

IOWA CAN CREATE 2,500 EFFICIENCY-RELATED JOBS, CUT ELECTRICITY BILLS, AND CURB CARBON POLLUTION



“Earth’s climate is on a path to warm beyond the range of what has been experienced over the past millions of years. By making informed choices now, we can reduce risks for future generations and ourselves, and help communities adapt to climate change. People have responded successfully to other major environmental challenges such as acid rain and the ozone hole with benefits greater than costs, and scientists working with economists believe there are ways to manage the risks of climate change while balancing current and future economic prosperity.”

—“WHAT WE KNOW,” AMERICAN ASSOCIATION FOR THE ADVANCEMENT OF SCIENCE, 2014

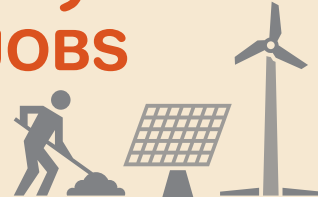
That sobering prospect and challenge from leading scientists makes it clear that **Iowans and all Americans** have an obligation to address climate change now, chiefly by reducing the carbon pollution fueling changes we’re already seeing. In doing so, we can reap substantial benefits to our economy while protecting future generations. Under the Clean Air Act, the U.S. Environmental Protection Agency is moving now to curb power plant carbon pollution, which makes up 40 percent of our nation’s total carbon footprint.

IOWA CAN ADDRESS CLIMATE CHANGE, WITH GREAT BENEFIT TO FUTURE GENERATIONS AND OUR ECONOMY

9.2
MILLION TONS
LESS POLLUTION

SETTING THE FIRST-EVER NATIONAL CARBON LIMITS...will cut Iowa’s dangerous carbon pollution by 9.2 million tons.¹

2,500
JOBS



USING SMART STRATEGIES... can put more than 2,500 people to work in efficiency-related jobs in Iowa.

\$235
MILLION IN SAVINGS FOR HOUSEHOLD AND BUSINESS CUSTOMERS

AND THAT WILL SAVE IOWA HOUSEHOLD CONSUMERS... \$101 million per year on their electric bills, or \$76 per average household.

All figures for 2020

WE MUST ACT NOW TO MEET THE ENVIRONMENTAL CHALLENGE OF OUR TIME



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THE EPA'S PLAN TAKES AIM AT THE HEART OF THE PROBLEM

- Electric power plants are the largest source of the dangerous carbon pollution that is driving climate change and extreme weather.
- In 2011, the nation's 100 largest electric power companies, which account for 86 percent of electricity production and 88 percent of the industry's carbon pollution, released 2.1 billion tons of carbon pollution, according to reporting by the industry.²
- In Iowa, power plants released 44 million tons of carbon pollution in 2011, equal to the emissions of 9.2 million cars. That ranks 21st-highest in the nation, according to air emissions tracking from the 100 largest electricity providers.³
- Today we limit the amount of arsenic, mercury, and soot these plants emit. But there are no limits on carbon pollution. That is wrong, and it must change.

In response, the president has directed the U.S. Environmental Protection Agency to end the limitless dumping of carbon pollution from these power plants. The EPA has both the authority and the responsibility to reduce carbon pollution under the Clean Air Act, and it should move forward to help protect future generations. The EPA has proposed standards for future power plants and is scheduled to issue the first federal standards for existing power plants in June 2014.

NRDC'S CARBON POLLUTION SOLUTION: EMPOWER STATES TO CURB CLIMATE CHANGE

In December 2012, the Natural Resources Defense Council unveiled a proposal showing one way for the EPA to significantly cut carbon pollution from the nation's power plants—at low cost and with big benefits.⁴ This approach:

- **Allows states to tailor policies** to meet the standards, choosing among such actions as cleaning up existing power plants, shifting power generation to plants with lower emissions or none at all, and improving the efficiency of electricity use.
- **Sets carbon intensity-based emissions standards** for all large fossil-fueled power plants. Each state would have a different target; states relying more on coal would have a higher carbon target than those depending less on coal.
- **Charts a path to affordable and effective emissions reductions** by tapping into the ingenuity of the states and leveraging their existing efforts to reduce pollution and provide more clean energy options. This state-based approach has been used for decades to cut other pollutants.
- **Can be implemented now** using the authority the EPA has under the Clean Air Act.

BENEFITS TO IOWA AND THE UNITED STATES FROM ACTING ON POWER PLANT CARBON POLLUTION

NRDC selected a respected firm, ICF International, Inc., often used by industry and government to model impacts of regulations, to analyze the impact of its power plant plan on jobs and electricity bills. In a 2014 analysis conducted by ICF for NRDC and based on NRDC's policy designs and assumptions, it was found that the EPA could design carbon pollution standards to help the nation reduce carbon pollution 29 percent by 2020 and 38 percent by 2025, compared with 2012 levels.⁵

These carbon reductions would generate between \$29 billion and \$50 billion in benefits through avoided climate change impacts and avoided pollution-related illnesses and deaths.

