissions by more than 10% between 2005 and 2012, according to the EPA. Some Wisconsin utilities have demonstrated an even stronger position: Madison Gas and Electric and Wisconsin Public Service Co., for example, have reduced emissions by more than 20% between 2005 and 2012,²⁸ and would be on pace to meet the 2030 standards years ahead of time.

An independent analysis by the World Resources Institute, a leading global sustainability organization, has shown that Wisconsin could reduce carbon pollution from existing power plants by 43% by 2020 by making modest increases in clean energy investments, taking advantage of the cleanest power plants in Wisconsin, and doubling down on energy efficiency.²⁹ This report concludes that Wisconsin's potential emissions reduction far exceeds the EPA's proposal.

We are aware that some Wisconsin utilities question certain assumptions for some of the building blocks. In particular, we have heard utility executives express concern that a 6% improvement in the heat rate or efficiency of coal plants within their fleet is overly optimistic or not possible due to recent improvements in efficiency gained when some of those plants were retrofitted for other pollutants. However, it should be noted that Building Block 1 also includes the re-dispatch of generation from less efficient to more efficient coal plants. This re-dispatch can be done without the need for improvement projects, and in Wisconsin, this alone could account for a 5% improvement in Wisconsin's AER.³⁰

At the same time, the assumptions made by EPA for the carbon reductions achievable through development of cost-effective renewable generation additions and increases in

²⁵ *Supra* note 15, at 14. See Table 4 'Interim and Final Mass Equivalents – Existing Affected Sources'.

²⁶ *Id.*

²⁷ *Id.*, at 16. See Table 5 'Interim and Final Mass Equivalents – Existing Affected and New Sources'.

²⁸ *Clean Wisconsin* analysis of EIA Form 861 2012 electricity generation data.

²⁹ World Resources Institute, "Power Sector Opportunities for Reducing Carbon Dioxide Emissions: Wisconsin." December 2013.

³⁰ *Clean Wisconsin* analysis of EIA Form 861 2012 electricity generation data.

energy efficiency programs seem very conservative. EPA's analysis assumes that Wisconsin's energy efficiency programs will reach a 1.5% annual reduction in electricity use by 2020 and remain at that level. Under the proposal forwarded by the Wisconsin Public Service Commission in 2009, it is estimated that Wisconsin would have reached 1.6% by 2014.³¹ Wisconsin has the technical ability to reach the 1.5% prior to 2020 and expand this potential beyond 1.5% during the plan's interim period.

Furthermore, Wisconsin's own recent experience with increasing renewable energy generation suggests that there is significant opportunity to attain higher levels of renewable energy development. From 2009 to 2013, Wisconsin achieved an average annual growth rate in renewable energy generation of 10.85%.³² By maintaining this growth rate, starting in 2020, we can achieve renewable energy generation levels of 9,873,881 MWh by 2029. This is 3,014,881 MWh more renewable energy generation calculated by the EPA in setting Wisconsin's AER goal.³³

By strengthening Wisconsin's existing Renewable Portfolio Standard to a level that achieves the same, demonstrated growth in renewable energy Wisconsin has accomplished and expanding programs such as the Focus on Energy program that provides funding for qualifying renewable energy and energy efficiency projects around our state, Wisconsin can relatively easily achieve the goal EPA set for our state under the Clean Power Plan.

Why is it Good for Wisconsin?

As part of the broader effort to combat climate change, the Clean Power Plan's limitations on carbon pollution will have far-reaching public health, economic, and environmental benefits for current and future generations in Wisconsin and around the country.

Wisconsin is already seeing the impact of climate change. Wisconsin's average temperature has risen by 1.1 degrees Fahrenheit over the past century with projections ranging as high as 9 degrees higher by mid-century and 13 degrees by year 2100.³⁴ The risk this poses to Wisconsin's culture, health, and economy is great and demands urgency.

The Clean Power Plan can help power Wisconsin's clean energy economy. Focusing on renewable energy and energy efficiency has the potential to create many thousands of jobs by 2030. Reducing Wisconsin's dependence on fossil fuels will help us keep some of the \$12 billion we spend annually to import fossil fuels for electricity and heating. With the savings from energy efficiency, the EPA projects that the Clean Power Plan will help reduce energy bills by up to 9% by 2030.³⁵

Wisconsin's environment will benefit, too. Wisconsin will have cleaner air, which will reduce incidences of air pollution-related illnesses and death. In Wisconsin alone in 2011,

³¹ *Supra* note 24.

³² *Clean Wisconsin* analysis of EIA Form 861 2012 electricity generation data.

³³ *Supra* note 22, see Table 4.6 "State Target RE Generation Levels (Gigawatt-hours)". 2029 RE Generation Target.

³⁴ Wisconsin Initiative on Climate Change Impacts (WICCI), "Wisconsin's Changing Climate: Impacts and Adaptation." 2011

³⁵ *Supra* note 1, at 34934.

more than 4,700 people were hospitalized with asthma and more than 19,000 people sought emergency room care for asthma.³⁶ Chronic bronchitis, emphysema, or other chronic lower respiratory diseases, not including asthma, were the cause of death of 2,454 Wisconsin residents in 2008.³⁷ By displacing fossil-fuel fired electricity generation, the Clean Power Plan will help reduce these incidences and protect the health and lives of at-risk Wisconsinites.

Process Going Forward

The EPA's Clean Power Plan is a proposed rule. Once published in the Federal Register, the public has 120 days to comment on the proposed rule. This comment period, however, was extended by the EPA. Public comments are now due by December 1, 2014. In consideration of these public comments, the EPA will then publish a final rule in July or August of 2015.³⁸ States would then be expected to submit their initial state plan by June 30, 2016. States granted extensions on an individual basis have a deadline of June 30, 2017. States granted extensions on a multi-state basis have a deadline of June 30, 2018.



³⁶ American Lung Association, "A Strategic Plan for Addressing COPD in Wisconsin." 2010.

³⁷ Wisconsin Department of Health Services, Wisconsin Asthma Statistics. Accessed at: <http://1.usa.gov/1DEZrCs>.

³⁸ Bloomberg News, "EPA to Delay U.S. Carbon Rule for Power Plants Until Summer". Accessed at: <http://bloom.bg/1MM5XLU>