Global Warming Solutions

The progress we've made, how we got there, and where we're going





Left to Right: A coal-fired power plant; The aftermath of Superstorm Sandy in Far Rockaway, NY; An aerial view of the 2010 Deepwater Horizon BP oil spill in the Gulf of Mexico.

We're moving America forward on climate

America isn't up to the challenge of global warming, the familiar narrative goes. The problem is too vast and requires too much sacrifice. America's political system is too dysfunctional for the task. We failed to sign the Kyoto Protocol in the nineties, the only developed country to do so. Congress waited until 2009 to get serious about federal climate legislation, and then it was blocked by the fossil fuel industry in the Senate.

This narrative misses the larger truth. It is true that the climate challenge is daunting. And it is true that we haven't done enough. But failure or apathy has never been a complete and accurate characterization of the American approach to climate change. In fact, despite high-profile setbacks, we've been making steady progress for over a decade, and that progress is accelerating.

Clean cars standards, first in the states and now at the federal level, are pushing automakers to build cars that go further on a gallon of gas or use none all. State renewable energy standards, federal tax policy, and technological advances have driven rapid deployment of clean energy technologies. Wind power has tripled and solar has increased twenty-fold since 2008. These developments, combined with state and regional limits on carbon pollution, have helped drive U.S. emissions down 10 percent from their 2005 peak, breaking a historic link between carbon emissions and economic growth.

The Environmental Protection Agency's Clean Power Plan is the most recent and most significant entry on America's growing climate action resume. The plan is the centerpiece of the U.S. commitment made in March to reduce global warming pollution up to 28 percent by 2025, which helped secure the first-ever commitment to cap carbon pollution from China, today's largest carbon polluter.

This December, the Paris climate conference looks poised to produce the world's first international climate agreement. Success in Paris, in a reversal from Kyoto, would be in large part a credit to U.S. leadership.

Environment America Research & Policy Center, Environment America (our sister 501(c)4 organization) and our state affiliates are proud to have played a major role in this progress. As we celebrate the gains we've made, we are taking a look back at the work we've done to make it possible, and at some of the challenges ahead.



In his 2015 State of the Union address, President Obama said, "No challenge poses a greater threat to future generations than climate change."



Left: Environment America staff at the 2014 People's Climate March in New York City. Right: Environment America Research & Policy Center Communications Director Elizabeth Ouzts releases the report, "America's Dirtiest Power Plants," in September, 2014.

The Clean Power Plan

The cornerstone of America's rising leadership on climate change is the Environmental Protection Agency's proposal to limit carbon pollution from power plants – the Clean Power Plan. The Clean Power Plan is not only the largest step the United States has ever taken to fight climate change, it is also the first national policy response to clean up the single biggest source of climate-altering pollution.

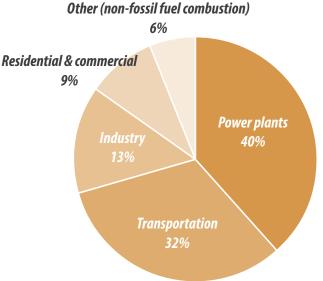
This success was made possible by a multi-year collaborative campaign to advance policy, build political will, and strengthen the climate movement.

In 2011, Environment America co-founded the Climate Action Campaign, the most collaborative climate partnership yet of the nation's leading environmental organizations. With Congress mired in partisan gridlock, the campaign focused on winning policy victories in the forum with the greatest potential for progress—the White House and EPA— while building a firewall in the Senate to defend the EPA from legislative rollbacks.

The Clean Power Plan is the result of a multi-year collaborative campaign advancing policy, building political will, and strengthening the climate movement. The campaign made a long-term investment in boots on the ground in key states, educated and engaged millions through grassroots activism, and built a diverse coalition of allies. We won stronger standards for mercury and soot that are projected to save tens of thousands of lives. By the summer of 2013, when President Obama announced his intention to limit carbon pollution from existing power plants, we had enough support within the Senate to defend the EPA's authority to crack down on pollution from power plants.

Today, the national environmental community and the movement we helped to build are stronger and better poised to win the climate and clean energy fights ahead.

U.S. carbon dioxide emissions, by source





Left: An Environment America canvasser discusses a campaign with a concerned citizen. **Right:** Jossi Fritz-Mauer, the Executive Director of the Energy Co-op in Philadelphia, speaks at a PennEnvironment Research and Policy Center press conference releasing the report "America's Dirtiest Power Plants." The Energy Co-op is one of the more than 600 solar businesses who has voiced their support for the Clean Power Plan.

