DPCC Myth vs. Fact: The Clean Power Plan

The time for action to combat climate change and reduce dangerous air pollution is now. The Clean Power Plan is a historic and important step in reducing carbon pollution and taking action on climate change. It will protect the health of our children and grandchildren, cut energy costs for consumers and create jobs in the clean energy economy. Failure to act on climate change will lead to more frequent extreme weather – from more severe droughts and wildfires in the west, to rising sea levels and more powerful hurricanes along our coastlines.

The Clean Power Plan is a pragmatic solution to address the largest source of pollution in America: power plants. Until this plan, there were no national limits on carbon pollution from power plants, despite its clear and dangerous impacts. Clean air and the economy can go hand in hand. Since the Clean Air Act was enacted with bipartisan support in 1970, the economy has more than tripled in size while emissions of key pollutants have decreased by nearly 70%.

Senate Republicans will falsely claim that the Clean Power Plan will lead to blackouts, cost jobs and harm the economy. The reality is that the CPP will protect public health, grow the clean energy economy and make our grid more resilient. Republicans continue to stand in the way of efforts like the Clean Power Plan to deal with climate change. But what is the Republican climate action plan? Americans are still waiting for Republicans to acknowledge the problem and work for a solution.

MYTH: The EPA's plan to cut carbon pollution from power plants will harm the economy and eliminate jobs.

FACT: The EPA's plan will create thousands of clean energy jobs and improve public health.

- **Republicans are creating a false choice between creating jobs and clean air**. For more than four decades, EPA has cut air pollution by 70 percent and the size of the economy has more than tripled. Between 1970 and 2011, emissions from air pollutants dropped 68% while U.S. GDP grew 212% and total private sector jobs increased by 88% during the same period. [EPA, BLS]

- **The overall economic benefits of EPA's clean air safeguards exceed costs by 30-1, and in 2010 they created $1.3 trillion in economic benefits.** [EPA, 3/11]

- **The Clean Power Plan will accelerate the development of renewable energy, creating thousands of jobs in the clean energy sector.**

- **The Energy Information Administration finds that the Clean Power Plan will increase the use of renewable energy, leading to thousands of clean energy jobs across the country.**
    - The EIA projects that under the plan, cumulative additions of renewable electricity generation capacity through 2040 increase by 174 gigawatts, or 160 percent. [Energy Information Administration, 5/22/15]
    - Wind power plays an important role in Clean Power Plan compliance, with wind electricity generation capacity more than tripling over 2013 levels by 2040. [Energy Information Administration, 5/22/15]
    - Solar will also grow by 76 gigawatts by 2040. [Energy Information Administration, 5/22/15]
- **More than 3.4 million Americans are employed in "green goods and services".** This includes renewable energy, energy efficiency, pollution reduction and removal, greenhouse gas reduction, recycling and reuse, and natural resources conservation**.** In 2012 alone, the clean energy sector created 110, 413 jobs. [BLS, 3/9/13; EESI.org, 6/13]
- **Green jobs are growing four times faster than the average of all other sectors combined.** Green jobs jumped 5% year on year from 2010 to 2011. The construction industry experienced the most growth in green goods and services, with a total of 101,932 new green construction jobs added between 2010 and 2011. [BLS, 10/13]
- **Solar jobs are growing nearly twenty times faster than the national average.** The most recent installment of the National Solar Jobs Census found that the U.S. solar industry currently employs 173,807 workers, a figure which represents 21.8% growth in employment over the previous year. This growth rate makes 2014 the second consecutive year in which employment both increased by 20% or more and exceeded growth projections. [Renewable Energy World, 1/27/14; The Solar Foundation, 2/12/15]

- **Environmental laws including the Clean Air Act have made the U.S. the largest producer of environmental technologies in the world, supporting close to 1.7 million jobs and $44 billion in exports annually.** The U.S. is the world's largest producer and consumer of environmental technologies worldwide. 119,000 American companies in environmental technologies generate approximately $300 billion in revenues, $43.8 billion in exports, and support close to 1.7 million jobs. [Department of Commerce, 4/10]
    - EPA vehicle emissions standards directly sparked the development and application of a range of automotive technologies that are now found throughout the global automobile market. The vehicle emissions control industry employs approximately 65,000 Americans with estimated domestic annual sales of $26 billion in 2010. [Manufacturers of Emissions Control Technology, 2014]
    - The U.S. boilermaker workforce grew by approximately 35%, or 6,700 boilermakers, between 1999 – 2001 during the installation of controls to comply with EPA's nitrogen oxide reduction program. [International Brotherhood of Boilermakers, 2005]

