

The U.S. Environmental Protection Agency (EPA) has introduced a proposal to reduce carbon emissions from existing power plants—a critical step to address climate change in the U.S. The proposal, dubbed the Clean Power Plan, asks each state to design its own strategy to achieve carbon reduction targets by 2030. It offers Maine a great opportunity not just to reduce climate change, but to lower electricity bills and boost the state economy.

Basics on the Clean Power Plan in Maine

In June 2014, the EPA introduced a proposal to curb carbon emissions from existing power plants, a critical step to address climate change in the U.S. The proposal, dubbed the Clean Power Plan, asks each state to design its own strategy to achieve carbon reduction targets by 2030. The EPA has proposed a 14 percent emission reduction target by 2030 for Maine. The agency expects to finalize the Clean Power Plan by August 2015.

The EPA rule will require Maine to reduce its carbon emissions, but it also offers the state a significant opportunity to save its consumers money and boost its economy. **A Public Citizen analysis projects that the Clean Power Plan will cut Maine electricity bills up to 12.5 percent by 2030.**

The state should seize the opportunity to serve its citizens—who overwhelmingly support the CPP¹—and fulfill Gov. Paul LePage's goal to bring down Maine's high energy costs. In fact, Maine can not only meet the Clean Power Plan target, but achieve even greater reductions if the state continues to invest in its successful renewable and energy efficiency initiatives.

A strong Maine carbon emissions standard would also enhance economic opportunity, sharpening Maine's competitive edge, bringing down energy costs and creating jobs in the state.

The Clean Power Plan Will Cut Mainer's Electricity Bills

- Based on the EPA's conservative data, by 2030, electricity bills will be 11.3 to 12.5 percent lower under the Clean Power Plan, saving the average Maine household \$117 to \$129 annually.²
- Under the Clean Power Plan a typical Maine household will pay roughly \$907 to \$919 for electricity in 2030; without the Clean Power Plan it will pay \$1,037.³
- Maine could see even greater savings than the EPA's data suggest because the agency omits entire categories of efficiency measures that states can use, such as building codes and appliance standards⁴
- Maine's energy efficiency resource standard targets an annual savings rate of 1.6 percent, and the EPA notes that Maine was already saving at 1.96 percent pace in 2012.⁵

Continuing to Promote Energy Efficiency Will Benefit Maine Consumers and the Environment

- Efficiency Maine's energy efficiency programs, through the 2011-2014 fiscal years, created

lifetime energy savings totaling over \$964.7 million.⁶

- Efficiency Maine's programs aid both consumers and the economy. For every \$1 spent, the programs generate \$3 in energy savings and \$4 in Gross State Product.⁷
- These programs have also been great for the climate, reducing approximately 300,000 tons of CO₂ annually, equal to removing 52,000 cars from the road.⁸
- Maine is a participant in the Regional Greenhouse Gas Initiative (RGGI), which caps and reduces power sector CO₂ emissions.⁹ The CO₂ cap declines each year by 2.5 percent, leading to 2.8 million tons in 2020.¹⁰ Maine's consumer oriented framework of RGGI results in 85 percent of revenues generate by direct toward energy saving initiatives.

Maine's Robust Clean Energy Economy Still Has Room to Grow

- As of 2006, Maine had 2,500 of the 3.7 million jobs related to renewable energy and energy efficiency in the U.S. This number is expected to increase by 7.1 percent per year, equating to about 600 new jobs per year.¹¹
- Maine's renewable portfolio standard, requiring 40 percent of electricity to come from clean energy sources, has already attracted \$900 million in private investment to implement green technologies. This number is expected to increase by \$1.9 billion by 2023.¹²
- The Number Nine Wind Farm, located in Aroostook County, has

the capacity to produce 250 megawatts of power. This wind farm will create 300 construction jobs and approximately 12 permanent positions.¹³

- Maine has harvested many renewable resources including wind and tidal energy. Expanding into solar energy will provide numerous positive benefits including energy diversity and security, reduced electricity price and less air pollution.¹⁴

Maine Can Achieve Even More in Renewable Energy Production

- Maine produces 61 percent of energy from renewable resources, with 32 percent coming from non-hydro renewables—the highest percentage in the nation.¹⁵
- Maine boasts the first ocean energy project to deliver power to public grid. This tidal energy project is currently in use and additional systems will be added, increasing output to 5MW and providing electricity to 2,000 homes and businesses.¹⁶
- The Number Nine Wind Farm aims to install 119 wind turbines

with a total generation capacity of 250MW. This will create enough electricity to power 68,000 homes with clean energy every year. The wind farm will avoid adding 362,000 tons of CO₂ into the atmosphere each year.¹⁷

- The future electricity production of wind farms in Maine could help offset pollution equivalent to 400,000 cars—almost half the registered passenger vehicles in the state.¹⁸

Fossil Fuels Still Hold Maine's Energy Consumption Captive

- Although Maine produces a large amount of renewable energy, Maine household energy consumption is still dominated by petroleum: 7 of 10 households use petroleum as their primary energy source for heating.¹⁹
- Maine records between 450-500 home heating oil spills yearly. These spills can harm indoor air quality and contaminate drinking water in homes that use wells.²⁰
- In 2012, Maine emitted 437 pounds of CO₂ per MWh. The proposed Clean Power Plan would require Maine to reduce

emissions to 378 pounds of CO₂ per MWh.²¹

Changes in Maine's Climate Can Have Drastic Impacts on the Environment and Economy

- The fishing of aquatic creatures such as lobsters plays a large role in Maine's economy, generating approximately \$400 million in revenue.²² Water temperature increases have been linked to the spread of lobster shell disease and could cause lobsters to migrate. Healthy lobster populations are key to the livelihoods of fishermen and Maine's economy.²³
- The one-meter sea level rise predicted to happen over the course of this century could have drastic impacts on Maine's coastline. 20,000 acres of coastal real-estate would be submerged and breeding habitats would be destroyed.²⁴
- Maine's summer temperatures could increase by between 7 and 13°F by the end of this century.²⁵

ENDNOTES

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² See PUBLIC CITIZEN, CLEAN POWER, CLEAR SAVINGS: THE EPA CLEAN POWER PLAN WILL CUT MAINE ELECTRICITY BILLS BY 11.4 TO 12.5 PERCENT BY 2030 (2015).

³ *Id.*

⁴ *Id.*

⁵ *Id.*

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<http://www.energycmaine.com/docs/2014-Efficiency-Maine-Annual-Report.pdf>.

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¹⁷ EDP Renewables, Number Nine Wind Farm, <http://numberninewindfarm.com/>.

¹⁸ WCSH6, Report highlights benefits of wind power in Maine, May 5, 2015, <http://www.wcsh6.com/story/news/local/augusta-waterville/2015/05/05/report-wind-power-benefits/26938207/>.

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