Building the political will for climate action

Our emphasis is on the outside game and at the state level. We educate the public, build support at the grassroots level and among community leaders, shape the narrative through strategic messaging and media outreach, and generate momentum to embolden policymakers to act.

Building on more than 40 years of experience in organizing and grassroots outreach, we have created one of the strongest field programs in the country. Every year our canvass operation knocks on more than two million doors, our online team works with over one million email activists to generate hundreds of thousands of online actions, and our organizers recruit and mobilize tens of thousands of coalition partners and grasstop leaders. We author and release strategically framed reports, earning media hits from the New York Times to state and local news outlets.

All along the way, we have built the base of support we need to make national and international progress on climate. That includes activists, coalition partners, opinion leaders, policymakers and others who understand the science behind global warming, believe the benefits of adopting solutions, and have the commitment to working hard to make those solutions a reality.

Case Study: Boots on the ground

In Pennsylvania and Colorado—purple states with major influence on national energy decisions—powerful entrenched fossil fuel industries are claiming that EPA regulations will drive up costs and destroy jobs. We are countering their narrative with boots on the ground – and we're winning.

We established a new narrative on our terms – protecting public health and the moral obligation to our children. We wrote and released a series of reports outlining the threat of power plant pollution and organized news conferences to earn coverage in local media. In Pennsylvania, we won resolutions from 15 municipalities supporting limits on carbon from power plants.

We had thousands of conversations with Coloradans and Pennsylvanians at the door, gathering petitions and distributing literature. We recruited hundreds of elected officials, solar businesses and health professionals to call for a strong clean power plan. In both states, we've invested in a lasting network of committed climate activists. Organizers trained hundreds of volunteers, including over a hundred who took three or more actions and committed to leading teams over the long term.

Over the last year, Senator Casey has moved from criticizing action to stating that Pennsylvania must take steps to reduce carbon pollution from power plants. Senator Bennet, one of the most vulnerable Senate Democrats in 2016, recently introduced an amendment acknowledging the science of climate change and calling for action to reduce carbon pollution.

A Foundation of State Progress

The Clean Power Plan wasn't dreamed up in a vacuum – it stands on the shoulders of the many campaigns that helped create the framework, the market, and the political landscape for a 30 percent reduction in carbon pollution from power plants.

From 2003 to 2008, we helped convince ten northeast states to join the Regional Greenhouse Gas Initiative (RGGI), a regional cap on power plant emissions, including the nation's first auction of global warming pollution permits.

New Jersey has since withdrawn from the agreement, but by January 2014 we succeeded in persuading the nine remaining RGGI states to develop and implement an even stronger cap on pollution. RGGI's success has shown that multi-state cooperation to cut carbon pollution from power plants is cost effective and successful, providing a powerful case study for the Clean Power Plan.

In 2005, Environment California helped pass the Global Warming Solutions Act, the first economy-wide cap on global warming emissions in the nation. And we helped organize the environmental community's successful defense of the law in 2011 when the oil industry funded Proposition 23— an attempt to roll it back.

We played a leading role in convincing Maryland, New Jersey, Massachusetts and Connecticut to pass similar or stronger caps on carbon pollution in the following years. Hawaii also adopted a cap in 2007, followed by Rhode Island in 2014. These states represent nearly a quarter of the U.S. economy, and the caps will result in a 270 million metric ton reduction in global warming pollution by 2020.

Building on more than 40 years of experience, we have created one of the strongest field programs in the country.







 Top: Environment Maryland Campaign Organizer Bailey Rehnberg leads a Climate Frontlines Tour at the Chesapeake Bay shoreline to bring attention to the local effects of climate change.
Middle: Bernadette Del Chiaro, Environment California's Clean Energy Advocate at the time, speaks at the signing of Senate Bill 1, the Million Solar Roofs Initiative, in August of 2006, with Sen. Kevin Murray and Gov. Arnold Schwarzenegger.
Bottom: Climate Defenders from Pennsylvania join Environment America staff in Washington, D.C. at a rally in support of the EPA's Clean Power Plan in July 2014.



Left: Environment America Executive Director Margie Alt testifies at an EPA hearing on the Clean Power Plan proposal in July 2014. Right: The Toyota Prius, an energy efficient vehicle.

More action to cut carbon

As a big a victory as the Clean Power Plan is, reducing carbon pollution from power plants is only one step toward the comprehensive action needed to avert the worst impacts of global warming. We're moving forward with campaigns to reduce emissions across the board and set the stage for even more transformative action in the future. And we're expanding our network of millions of activists, community leaders, allied organizations, and new voices like health professionals, local elected officials, and businesses.

