

THE CLEAN POWER PLAN: Protecting Iowa's Fish, Wildlife & Outdoor Recreation Economy

The Clean Power Plan to cut carbon pollution from U.S. power plants 32% by 2030 will protect Iowa's natural resources, improve our economy, and increase our energy independence – all while maintaining an affordable, reliable energy supply. ¹

Carbon Pollution is Costing Iowa's Natural Resources

Outdoor recreation is an important driver for our state's economy, supporting valuable jobs for Iowans and stimulating spending in local and rural communities. Each year in Iowa, outdoor recreation supports:

- \$3 billion in spending,
- \$717 million in income, and
- 31,000 jobs.²

Carbon pollution (i.e., carbon dioxide) threatens fish, wildlife and outdoor recreation opportunities. While the impacts of carbon pollution occur over time, they are costing our natural resources *today*.

HUNTING

Increased weather variability: As levels of carbon pollution in our air rise, increases in weather variability occur including excessive heat, droughts, flooding, heavy precipitation.³ These changes impair wildlife habitat, the availability and quality of wildlife food sources, and wildlife migration patterns.⁴

- In the Midwest (i.e. "Mississippi Flyway") such changes are projected to contribute to a **19-39% reduction in duck populations** by 2030.⁵

Increased wildlife disease: Increased carbon pollution in our air indirectly promotes outbreaks of diseases and insects/parasites,⁶ both of which prey on wildlife and diminish their populations.

- In 2012, nationwide heatwaves caused large outbreaks of hemorrhagic disease in white-tailed deer populations and massive deer die-offs.⁷
- In 2012, Iowa experienced its largest documented outbreak of hemorrhagic disease in white-tail deer⁸ and additional outbreaks of hemorrhagic disease occurred in Iowa in 2013.⁹ These outbreaks further **reduce Iowa's deer population** that, as a whole, has been in decline since 2006.¹⁰

Human health risks: An increase in insects/parasites not only poses health risks for Iowa's wildlife, but also outdoorsmen.

- Rising carbon pollution contributes to conditions which **increase the range and prevalence of deer ticks**, increasing risk of Lyme disease for outdoor enthusiasts.¹¹

Reduced hunting-related revenue: The effects of carbon pollution not only diminish our natural resources and our outdoor recreation opportunities, but can also contribute to reduced spending in local communities on hunting/fishing permits, outdoor gear, lodging, food, etc.

- Following the 2012 hemorrhagic disease outbreak, a reduced number of deer hunting permits were issued in some areas of the nation to help sustain white tail deer populations, restricting hunting opportunities.¹²

FISHING

Impacts to water quality and temperature: In addition to increased flooding and heavy precipitation events, carbon pollution contributes to increased water temperatures and decreased water quality.¹³ These conditions can have devastating consequences for fish and aquatic life.

- Flooding and heavy precipitation can increase the amount of chemical runoff and concentrations of nutrient pollution in waterways, leading to algal blooms in waters that **reduce oxygen levels and prove deadly to fish**.¹⁴
- Because fish require oxygen and particular water temperatures in order to thrive, "**higher temperatures combined with oxygen depletion can be a quiet killer**."¹⁵
- Common fish found in Iowa (like Northern pike, walleye, trout and yellow perch) are particularly vulnerable to increased water temperatures.¹⁶

Meeting the Challenge of Rising Carbon Pollution

Power plants are our nation's single largest source of carbon pollution.¹⁷ Despite this fact, there have been *no limits* on the amount of carbon pollution power plants can emit.

The Clean Power Plan establishes these first-ever, federal limits on carbon pollution from existing power plants by setting state-specific carbon pollution reduction goals based on each state's energy portfolio.

- **Over 325 national, state and local sporting organizations support the Clean Power Plan**, including: Trout Unlimited, Pheasants Forever, Quail Forever, National Wildlife Federation, American Fly Fishing Trade Association, Izaak Walton League of America, Wildlife Management Institute, and Bull Moose Sportsmen's Alliance.¹⁸

States have broad flexibility to determine how to best achieve their carbon reduction goal. Because Iowa is a national leader in wind energy generation and manufacturing, the state is well-equipped to meet its carbon reduction goal: Under the Clean Power Plan, Iowa has one of the least stringent state goals in the country.¹⁹

The Clean Power Plan Will Increase Iowa's Energy Independence

Despite its leadership in renewable wind energy, Iowa remains one of the most coal-dependent states in the country.²⁰ And because Iowa has no active coal mines within its borders, all of Iowa's coal demand must be imported from outside the state.²¹

- \$590M is spent each year to import coal to Iowa, costing each Iowan \$193 annually.²²

The Clean Power Plan will help decrease Iowa's coal-dependence: By encouraging clean energy growth, the Clean Power Plan gives Iowans the opportunity to invest in their state's own renewable energy resources, and in turn increase Iowa's energy security and self-reliance.

The Clean Power Plan Will Strengthen Iowa's Economy

Meeting carbon reductions under the Clean Power Plan with renewable wind energy would not only allow Iowa to become more energy independent, but would also provide economic benefits for rural landowners and local communities.

- Iowa farmers/landowners already receive more than \$16 million annually in lease payments from wind turbines.²³
- Total increased assessed value of property with wind turbines in Iowa through 2013 is estimated to be \$2.6 billion.²⁴

As a national leader in wind energy generation and manufacturing, Iowa's economy could benefit from helping to meet an increased demand for renewable energy.

- Iowa could sell its own excess wind energy to other states with more stringent carbon reduction goals or less clean energy to meet their own goals.
 - Iowa could also sell Iowa-made wind turbines and components to other states. Currently, Iowa has 15 manufacturing facilities that produce wind turbine parts,²⁵ and over 75 Iowa companies in the wind supply chain.²⁶
-

The Clean Power Plan Will Maintain Energy Affordability & Reliability

Increasing our self-reliance on renewable wind energy under the Clean Power Plan will increase our energy independence, helping to keep Iowa's electricity rates low and its energy supply stable.

