

# ARKANSAS CAN CREATE 2,200 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 **Arkansans 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.

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

**1.9**  
MILLION TONS  
LESS POLLUTION

SETTING THE FIRST-EVER NATIONAL CARBON LIMITS... will cut Arkansas’s dangerous carbon pollution by 1.9 million tons.<sup>1</sup>

**2,200**  
JOBS

USING SMART STRATEGIES... can put more than 2,200 people to work in efficiency-related jobs in Arkansas.

**\$122**  
MILLION IN SAVINGS FOR HOUSEHOLD AND BUSINESS CUSTOMERS

AND THAT WILL SAVE ARKANSAS HOUSEHOLD CUSTOMERS... \$57 million per year on their electric bills.

All figures for 2020

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



For more information, please contact:

**Kelly Henderson**  
khenderson@nrdc.org  
(202) 289-2401  
 switchboard.nrdc.org/  
blogs/khenderson

[www.nrdc.org/policy](http://www.nrdc.org/policy)  
[www.facebook.com/nrdc.org](https://www.facebook.com/nrdc.org)  
[www.twitter.com/nrdc](https://www.twitter.com/nrdc)

## 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.<sup>2</sup>
- In Arkansas, power plants released 38 million tons of carbon pollution in 2011, equal to the annual emissions of 8 million cars. That ranks 25th-highest in the nation, according to air emissions tracking from the 100 largest electricity providers.<sup>3</sup>
- 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.<sup>4</sup> 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 FOR ARKANSAS 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.<sup>5</sup>

These carbon reductions would generate between \$28 billion and \$63 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.<sup>6</sup>
- Stimulate significant growth in the energy efficiency industry.

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

- **Create 2,200 new jobs**—largely through investments in energy efficiency.
- **Trim \$3.60 per month** from the average customer's electricity bill.
- **Cut 1.9 million tons of carbon pollution**, equal to the annual emissions of 400,000 cars.
- **Save Arkansas household customers \$5 million a month, \$57 million a year** 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.

## ARKANSAS ALREADY LEADS ON CLEAN ENERGY

Already, Arkansas'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.<sup>7</sup>

- Arkansas was home to 33,420 green energy jobs in 2011, according to the Bureau of Labor Statistics.<sup>8</sup>
- The pace of green job growth continues. The state has received more than \$830,000 in grants from the U.S. Department of Agriculture to make energy efficiency improvements.<sup>9</sup>
- More than half of Arkansas's land is covered by commercially owned forests, and the state's forest industries already generate 50 percent of their energy from wood waste and mill residues.<sup>10</sup>
- The Arkansas Energy Office estimates that local biomass could generate 19.8 billion kilowatt-hours of electricity each year. That amount, enough to power nearly 2 million average homes, is a whopping 50 percent more than the electricity currently consumed by all of Arkansas's households combined.<sup>11</sup>
- While Arkansas has significant untapped wind power potential, it is already sharing in the economic benefits of the growing wind energy industry. Little Rock is home to LM Wind Power, the world's leading supplier of rotor blades for wind turbines. The company planned to employ 1,200 workers at its Little Rock facility. At the end of 2012 the company employed 5,122 people worldwide.<sup>12</sup>
- Walmart has been generating more solar energy than the combined efforts of 38 states. According to the Solar Energy Industries Association, Walmart draws on 89 megawatts of energy capacity, which is estimated to power 22,250 homes.<sup>13</sup>

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

### Rising temperatures are a health concern

According to 2013 estimates, asthma sickens about 60,757 children and 212,590 adults in Arkansas.<sup>14</sup> Climate change, driven by rising carbon pollution, leads to higher concentrations of ground-level ozone, or smog pollution, which aggravates asthma.

### Climate change is driving extreme weather

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.<sup>15</sup>

### 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.<sup>16</sup>

### Arkansas's share is significant

In 2012 alone, an estimated \$807 million of the federal taxes paid by Arkansas residents went to clean up after extreme weather, according to Natural Resources Defense Council calculations.

### Extreme Weather and Pollution Are Affecting Arkansans Now

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

- In 2012 in Arkansas, excessive heat broke records in 22 counties, and heavy rainfall broke precipitation records in 5 counties. The state saw heavy snowfall break records in 19 counties, and during dry months the state endured 51 large wildfires.<sup>17</sup>
- Arkansas has been declared a disaster area 23 times since 2000 due to severe rainstorms, winter snowstorms, tornadoes, flooding, and damage from Tropical Storm Ike.<sup>18</sup>
- Climate change will worsen smog and will cause plants to produce more pollen, increasing respiratory health threats, particularly for people with allergies and asthma. Fifty-five Arkansas counties have ragweed pollution, 6 counties have unhealthy smog levels, and 3 have both.<sup>19</sup>
- The American Lung Association gave Pulaski County—the most populous county in the state—a failing grade for ozone pollution in 2009.<sup>20</sup>