- The Institute for Clean Air Companies (ICAC) in 2010 estimated that implementation of just one rule – the Clean Air Interstate Rule Phase 1 – resulted in approximately 200,000 jobs in the air pollution control industry from 2003 – 2010. [Institute of Clean Air Companies, 11/3/10]

- **The Clean Power Plan makes America healthier improving the wellbeing and productivity of our children, seniors and workforce.** The Clean Power Plan has public health and climate benefits worth an estimated $34 billion to $54 billion per year in 2030, far outweighing the costs of $8.4 billion. Reducing exposure to particle pollution and ozone in 2030 will avoid a projected [EPA]

  - 1,500 to 3,600 premature deaths
  - 90,000 asthma attacks in children
  - Up to 1,700 heart attacks
  - 1,700 hospital admissions
  - 300,000 missed school and work days

MYTH: The clean power plan will raise electricity rates and increase costs for consumers.

FACT: Independent analysis of the clean power plan by energy experts and economists show the clean power plan will actually LOWER electricity rates.

- **A report by researchers at Georgia Tech found that complying with the Clean Power Plan would produce substantial benefits, including lower electricity bills, greater GDP growth and significant reductions in toxic air pollutants.** The researchers at Georgia Tech found that "as energy is used more efficiently, non-competitive power plants can be retired, construction of new coal plants can be deferred, and transmission and distribution infrastructure investments can be delayed, all of which would *lower rates and therefore lower the energy bills of consumers*. " [Georgia Tech, 7/27/15]

- **Ads run by the National Mining Association claiming that the EPA's clean power plan will raise electricity rates have been discredited and called "bogus and hyped" by fact checkers**. The National Mining Association has run ads claiming that the EPA's carbon pollution standards for new power plant rules will raise electric prices 80% and double electric bills. The *Washington Post* fact checker gave the ad "4 Pinocchios," said the claim was "wholly unsupported," and found the estimate had nothing to do with the proposal's actual standards. [Washington Post, 5/23/14]

- **Electricity bills for Regional Greenhouse Gas Initiative states actually went down by $460 million since 2011 while lowering carbon emissions by 15%.** A report from the Analysis Group claims the Regional Greenhouse Gas Initiative (RGGI), in which nine New England and Mid-Atlantic states agreed to limit carbon pollution, has added $1.3 billion in economic activity to the region since 2011, while lowering carbon emissions by 15%. It also says people in those states have paid $460 million less for electricity during that time thanks to the cap & trade program. [CleanTechnica, 7/16/15]

MYTH: The EPA's plan to cut carbon pollution from power plants threatens the reliability of the grid.

FACT: Independent expert analysis has repeatedly debunked the notion the clean power plan will threaten reliability.

- **For 40 years, we have been able to both implement the Clean Air Act and keep the lights on. The EPA's plan to cut carbon pollution from power plants will not change that.**

- **EPA's analysis shows that there will be enough capacity across the U.S. electricity system to meet the anticipated level of demand. Projected increases in natural gas, renewables and efficiency improvements are more than adequate to ensure reliability.** Coal, oil, and natural gas will continue to have an important role in a diverse U.S. energy mix for years to come – with coal and natural gas remaining the two leading sources of electricity generation, each providing more than 30% of projected generation in 2030. [EPA, 6/2/14]

- **Renewables, like wind and solar, are already generating power reliably and cost effectively across America. Wind Power is already proving it can be integrated onto the grid at a large scale while ensuring reliability:**

    - Iowa and South Dakota reliably produce more than 25 percent of their electricity from wind power; nine states produce more than 12 percent and more than 4 percent in the U.S. overall. [AWEA, 2/2/15]

    - Technological advances have enabled U.S. wind farms to set generation records as a percent of demand over the past two years, all without reliability problems: At times more than 60 percent on Xcel Energy's Colorado power system; Nearly 40 percent of generation in ERCOT, the main Texas power system; and 33 percent in the Southwest Power Pool (area that covers all or parts of several states in the Southwest. [AWEA, 2/2/15]

    - The largest grid operator in the U.S., PJM, recently reported it could reach 30 percent of wind power while maintaining electricity reliability. [AWEA, 2/2/15]

    - More than a dozen wind integration studies by U.S. grid operators and others find wind energy can reliably supply at least 20-30 percent of U.S. electricity demands; some studies showing 40 percent. [AWEA, 2/2/15]