- Iowa's electricity rates have remained below the national average during peak wind energy growth,²⁷ and our energy supply has remained stable. In fact, studies show that the grid can handle much higher levels of renewable energy while maintaining and even strengthening reliability.²⁸
 - Iowans can expect increased savings under the Clean Power Plan. By 2030, the Clean Power Plan is projected to save the average American family about \$7 on their monthly electric bills (a savings of more than \$80 per year).²⁹
-

¹⁷ This 32% estimated reduction is from 2005 carbon pollution levels. See, U.S. Environmental Protection Agency, *By the Numbers: Cutting Carbon Pollution from Power Plants*, <http://www.epa.gov/airquality/cpp/fs-cpp-by-the-numbers.pdf>

¹⁸ Daniel Ottis, Kristin Tyka & Susan Erickson, *Economic Value of Outdoor Recreational Activities in Iowa* (Iowa State University Extension and Outreach) at 1 (2012), available at: http://www.cand.asstate.edu/environment/riems/DNR_AmenityRevised_9-25-12.pdf

¹⁹ U.S. Environmental Protection Agency, *Learn About Carbon Pollution from Power Plants*, <http://www2.epa.gov/carbon-pollution-standards/learn-about-carbon-pollution-power-plants.html>

²⁰ See National Wildlife Federation, *Global Warming and Waterfowl: Impacts to Waterfowl by Flyway*, <http://www.nwf.org/Wildlife/Threats-to-Wildlife/Global-Warming/Effects-on-Wildlife-and-Habitat/Birds-and-Waterfowl.aspx>

²¹ See generally, U.S. Environmental Protection Agency, *supra*.

²² Doug Irkley and Sara Lassoff, *Ticked Off: America's Outdoor Experience and Climate Change*, (National Wildlife Federation) at 14 (2014), available at: <http://www.nwf.org/~media/PDFs/Global-Warming/Reports/2014/Ticked-Off-LOW-RES-FINAL-081814.pdf>

²³ Iowa Department of Natural Resources, *Trends in Iowa Wildlife Populations and Harvest at 17* (December 2013), available at: <http://www.iowadnr.gov/Hunting/DeerHunting/PopulationHarvestTrends.aspx>

²⁴ Iowa Department of Natural Resources, *Trends in Iowa Wildlife Populations and Harvest at 16* (December 2014), available at: <http://www.iowadnr.gov/Hunting/DeerHunting/PopulationHarvestTrends.aspx>

²⁵ See *id.* at 14.

²⁶ See *id.* at 10-11.

²⁷ See *id.* at 16-17.

²⁸ See *id.* at 16.

²⁹ See *id.* at 16.

³⁰ U.S. Environmental Protection Agency, *Overview of Greenhouse Gases: Carbon Dioxide Emissions*, <https://www.epa.gov/climatechange/ghgemissions/gases/co2.html>

³¹ Letter from Sportsmen Groups to President of the United States (October 8, 2014), available at: <http://www.nwf.org/~media/PDFs/Global-Warming/2014/NWFSportsmenLetterNATIONAL.pdf>. See also, National Wildlife Federation, *325 Sporting Groups Support EPA's Clean Power Plan*, (October 17, 2014), available at: <http://blog.nwf.org/2014/10/325-sporting-groups-support-epas-clean-power-plan/>

³² U.S. Environmental Protection Agency, *Clean Power Plan State at a Glance: Iowa* (August 3, 2015), available at: <http://www.epa.gov/airquality/cppt/hotw/iowa.pdf>

³³ U.S. Energy Information Administration, *Iowa State Profile Analysis*, <http://www.eia.gov/state/analysis.cfm?uid=iowa>

³⁴ See *id.*

³⁵ Union of Concerned Scientists, *Burning Coal, Burning Cash: Ranking the States That Import the Most Coal: 2014 Update*, available at: http://www.ucusa.org/assets/documents/clean_energy/Burning_Coal_Burning_Cash_2014_Update_National_Findings.pdf

³⁶ American Wind Energy Association, *State Wind Energy Statistics: Iowa*, <http://www.awea.org/Resources/state.aspx?ItemNumber=5224>

³⁷ Iowa Wind Energy Association, *Wind Power Facts*, <http://www.iowawindenergy.org/whywind.asp>

³⁸ American Wind Energy Association, *supra*.

³⁹ Environmental Law and Policy Center, *Iowa Wind Power and Solar Energy Supply Chain Businesses* (March 2015), available at: <http://elpc.org/newsroom/publications/?slug=iowa-clean-energy-supply-chain>

⁴⁰ See U.S. Energy Information Administration, *Average Retail Price of Electricity to Ultimate Customers by End Use Sector, April 2014 and 2015* (June 26, 2015), http://www.eia.gov/electricity/monthly/epm_table_grapher.cfm?t=epmt_5_6_a

⁴¹ American Wind Energy Association and Solar Energy Industries Association, *A Handbook for States: Incorporating Renewable Energy into State Compliance Plans for EPA's Clean Power Plan*, Version 1.0 (February 2015) at 88, available at: <http://www.files.cms-plus.com/FilesDownloads/pdfs/Handbook%20for%20States%20final.pdf>

⁴² U.S. Environmental Protection Agency, *Fact Sheet: Benefits of a Cleaner, More Efficient Power Sector*, available at: <http://www.epa.gov/cleanpowerplan/fact-sheet-clean-power-plan-benefits-cleaner-more-efficient-power-sector/print>