



INSPIRING AMERICANS TO PROTECT WILDLIFE FOR OUR CHILDREN'S FUTURE.

# Fact Sheet

CONFRONTING GLOBAL WARMING



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## The Clean Air Act

### 40 Years of Success Protecting Public Health & Environment

This fall marks the 40th anniversary of the Clean Air Act, one of our nation's most effective and beneficial public health laws. For four decades, the Environmental Protection Agency (EPA) has used the Clean Air Act to hold polluters accountable and successfully protect the health of millions of Americans – including our children, our seniors, and the most vulnerable among us – from dozens of different air pollutants. Cleaning up air pollution has also protected wildlife from harmful emissions that threaten species directly and also contaminate water, degrade habitats, and damage the environment.

The National Wildlife Federation, on behalf of our four million members and supporters nationwide, stands with a broad coalition of public health, environmental, business, labor, faith, and sportsmen organizations in support of the Clean Air Act and in strong opposition to any attempts by polluter lobbyists to weaken its protections. It is critical that the EPA continue its important work of reducing air pollution in this country by setting strong emission standards for all pollutants, including greenhouse gases, as required by the Clean Air Act. It is time for our nation's polluters to finally be held accountable for their harmful emissions that contribute to climate change.

### Cost-Effective Pollution Reductions

Since 1970, the Clean Air Act has a proven track record of protecting public health, wildlife, and the environment from harmful pollution while ensuring our economy is strengthened. In 1990, the Act was revised with bipartisan support and signed into law by President George H.W. Bush – demonstrating that clean air and less pollution are goals shared by Republicans and Democrats alike.

- The first 20 years of Clean Air Act implementation prevented: 205,000 premature deaths; 21,000 cases of heart disease; 672,000 cases of chronic bronchitis; 843,000 asthma attacks; 18 million child respiratory illnesses; and 189,000 cardiovascular hospitalizations.<sup>1</sup>
- Clean Air Act programs have resulted in 92% less lead in ambient air than in 1980, significantly reducing the number of children with lower IQs from toxic lead exposure.<sup>2</sup>
- Since 1990, pollution that causes acid rain, asthma, developmental problems, and premature deaths has dropped 41%, while our economy has grown 64%.<sup>3</sup>
- Between 1970 and 1990, actions to reduce air pollution saved the nation an estimated \$22 trillion in health care expenses and lost productivity at a cost of \$523 billion—a remarkable 40-1 benefit-cost ratio. The innovation and ingenuity of American industry has shown us, time and time again, that holding polluters accountable can be achieved faster and at lower cost than initially predicted.<sup>4</sup>

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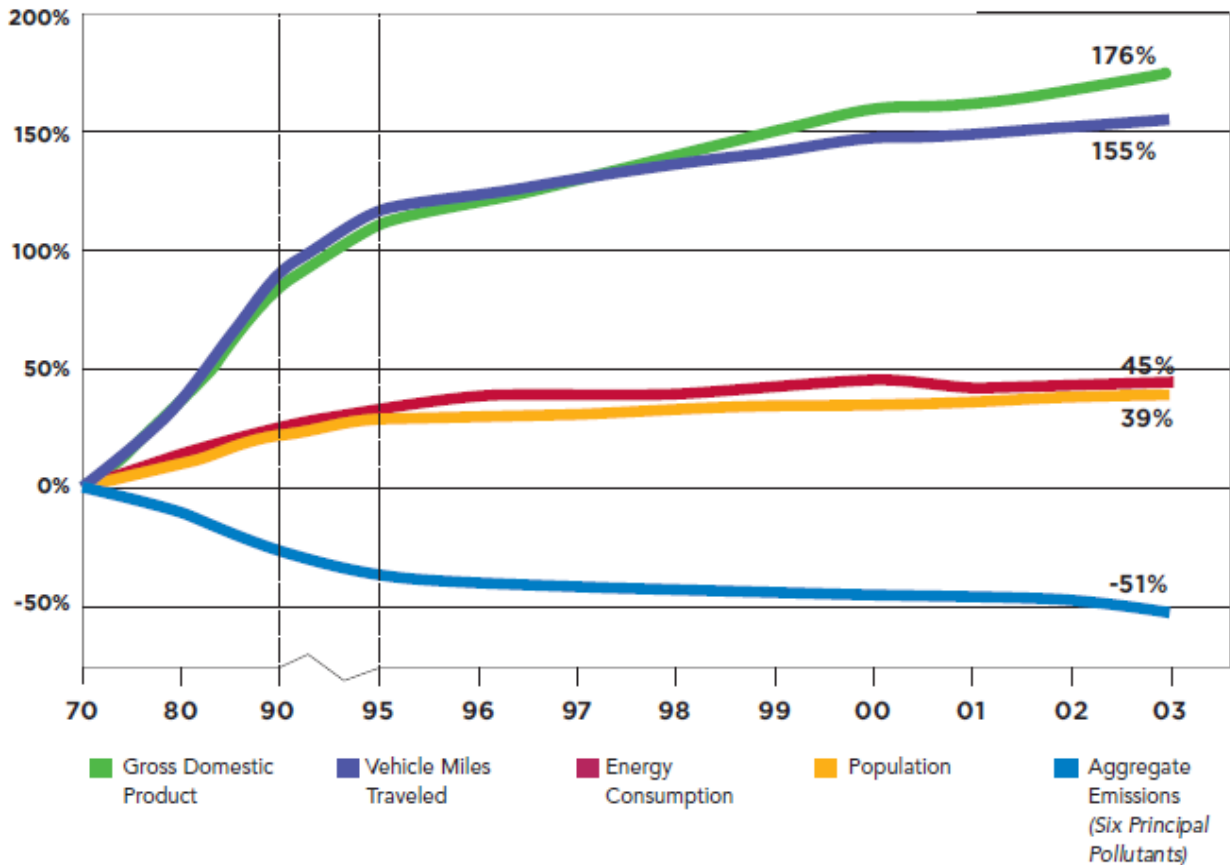
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Cost-Effective Pollution Reductions cont'd

