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HOW ILLINOIS CAN MEET ITS CLEAN POWER PLAN TARGETS

KRISTIN IGUSKY, REBECCA GASPER, NOAH KAUFMAN

CONTACT

Kristin Igusky Associate Climate and Energy Program kigusky@wri.org

Rebecca Gasper Research Analyst Climate and Energy Program rgasper@wri.org

Noah Kaufman Climate Economist nkaufman@wri.org

Disclaimer: This Fact Sheet contains preliminary research, analysis, findings, and recommendations. It is intended to stimulate timely discussion and critical feedback and to influence ongoing debate on emerging issues. Its contents may eventually be revised and published in another form. In August 2015, the Environmental Protection Agency (EPA) finalized the Clean Power Plan (CPP), the first-ever carbon pollution standards for existing power plants. The CPP enables states to use a wide range of options to meet their standards, including fuel switching, increased use of renewables, energy efficiency, a carbon fee, or participation in a trading program.

For Illinois, EPA set a mass-based standard for existing fossil plants of 66.5 million short tons of carbon dioxide (CO_2) , which is about a 35 percent reduction below the state's 2012 levels. While the U.S. Supreme Court has temporarily halted CPP implementation while the courts consider legal challenges, this stay is not a reason for Illinois to stop planning for a lower-carbon power sector. In this fact sheet, we show how Illinois can build on its existing policies while making better use of existing power plants to meet its mass-based standards while minimizing compliance costs, ensuring reliability, and harnessing economic opportunities in clean energy.

WRI analysis finds that Illinois can reduce existing power plant CO_2 emissions 27 percent below 2012 levels by 2030 by meeting its clean energy targets and making better use of existing power plants, achieving about 75 percent of the reductions necessary to meet its mass-based emission target. The remaining gap can be closed by addressing the current barriers that are limiting clean energy development as well as expanding the state's clean energy targets (Figure 1).

FOUR WAYS TO REDUCE POWER SECTOR EMISSIONS IN ILLINOIS

Illinois can build on its progress to date and achieve greater reductions by taking the following four actions:

• Energy efficiency. Remove the spending cap on the energy efficiency standard so the utilities can fully meet their savings targets, which ramp up to 2 percent annually starting by 2015.

- Renewable energy. Ensure that alternative compliance payments, which alternative retail electric suppliers must use to meet half of their requirement under the renewable energy standard, are used to increase investment in renewable energy.
- **Existing natural gas plants.** Increase the use of combined cycle plants to 75 percent, which is closer to the levels they're capable of achieving than the 18 percent at which they ran in 2013.
- **Coal plant efficiency.** Adopt low-cost operational improvements and best practices at coal plants.

Illinois could meet—or even exceed—its mass-based emission targets by adjusting or removing the spending cap on efficiency while increasing the target to achieve about 20 percent cumulative energy savings by the end of 2025 and increasing the renewable energy standard to 35 percent of the state's sales by 2030, in line with the state's bipartisan Clean Jobs Bill. Doing so would cut CO_2 emissions by 76 percent below 2012 levels by 2030.

MAXIMIZING THE ECONOMIC BENEFITS OF THE CLEAN POWER PLAN

Illinois can develop an implementation plan that maximizes the economic benefits to the state and achieves emission reductions cost-effectively by:

- 1. Adopting a market-based carbon pricing program, which encourages cost-effective emission cuts and generates revenue that can be used for public investments or reducing taxes. The CPP encourages states to trade credits without formally joining a trading program. If Illinois surpasses its CPP target through the actions described above, it could generate an average of over \$300 million per year in revenue between 2022 and 2030 from out-of-state sources if emission allowances trade at \$10 per short ton.
- 2. Investing in energy efficiency. Efficiency is one of the most cost-effective tools for Illinois to cut its emissions while saving money for residents. The state's efficiency standard is estimated to save customers over \$1 billion per year in 2025.

CONCLUSION

Even with the stay on the Clean Power Plan, Illinois has every reason to move forward with its transition to a low-carbon power sector. By expanding its clean energy policies and addressing current barriers, Illinois would be ahead of the game when EPA is able to move forward with regulating carbon pollution from power plants. At the same time, the state would be able to scale up the benefits from these policies, reduce the need to invest in other states' power sectors, and achieve deeper carbon emission reductions more cost-effectively.

For details on the measures Illinois can take, see: http://www.wri.org/publication/power-plan-targets-illinois

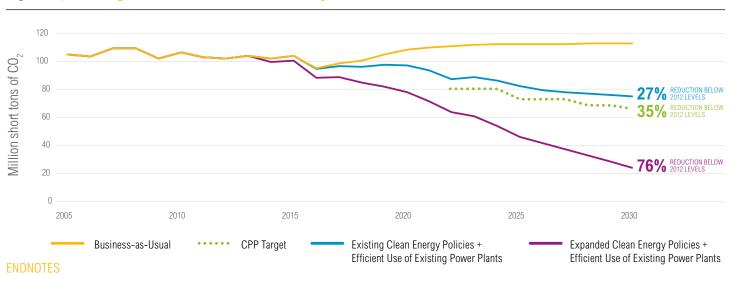


Figure 1 | Existing Power Plant Emission Pathways for Illinois

1 For more information, see EPA's Clean Power Plan at: http://www2.epa.gov/cleanpowerplan/clean-power-plan-existing-power-plants>.

2 Percent reductions calculated using an adjusted 2012 baseline, including emissions and generation from affected plants under construction as of January 8, 2014, consistent with EPA's methodology.

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