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

- 1 Laurie Johnson, Starla Yeh, and David Hawkins, *Retail Electric Bill Savings and Energy Efficiency Job Growth from NRDC Carbon Standard: Methodology Description*, Natural Resources Defense Council, May 2014.
- 2 Christopher Van Atten, Amlan Saha, and Lee Reynolds, *Benchmarking Air Emissions of the 100 Largest Electric Power Producers in the United States*, M.J. Bradley & Associates, May 2013, [www.nrdc.org/air/pollution/benchmarking/files/benchmarking-2013.pdf](http://www.nrdc.org/air/pollution/benchmarking/files/benchmarking-2013.pdf).
- 3 Ibid.
- 4 NRDC, *Using the Clean Air Act to Sharply Reduce Carbon Pollution from Existing Power Plants, Creating Clean Energy Jobs, Improving Americans' Health, and Curbing Climate Change*, December 2012, [www.nrdc.org/air/pollution-standards/files/pollution-standards-IB.pdf](http://www.nrdc.org/air/pollution-standards/files/pollution-standards-IB.pdf)
- 5 NRDC, *Cleaner and Cheaper: Using the Clean Air Act to Sharply Reduce Carbon Pollution from Existing Power Plants*, [www.nrdc.org/air/pollution-standards/](http://www.nrdc.org/air/pollution-standards/).
- 6 Laurie Johnson, Starla Yeh, and David Hawkins, *Retail Electric Bill Savings and Energy Efficiency Job Growth from NRDC Carbon Standard: Methodology Description*, Natural Resources Defense Council, May 2014.
- 7 NRDC, *Renewable Energy for America: Arkansas*, [www.nrdc.org/energy/renewables/arkansas.asp](http://www.nrdc.org/energy/renewables/arkansas.asp).
- 8 Bureau of Labor Statistics, *Green Goods and Services (GGS) Employment by State, Annual Averages*, [www.bls.gov/news.release/ggqcew.t04.htm](http://www.bls.gov/news.release/ggqcew.t04.htm).
- 9 Clean Energy Works for US, *How Clean Energy Works for Arkansas*, [cleanenergyworksforus.org/states/arkansas/](http://cleanenergyworksforus.org/states/arkansas/).
- 10 M. Langholtz et al., "Arkansas: Saline and Union Counties," *Wood to Energy: Community Economic Profile*, University of Florida, Institute of Food and Agricultural Sciences, September 2007, [www.interfacesouth.org/products/wood-to-energy/biomass-ambassador-guide/community-profiles/CEP\\_Arkansas.pdf](http://www.interfacesouth.org/products/wood-to-energy/biomass-ambassador-guide/community-profiles/CEP_Arkansas.pdf).
- 11 Arkansas Economic Development Commission Energy Office, *Biomass*, 2010, [arkansasenergy.org/solar-wind-bioenergy/bioenergy/biomass.aspx](http://arkansasenergy.org/solar-wind-bioenergy/bioenergy/biomass.aspx).
- 12 LM Wind Power, *More Than 160,000 Wind Turbine Blades in 30 Years*, [www.lmwindpower.com/About-Us](http://www.lmwindpower.com/About-Us).
- 13 M.G. Richard, "Walmart Has More Solar Capacity Than 38 U.S. States," *Treehugger*, October 28, 2013, [www.treehugger.com/renewable-energy/walmart-more-solar-power-capacity-38-us-states.html?utm\\_campaign=2013-11-01-CEBN.html&utm\\_medium=email&utm\\_source=Eloqua](http://www.treehugger.com/renewable-energy/walmart-more-solar-power-capacity-38-us-states.html?utm_campaign=2013-11-01-CEBN.html&utm_medium=email&utm_source=Eloqua).
- 14 American Lung Association, *Estimated Prevalence and Incidence of Lung Disease*, April 2013, [www.lung.org/finding-cures/our-research/trendreports/estimated-prevalence.pdf](http://www.lung.org/finding-cures/our-research/trendreports/estimated-prevalence.pdf).
- 15 NRDC, "Extreme Weather Map Shows 3,527 Monthly Weather Records Shattered in 2012," press release, January 2013, [www.nrdc.org/media/2013/130115.asp](http://www.nrdc.org/media/2013/130115.asp). NRDC, *Extreme Weather Map 2012*, [www.nrdc.org/health/extremeweather/](http://www.nrdc.org/health/extremeweather/).
- 16 NRDC, *Who Pays for Climate Change?* May 2013, [www.nrdc.org/globalwarming/taxpayer-climate-costs.asp](http://www.nrdc.org/globalwarming/taxpayer-climate-costs.asp).
- 17 NRDC, *Extreme Weather and Arkansas*, [www.nrdc.org/health/extremeweather/default.asp](http://www.nrdc.org/health/extremeweather/default.asp).
- 18 Federal Emergency Management Agency, *Disaster Declarations for Arkansas*, [www.fema.gov/disasters/grid/state-tribal-government/61?field\\_disaster\\_type\\_term\\_tid\\_1=All](http://www.fema.gov/disasters/grid/state-tribal-government/61?field_disaster_type_term_tid_1=All).
- 19 NRDC, *Climate Change Health Threats in Arkansas*, [www.nrdc.org/health/climate/ar.asp](http://www.nrdc.org/health/climate/ar.asp).
- 20 Harvard Center for Health and Global Environment, *Climate Change and Health in Arkansas*, 2009.