- **Several independent analyses by leading economic consulting firms have found no reliability issues with the Clean Power Plan:**

    - An independent review by the Analysis Group found no reliability concerns with the Clean Power Plan**:** "Historically, the reliability red flag has tended to be raised with regard to concerns that compliance with a new environmental rule would require a large portion of generating capacity to be simultaneously out of service to add control equipment, to retire permanently or otherwise to become unavailable to produce power. To date, implementation of new environmental

rules has not produced reliability problems, in large part because the industry has proven itself capable of responding effectively." [Analysis Group: "Greenhouse Gas Emission Reductions From Existing Power Plants: Options to Ensure Electric System Reliability" , 5/14]

- A February 2015 independent review of the Clean Power Plan found no reliability concerns with the Clean Power Plan: "The combination of the ongoing transformation of the power sector, the steps already taken by system operators, the large and expanding set of technological and operational tools available, and the flexibility under the CPP are likely sufficient to ensure that compliance will not come at the cost of reliability" The Brattle Group: "EPA's Clean Power Plan and Reliability: Assessing NERC's initial Reliability Review", 2/15]

- Another February 2015 independent report found no reliability concerns with the Clean Power Plan: "Some of the reliability concerns raised by stakeholders about the Clean Power Plan presume inflexible implementation, are based on worst-case scenarios, and assume that policy makers, regulators, and market participants will stand on the sidelines until it is too late to act. There is no historical basis for these assumptions." [Analysis Group: "Electric System Reliability and EPA's Clean Power Plan: Tools and Practices", 2/19/15]

MYTH: The EPA is waging a war on coal.

FACT: Market trends in the electric power industry, such as a flood of cheap natural gas, are the single biggest factor affecting the coal industry.

- **Cheap natural gas being used for electricity generation has changed electricity markets, making coal far less cost competitive** For the first time ever, natural gas trumped coal as the top source of electric power generation in the U.S. In April, roughly 31 percent of electric power generation came from natural gas, whereas coal accounted for 30 percent, a dramatic difference from April 2010, when coal accounted for 44 percent of the mix and natural gas just 22 percent. [CNBC, **1/14/15**]

- **Arch Coal CEO John Eaves: "Low natural gas prices biggest threat to Central Appalachian coal"**: In a presentation to investors, Arch Coal CEO John Eaves made clear that Appalachian mines were most threatened by cheap natural gas and lower cost Powder River basin coal: "Year-to-date, natural gas pricing levels have put most coal supplier basins under heavy pressure," he said. With gas selling at less than $2.75 per million Btu, it is even beginning to compete with Powder River Basin coal in some parts of the country. Given these market factors, we now expect domestic coal consumption for power generation to decline by 80 million tons in 2015 from prior-year levels. We estimate that more than half of that loss coal burn will come out Appalachia due to its higher cost structures, and Powder River Basin coal would be the least affected, as it remains the most competitive against natural gas." [The State Journal, 4/30/15]

- **Coal mining jobs in Appalachia fared worse under Reagan, and George H.W. Bush Administrations than under President Obama's.** Under President Reagan the coal industry lost about 15,000 jobs (West Virginia went from just over 41,000 coal

jobs to 31,000 coal jobs; Kentucky went from 38,000 jobs to 33,000 jobs) Under George HW Bush the coal industry lost 11,000 jobs (West Virginia went from 31,000 coal jobs to 25,000 jobs; Kentucky went from 33,000 jobs to 27,000 jobs).Under the President Obama between 2009-2013 West Virginia and Kentucky lost a combined 2000 jobs. [National Journal, 10/31/13]

MYTH: The EPA lacks the legal authority to set standards on carbon pollution.