- The Clean Air Act's Acid Rain Program has successfully reduced acid deposition by more than 30% since 1990, with economic benefits also outweighing the costs more than 40-to-1. Costs of compliance with the program were 83% lower than EPA initially predicted.<sup>5</sup>
- Actions under the Clean Air Act have been extremely successful in cost-effectively reducing air pollution resulting from cars, trucks, and other vehicles. As a result of new rules for cleaner fuels and engines, today's cars, light trucks, and heavy-duty diesel engines are up to 95% cleaner than past models. According to EPA, the expected benefits of achieving emission reductions from the newest car standards will outweigh the costs more than 16-to-1.<sup>6</sup>
- Clean Air Act regulation of ozone-depleting chemicals is estimated to result in nearly 300 million fewer cases of cancer from 1989 thru 2075, while also protecting people from other harmful impacts of exposure such as immune disorders and cataracts. Phase-out of these chemicals occurred much faster, and cost 30% less, than initially predicted.<sup>7</sup>
- According to preliminary EPA analysis, the *annual* economic benefit of air quality improvements thanks to the Clean Air Act is estimated to be nearly \$2 trillion in 2010 – far exceeding the costs of compliance.<sup>8</sup>

COMPARISON OF GROWTH AREAS AND EMISSIONS



Source: U.S. Environmental Protection Agency & National Association of Clean Air Agencies<sup>9</sup>



## Limiting Pollution as Congress Intended

When Congress passed the Clean Air Act nearly four decades ago, it gave EPA the responsibility to protect the American people when science shows that new air pollutants threaten our health or environment. In 2007, the Supreme Court confirmed in its landmark decision, Massachusetts v. EPA, that the Act requires EPA to protect public health and welfare from air pollutants that contribute to climate change. Just this past spring, the National Academies of Science again underscored the urgency of curbing global warming pollution, concluding that "climate change is occurring, is caused largely by human activities, and poses significant risks for — and in many cases is already affecting — a broad range of human and natural systems."<sup>10</sup>

*"...the legislation before us at this time will be far reaching toward finding a solution to this problem to provide a healthier climate around us."<sup>11</sup>*

- Excerpt from the Congressional debate prior to passage of the 1970 Clean Air Act

**Threats to Public Health:** Every year that we allow corporate polluters to dump more greenhouse gases into the air will result in more severe effects of global warming, now and into the future — including record high temperatures, stronger storms, more droughts, heavier rainfall, increased flooding, sea-level rise, and many others. For example, more frequent and intense heat waves increase the threats of asthma and other respiratory disease and more frequent and intense rainfall, flooding, and sea-level rise increase the threats of water-borne diseases. It is the people who have the least ability to cope with these changes—the poor, very old, very young, or sick—who are the most vulnerable to the changes we will experience.<sup>12</sup>

**Dangers to Wildlife:** All the climate change impacts listed above, from heat waves to droughts to sea-level rise, pose significant risks to wildlife as well. As the climate changes, wildlife are especially vulnerable to changes in habitat, reproductive processes, and migration patterns. America's abundant and diverse wildlife resources, which are so important to our culture and well-being, face a bleak future if we do not address global warming. Scientists predict that rising global temperatures could move 30% of all plant and wildlife species toward extinction in the lifetime of a child born today.<sup>13</sup> Taking action to reduce global warming pollution and confront our climate crisis will greatly benefit wildlife.

