#### ECONOMIC OPPORTUNITIES OF CUTTING CARBON POLLUTION AND CLIMATE CHANGE IN ARKANSAS





# THE IMPACT OF POLLUTION AND CLIMATE CHANGE IN ARKANSAS

Recent incidents in Arkansas provide a reminder of the economic and public health impacts of extreme weather. Although we cannot say that climate change is directly responsible for any individual event, such change is already increasing our risks from these events.

- In 2011, Arkansas's power plants and major industrial facilities emitted 38 million metric tons of carbon dioxide, ranking the state 25th in carbon pollution among all the states.<sup>4</sup>
- 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>5</sup>

- Arkansas has been declared a disaster area 23 times since 2000 due to severe storms, winter snowstorms, tornadoes, flooding, and damage from Tropical Storm Ike.<sup>6</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, six have unhealthy smog levels, and three counties suffer from both.<sup>7</sup>
- The American Lung Association gave Pulaski County—the most populous county in the state—a failing grade for ozone pollution in 2009.<sup>8,9</sup>
- Statewide, asthma sickens an estimated 60,000 Arkansas children and 212,000 adults a year.<sup>10</sup>



#### CLIMATE CHANGE: THE KEY ENVIRONMENTAL CHALLENGE OF OUR TIME



RISING TEMPERATURES ARE A HEALTH
CONCERN. In Arkansas, asthma sickened
60,757 children and 212,590 adults in
2011, according to the American Lung
Association.¹ Climate change, driven by
rising pollution levels, leads to higher
concentrations of ground-level ozone,
a chief component of smog, which
aggravates asthma.



#### IT 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 (NCDC). 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>2</sup>

# \$1,100 PER TAXPAYER

IT IS IMPOSING GRIEVOUS AND GROWING COSTS. In 2012 alone, crop losses, flood damage, wildfires, and other climate-related disasters cost our country more than \$140 billion. The American public picked up the lion's share of the tab, to the tune of \$1,100 per taxpayer.<sup>3</sup>

#### ...BUT WE CAN ADDRESS IT, WITH GREAT BENEFIT TO OUR FUTURE GENERATIONS AND ECONOMY

### ARKANSAS LEADS ON CLEAN ENERGY, AND ECONOMIC OPPORTUNITY LIES AHEAD

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>11</sup>

- Arkansas was home to 33,420 green energy jobs in 2011, according to the Bureau of Labor Statistics.<sup>12</sup>
- The pace of green job growth continues. The state received more than \$830,000 in grants from the U.S. Department of Agriculture to make energy efficiency improvements.<sup>13</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>14</sup>
- The Arkansas Energy Office estimates that local biomass power could generate 19.8 billion kilowatt-hours of electricity each year. That's enough to power nearly 2 million average homes—a whopping 50 percent more than the electricity currently consumed by all of Arkansas's homes put together.¹5
- While Arkansas has significant untapped wind power potential, it is 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. As of the end of 2012, the company employed 5,122 people worldwide.¹6

There is untapped solar energy potential in the state's best-known business, Walmart. It has more solar capacity than 38 states.<sup>17</sup>

### BENEFITS FOR ARKANSAS FROM ACTING ON CARBON POLLUTION

The carbon reductions are possible under a plan in which Arkansas and other states and their power companies meet national carbon standards using flexible approaches to conform to state-specific limits on carbon pollution in a way that best fits their energy needs and resources. NRDC selected a respected firm, Synapse Energy Economics, to analyze the impact of its power plant plan on jobs, electricity costs, and GDP. Synapse found that NRDC's proposal could create 210,000 new jobs nationwide, mainly in clean energy, while helping Americans save an average of \$.90 per month on their electricity bills and helping the economy.<sup>19</sup>

Because the bulk of investment in energy efficiency focuses on making our buildings and homes more efficient, such investment creates a lot 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.

"We have to act with more urgency—because a changing climate is already harming western communities struggling with drought, and coastal cities dealing with floods. That's why I directed my administration to work with states, utilities, and others to set new standards on the amount of carbon pollution our power plants are allowed to dump into the air. The shift to a cleaner energy economy won't happen overnight, and it will require tough choices along the way. But the debate is settled. Climate change is a fact. And when our children's children look us in the eye and ask if we did all we could to leave them a safer, more stable world, with new sources of energy, I want us to be able to say yes, we did."

-President Barack Obama, 2014 State of the Union Address

With those words, the president made it clear that **Arkansas residents** and all Americans have an obligation to future generations to address the key environmental challenge of our time. The president has laid out a comprehensive National Climate Plan to curb pollution, expand clean energy, and make our communities more resilient. The plan also presents a tremendous economic opportunity for businesses, communities, states, and our country.

## THE PRESIDENT'S CLIMATE PLAN AIMS 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. Each year in the United States, these plants release about 2.4 billion tons of carbon pollution into the air, accounting for about 40 percent of our nation's carbon footprint. Today we limit the amount of arsenic, mercury, and soot these plants emit. But, astonishingly, there are no limits on carbon pollution. That is wrong and it must change. The president has directed the U.S. Environmental Protection Agency to end the limitless dumping of carbon pollution from these power plants. Under the Clean Air Act, the EPA has both the authority and the responsibility to reduce carbon pollution, and it should move forward to help protect future generations. <sup>18</sup>

## NRDC'S CARBON POLLUTION SOLUTION HELPS CURB CLIMATE CHANGE

In December 2012, the Natural Resources Defense Council unveiled a proposal showing how the EPA can cut carbon pollution from the nation's power plants 26 percent by 2020 and 34 percent by 2025. These carbon reductions would generate between \$25 billion and \$60 billion in benefits through avoided climate change impacts and avoided pollution-related illnesses and deaths. They would cost industry about \$4 billion, or just 1 percent of revenues. That means we could see up to \$15 in climate and health benefits for every \$1 invested. These reductions, at low cost with big gains, are achieved through a program that:

- **Sets carbon intensity-based emissions standards** for all large fossil-fueled power plants, taking into account differences in emissions starting points among the states.
- Allows states to choose what policies to implement in order to meet the standards, including cleaning up existing power plants, shifting power generation to plants with lower emissions or none at all, and improving the efficiency of electricity use.
- 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.
- Can be implemented using the authority the EPA has now under the Clean Air Act.

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