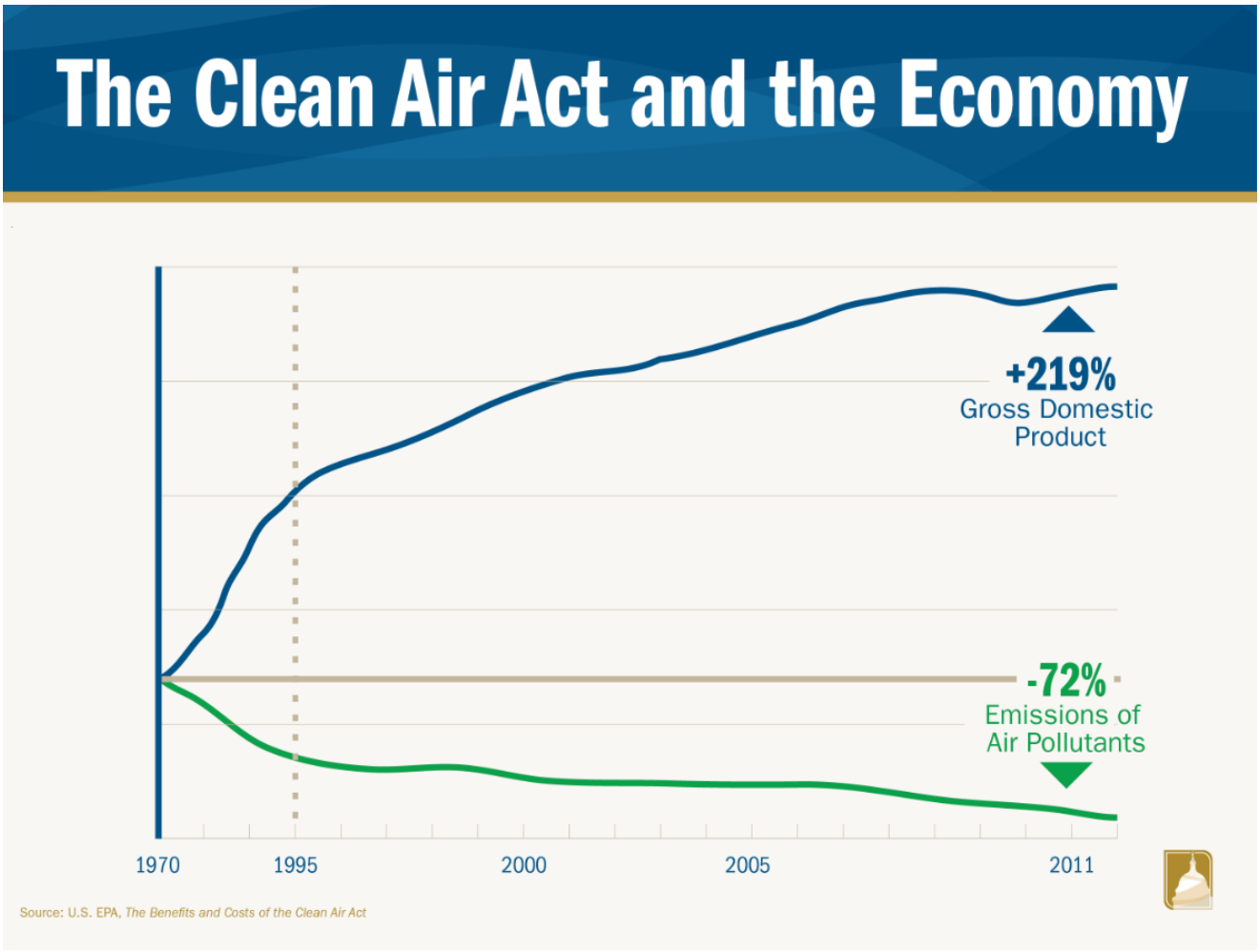
FACT: The Supreme Court has affirmed that EPA has clear legal authority to combat carbon pollution three times.

- **In 2007, the Supreme Court ruled in *Massachusetts v. EPA* that the Clean Air Act's definition of "air pollutant" included greenhouse gas emissions, authorizing EPA to regulate Greenhouse Gas Emissions from sources including power plants.** In 2012, the D.C. Circuit Court unanimously affirmed the EPA's finding that carbon pollution is dangerous. [EPA, 6/26/12]

- And in 2011, in ***American Electric Power v. Connecticut***, the Supreme Court reaffirmed unanimously its earlier decision that EPA has authority to regulate greenhouse gas pollution and, in the same case, relied on EPA's specific authority to regulate greenhouse gas pollution from power plants, including existing power plants, under section 111 of the Clean Air Act. [U.S. Supreme Court, 6/20/11]

- Furthermore, at oral argument on February 24, 2014, the Justices made it clear that they were not entertaining any thoughts of overruling *Massachusetts v EPA* or reversing EPA's endangerment finding. Thus, it is clear that EPA has the authority to regulate GHG emissions. [U.S. Supreme Court, 2/24/14]

CHARTS:


The Clean Air Act and the Economy
+219%
Gross Domestic Product
-72%
Emissions of Air Pollutants
1970
1995
2000
2005
2011
Source: U.S. EPA, The Benefits and Costs of the Clean Air Act