In passing the Clean Air Act, Congress clearly intended it to serve as a living document, in order to ensure that EPA has the tools it needs to respond to new air pollution problems. The science is clear: global warming pollution poses significant threats to public health and welfare, and EPA is obligated under the law to limit sources of this pollution and address the impacts of climate change.

## What's Next: Common Sense, Cost-Effective Action

Over the last year, EPA has pursued sensible measures to fulfill its obligations under the Clean Air Act by focusing on global warming pollution from tailpipes on new vehicles and smokestacks of the biggest corporate polluters. EPA took the first major steps to curb emissions in March 2010, when it issued new standards to cut heat-trapping pollution from new cars and SUVs through 2016, together with new fuel economy standards from the Department of Transportation. As a result of these important rules, new vehicles will emit 30 percent less carbon pollution by 2016 and reduce dependence on foreign oil by 1.8 billion barrels over the life of the program.<sup>14</sup>

**New Emissions Standards:** EPA is now turning its attention to new emission limits for trucks, cars (post-2016), power plants, and other large industrial polluters. It is important to recognize that the Clean Air Act has clear guidelines that EPA must follow, including specific requirements that technical feasibility and cost form the basis for new emission standards. For example, when developing new regulations for the biggest global warming pollution sources, EPA must base the emission standards on *available and affordable* pollution control measures.<sup>15</sup>



What's Next: Common Sense, Cost-Effective Action cont'd

When addressing new pollution sources, the Clean Air Act specifically states that EPA must require emission reductions that are achievable using technology that has been *adequately demonstrated*, and consider both the *energy and economic impacts and costs* that may result from compliance with the new standards.<sup>16</sup> Additionally, the Act also requires EPA to consider the remaining useful life of facilities when setting standards for specific sources, providing another key assurance that new pollution limits will not have an adverse impact on our economy.<sup>17</sup> This standard-setting process is the same approach that EPA has successfully used for decades to reduce dangerous pollutants, such as sulfur dioxide and nitrogen oxides, while keeping our economy growing.



**Polluter Lobbying Influence Standing In the Way:** Despite these clear boundaries on EPA's authority in regulating conventional (non-toxic) emissions, polluter lobbyists continue to cry foul at any mention of EPA fulfilling its obligation under the Clean Air Act with respect to global warming pollution. This is simply the latest in a string of red herrings that industry has raised time and again to avoid complying with laws that are essential for protecting public health. From seatbelts to catalytic converters to unleaded gasoline, industry falsely claimed that new standards would have devastating economic impacts. History has shown us that these requirements have not adversely affected our economy – to the contrary, they have had substantial benefits in saving lives, improving public health, and advancing cleaner technology. When EPA followed the Clean Air Act guidelines in setting emission standards for sulfur dioxide, the costs were *over thirty times* lower than industry claimed it would be.<sup>18</sup>

**Moving Forward Successfully:** EPA must be allowed to do its job and continue its successful track record of taking environmentally protective, cost-effective actions to reduce harmful pollution. While some corporate polluters may drag their feet, many businesses are frustrated that they are operating under a lack of regulatory certainty. These forward-looking businesses know that some form of limits on greenhouse gas emissions are inevitable, and would prefer to have the specifics clarified so they can make strategic investment decisions for their companies into the future.

It is long past time for EPA to move forward and require the emission reductions necessary to protect America from the urgent threat of climate change.

## The Cost of Inaction

Our current business-as-usual approach to global warming pollution is an expensive gamble, threatening our public health, our infrastructure, our food and water supplies, our economic competitiveness, and our national security. If we delay action on addressing climate change now, the future only looks worse. Between higher hurricane damages, significant real estate losses, increased energy-sector costs, and diminished water supplies, climate change will cost the United States about \$1.9 trillion per year by 2100—almost 2 percent of our projected GDP.<sup>19</sup> According to the U.S. Global Change Research Program, a consortium of 13 science agencies, the costs of climate change will drastically intensify over the next few decades if we don't take action soon and "impacts are expected to become increasingly severe for more people and more places as the amount of warming increases."<sup>20</sup>

**Moving Away From Our Fossil Fuel Addiction:** Decades of inaction has kept the U.S. hooked on old, polluting energy technologies and delayed critical investments in new clean energy technology, innovation, and jobs – leaving China to lead the clean energy race, with many other nations also far ahead of the U.S. Currently, the Commerce Department estimates that the environmental products industry, including clean air technologies, employs 1.6 million Americans and generates approximately \$282 billion in revenues and \$40 billion in exports.<sup>21</sup>



*The Cost of Inaction cont'd*

While the U.S. is currently the largest single market for environmental technologies, foreign markets continue to grow at a higher rate leaving the U.S. vulnerable to losing jobs overseas. Over the past decade, America's green trade balance has deteriorated significantly – moving from a surplus of \$14.4 billion in 1997 to a deficit of nearly \$8.9 billion in 2008.<sup>22</sup> If the U.S. is going to maintain a competitive edge, industry needs a clear signal from the government to encourage domestic production as well as consumption of clean energy technology.

