

# FLORIDA CAN CREATE 10,000 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 **Floridians 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.

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

**11.4**  
MILLION TONS  
LESS POLLUTION

SETTING THE FIRST-EVER NATIONAL CARBON LIMITS...will cut Florida’s dangerous carbon pollution by 11.4 million tons.<sup>1</sup>

**10,000**  
JOBS

USING SMART STRATEGIES... can put more than 10,000 people to work in efficiency-related jobs in Florida over the next five years.

**\$48**  
MILLION IN SAVINGS FOR HOUSEHOLD AND BUSINESS CUSTOMERS

AND THAT WILL SAVE FLORIDA HOUSEHOLDS...a total of \$27 million on their electric bills, or \$3 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.<sup>2</sup>
- In Florida, power plants released 124 million tons of carbon pollution in 2011, equal to the annual emissions of 26 million cars. That ranks third-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 FLORIDA 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 Florida, the impacts would be substantial. Using the Clean Air Act in this way to reduce carbon pollution, the state could in 2020:

- **Create 10,000 new jobs**—largely through investments in energy efficiency.
- **Trim \$0.30 per month** from the average customer's electricity bill.<sup>7</sup>
- **Cut carbon pollution by 11.4 million tons every year**, equal to the annual emissions of 2.4 million cars.
- **Save Florida households \$2 million a month, or \$27 million a year**, on their electricity bills.
- **Save Florida business interests \$22 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.

## FLORIDA ALREADY LEADS ON CLEAN ENERGY

Already, Florida's clean energy policies and growing energy efficiency and renewable energy industries have provided big benefits to the state.

- 102,000 Floridians held clean energy-related jobs in 2011, the seventh-most among the 50 states, according to the latest data available.<sup>8</sup>
- Since the beginning of 2012, businesses operating in Florida on rail, solar, biofuel, and wind projects have announced more than 2,000 clean energy jobs.<sup>9</sup>
- For example, the Florida Department of Transportation announced there were 250 full-time employees working on the SunRail commuter rail project linking DeBary with downtown Orlando and other cities.
- Environmental Entrepreneurs, an independent business voice for the environment, tracks such new clean energy job announcements in a database here: [www.e2.org/jsp/controller](http://www.e2.org/jsp/controller)

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

### Rising temperatures are a health concern

According to 2013 estimates, asthma sickens about 341,000 children and 1.1 million adults in Florida.<sup>10</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>11</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>12</sup>

### Florida's share is significant

In 2012, an estimated \$5 billion in federal taxes paid by Floridians went to clean up after extreme weather, according to Natural Resources Defense Council calculations.

## Extreme Weather and Pollution Are Affecting Floridians Now

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

- Nearly 1.2 million people live in the nine Florida counties where average summertime temperatures set records in 2010.<sup>13</sup>
- In 2012, Florida residents endured intense high temperatures that broke 9 heat records, drenching rainstorms that broke 35 precipitation records, and 62 large wildfires.<sup>14</sup>
- Florida experienced its wettest summer on record in 2012, in part due to Hurricane Isaac and Tropical Storm Debby.<sup>15</sup>
- Climate change will worsen smog and cause plants to produce more pollen pollution, increasing respiratory health threats, particularly for people with allergies and asthma.
- Residents of 57 Florida counties encounter ragweed pollution, and residents of Orange, Sarasota, and Escambia Counties suffer from both unhealthy smog levels and ragweed pollution.<sup>16</sup>
- Florida has been declared a disaster area 19 times since 2000 due to severe storms, hurricanes, and flooding.<sup>17</sup>
- About 96 percent of the state's counties now face higher risks of water shortages by mid-century as a result of climate change.<sup>18</sup>
- Sea level is a critical concern. A rise of just 3 to 6 inches would jeopardize cities' infrastructure and water supplies, especially in southeast Florida.<sup>19</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

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