NEW JOBS AND LOWER BILLS

In addition, this approach could help the country in 2020:

- Create 274,000 new efficiency-related jobs.
- Save U.S. household and business customers \$37.4 billion per year on their electricity bills, including:
 - Save U.S. household customers \$13 billion, or an average of \$103 per household.
 - Save U.S. business customers \$24.3 billion.
- Reduce U.S. carbon pollution by 531 million tons.⁶
- Stimulate significant growth in the energy efficiency industry.

In Iowa, the impacts would be substantial. Using the Clean Air Act in this way to reduce carbon pollution, the state could in 2020:

- **Create 2,500 new jobs**—largely through investments in energy efficiency.
- **Save \$6.30 per month** on an average customer's electricity bill.
- **Cut 9.2 million tons of carbon pollution**, equal to the annual emissions of 1.9 million cars.
- **Save Iowa household customers \$8 million a month, or \$101 million a year**, on their electricity bills.
- **Save Iowa business customers \$134 million on their electricity bills.**
- **Stimulate significant growth** in the state's energy efficiency industry.

Because the bulk of investments in energy efficiency focus on making our buildings and homes more efficient, such investments create thousands of jobs that require a broad range of homegrown expertise, in industries that have been especially hard hit by the recent recession. There will be greater demand for electricians, heating/air-conditioning installers, carpenters, construction equipment operators, roofers, insulation workers, industrial truck drivers, construction managers, and building inspectors.

IOWA ALREADY LEADS ON CLEAN ENERGY

Already, Iowa's clean energy policies and growing energy efficiency and renewable energy industries have provided big benefits to the state. And there are tremendous economic opportunities that lie ahead from cutting carbon pollution.

In 1983 Iowa approved one of the country's earliest renewable-generation laws, requiring its major utilities to own or contract a specific amount of renewable energy. Today, more than 25 percent of Iowa's electricity comes from wind power, the highest proportion in the nation.⁷ Among the state's clean energy developments:

- Iowa boasted 43,000 green energy jobs in 2011, according to the Bureau of Labor Statistics.⁸
- According to Environmental Entrepreneurs (E2), a national community of business leaders who promote sound environmental policies that build economic prosperity, clean energy projects announced in Iowa over the past two years are poised to create more than 1,600 jobs in industries like solar and wind.⁹
- The wind energy industry in Iowa currently employs 6,000 to 7,000 people. This ranks Iowa third in the nation in all employment related to the wind energy industry.¹⁰
- Alcoa Development Works recently hired more than 300 workers in Davenport to help meet demand for its lightweight aluminum parts for fuel-efficient vehicles.¹¹
- Siemens Energy received an order for a 1,050-megawatt wind turbine in December 2013 from MidAmerican Energy Co., the largest single energy supplier in the state, which provides electric service to 734,000 customers and natural gas service to 714,000 in Iowa, Illinois, Nebraska, and South Dakota. The wind project will employ more than 800 people.¹²
- Farmers Electric Cooperative of southeastern Iowa has started moving on what is expected to be the single largest solar farm in Iowa and possibly the Midwest. The 750-kW project will provide power to a number of businesses.¹³

THE IMPACT OF POLLUTION AND CLIMATE CHANGE IN IOWA AND THE UNITED STATES SHOWS WHY WE NEED TO ACT NOW

Rising temperatures are a health concern

Asthma sickened about 41,694 children and 193,727 adults in Iowa in 2013.¹⁴ Climate change, driven by rising carbon pollution, leads to higher concentrations of ground-level ozone, or the pollutant smog, which aggravates asthma.

Extreme weather is becoming more common

In 2012, there were 3,527 monthly weather records broken for heat, rain, and snow in the United States, according to information from the National Climatic Data Center. That's even more than the 3,251 records smashed in 2011—and some of the newly broken records had stood for 30 years or more.¹⁵

And it is imposing growing and grievous costs

Nationally, in 2012 alone, crop losses, flood damage, wildfires, and other climate-related disasters cost our country more than \$140 billion. Taxpayers picked up the lion's share of the tab, to the tune of \$1,100 each.¹⁶

Iowa's share is significant

In 2012 an estimated \$761 million in federal taxes paid by Iowans went to clean up after extreme weather, according to Natural Resources Defense Council calculations.

Extreme Weather and Pollution Are Affecting Iowans Now

Although we cannot say climate change is responsible for any individual event, climate change is already making itself felt:

- In 2012 in Iowa, excessive heat broke temperature records in 35 counties, and heavy rainfall broke precipitation records in 28 counties.¹⁷
- Climate change is already taking a toll on communities and the state's economy. From 2008 to 2012, tornadoes, floods, and damage to crops caused economic losses exceeding \$5.6 billion in Iowa, according to the Climate Science Program at Iowa State University.¹⁸
- About 85 percent of the state's counties now face higher risk of water shortages by mid-century as the result of climate change.¹⁹
- Iowa has been declared a disaster area 21 times since 2000 due to severe rainstorms, winter snowstorms, tornadoes, and flooding.²⁰

THE LONGER WE DELAY TAKING SUBSTANTIAL STEPS TO CURB CARBON POLLUTION, THE WORSE THESE CHANGES WILL BECOME. TO PROTECT OUR CHILDREN AND FUTURE GENERATIONS FROM CATASTROPHIC CLIMATE CHANGE, WE MUST ACT NOW.

ENDNOTES

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