**Investing In A Prosperous Economic Future:** History has shown that air quality regulations can spark economic growth in new sectors with high-skilled, high-paying job opportunities. For example, the Clean Air Act Amendments of 1970 spurred the creation of the motor vehicle emission control industry. The U.S. market for vehicle emission control technology is expected to grow from \$16 billion in 2005 to over \$36 billion in 2020.<sup>23</sup> This is substantial growth during very tough economic times.

EPA's efforts to reduce global warming pollution should be promoted, not prevented, so we can jumpstart the modernization and retooling of our industries while protecting public health and our environment.

## Moving Forward

The Clean Air Act has a strong and proven track record of protecting public health along with our lakes, forests, wildlife, national parks, and other natural treasures from the devastating impacts of air pollution while allowing our economy to prosper. It is essential that EPA continue this important work and gets started using the tools Congress provided to protect current and future generations from the most severe environmental threat we have ever faced: climate change.



<sup>1</sup> EPA, "The Clean Air Act – Highlights of the First 40 Years", September 2010 ([http://epa.gov/oar/caa/Clean\\_Air\\_Act\\_40th\\_Highlights.pdf](http://epa.gov/oar/caa/Clean_Air_Act_40th_Highlights.pdf))

<sup>2</sup> Ibid

<sup>3</sup> EPA, "Acid Rain Program Benefits Exceed Expectations," April 14, 2009 (<http://www.epa.gov/airmarkets/cap-trade/docs/benefits.pdf>)

<sup>4</sup> National Association of Clean Air Agencies, "Don't Take Away a State's Right to Protect Its Citizens from Dirty Air," April 2005 (<http://www.4cleanair.org/FinalBrochure-April05.pdf>)

<sup>5</sup> EPA, "The Clean Air Act – Highlights of the First 40 Years", September 2010 ([http://epa.gov/oar/caa/Clean\\_Air\\_Act\\_40th\\_Highlights.pdf](http://epa.gov/oar/caa/Clean_Air_Act_40th_Highlights.pdf))

<sup>6</sup> Ibid

<sup>7</sup> Ibid

<sup>8</sup> EPA, "The Benefits and Costs of the Clean Air Act: 1990 to 2020," August 2010 (<http://www.epa.gov/oar/sect812/aug10/fullreport.pdf>)

<sup>9</sup> EPA, "Acid Rain Benefits Exceed Expectations," April 14, 2009 (<http://www.epa.gov/airmarkets/cap-trade/docs/benefits.pdf>)

<sup>10</sup> America's Climate Choices, <http://americasclimatechoices.org/>

<sup>11</sup> Excerpt from Congressional debate prior to passage of the 1970 Clean Air Act: 111 Cong. Rec. 25061-62 (Sept. 24, 1965)

<sup>12</sup> For more on global warming and its effects on extreme weather events, health, and ecosystems, visit: <http://www.nwf.org/Global-Warming.aspx>

<sup>13</sup> Climate Change 2007: Impacts, Adaptation and Vulnerability. Contribution of Working Group II to the Fourth Assessment Report of the Intergovernmental Panel on Climate Change

<sup>14</sup> For more on the National Fuel Efficiency Policy, visit: The National Highway Safety Administration (<http://www.nhtsa.gov/fuel-economy>)

<sup>15</sup> Clean Air Act Sec. 169(3)

<sup>16</sup> Clean Air Act Sec. 111(a)(1)

<sup>17</sup> Clean Air Act Sec. 111(d)

<sup>18</sup> EPA SO2 Auction Results (<http://www.epa.gov/airmarkets/trading/auction.html>); Resources for the Future, "Sulfur Dioxide Control by Electric Utilities: What are the Gains from Trade?," April 2000 (<http://www.rff.org/documents/RFF-DP-98-44-REV.pdf>)

<sup>19</sup> NRDC, The Cost of Climate Change, <http://www.nrdc.org/globalwarming/cost/cost.pdf> May, 2008

<sup>20</sup> Global Climate Change Impacts in the U.S., <http://www.globalchange.gov/publications/reports/scientific-assessments/us-impacts>

<sup>21</sup> Based on 2007 U.S. Department of Commerce estimates at <http://environment.ita.doc.gov/>

<sup>22</sup> Sherraden, Samuel, "Green Trade Balance", June 22, 2009 ([http://www.newamerica.net/publications/policy/green\\_trade\\_balance](http://www.newamerica.net/publications/policy/green_trade_balance))

<sup>23</sup> See Manufacturers of Emission Controls Association: (<http://www.meca.org/page.wv?name=Who+We+Are&section=Organization+Info>)