Charging Ahead with electric vehicles

Transportation accounts for a roughly a third of U.S. carbon pollution, and 94 percent of all transportation in the United States is powered by oil. Ending our addiction to oil will be a particularly daunting challenge. Scientists and policy experts agree that in order to put the nation and the world on a trajectory towards a sustainable climate, we need to deploy cleaner transportation alternatives as quickly as possible.

In 2002 we helped persuade California to adopt the first-in-the-nation standards for global warming pollution from tailpipes—and from 2003 to 2008 Environment America state affiliates and our allies convinced nearly a dozen other states to adopt the same standards. We built support for cleaner transportation amongst community groups, local officials, environmentalists, public health experts and ultimately, governors.

We helped lead a coalition calling for a national standard of 60 miles per gallon. In July of 2009, building on the leadership of more than a dozen states, President Obama announced a historic deal with most major automakers, ultimately finalizing standards in 2012 that will raise average fuel economy standards to 54.5 miles per gallon by 2025.

We are again pushing the envelope in California, leading the Charge Ahead California coalition to put one million electric vehicles on the road by 2023. In the process, we are protecting California's historic global warming law (AB 32) from attack by the oil industry, implementing California's Zero Emission Vehicle program, and establishing a model campaign that can be replicated across the country.

> Recent history has shown that when we bring enough people together toward a common goal, with a smart strategy and tough-minded opposition, we can muster the power it takes to tackle challenges previously thought impossible.

Expanding clean energy

America is now the world's biggest generator of wind energy, and an American home or business went solar every 3 minutes on average in 2014. The United States can and must transition to 100 percent clean, renewable energy. We're only scratching the surface of our clean energy potential, but thanks in part to our successful campaigns and the efforts of our allies, clean energy momentum is building rapidly.

Starting in the mid-1990s, we led the charge for Massachusetts and California to adopt Renewable Electricity Standards. Over the past decade we've won RES campaigns in 19 states: Maine, New Hampshire, Connecticut, Rhode Island, Pennsylvania, Maryland, New Jersey, North Carolina, Ohio, Michigan, Wisconsin, Illinois, Minnesota, Texas, Colorado, New Mexico, Arizona, Oregon, and Washington.

Clean energy now poses a threat to the established power of the fossil fuel industry, the nuclear industry and many utility companies. We've defended renewable standards from attack in North Carolina, and fought off attacks on net metering in Colorado and Arizona.

Now we're building a solar future. We've laid out an ambitious vision of getting at least ten percent of our power from the sun by 2030. To reach this national goal, we're working across the country to win commitments from local and state officials to commit to expanding solar energy and to implement concrete policies. We have helped set solar goals in Minnesota, Massachusetts and the city of Cincinnati.

And we're working to expand wind energy. Environment America has been a consistent voice in favor of federal tax incentives for wind power. We helped lead a coalition to build support for the continued development of America's offshore wind potential along the Atlantic coast. Now New England is poised to be the home of the nation's first wind project—the Block Island Wind Farm off the coast of Rhode Island—and the federal government has leased additional sites to wind energy developers along the coast.

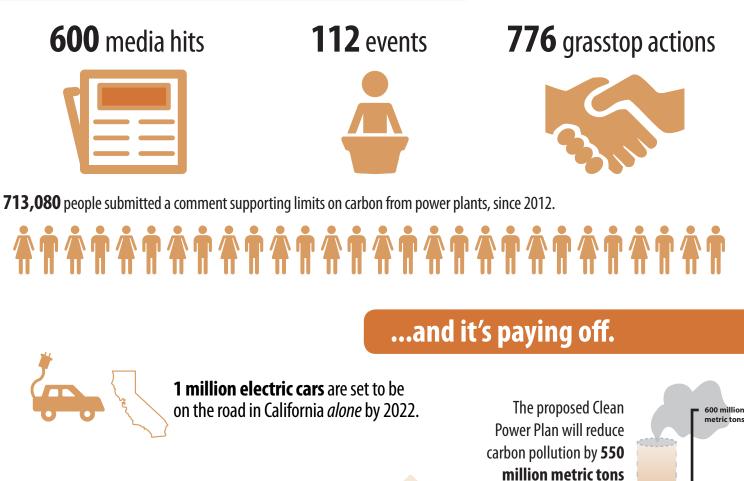


Top: The Nellis Solar power plant, located near Las Vegas, NV. **Bottom:** A map showing states with Renewable Electricity Standards from "Moving America Forward," an Environment America Research & Policy Center report released in March 2014.

The Way Forward

The effort to shift our country to clean energy and prevent the worst impacts of global warming is daunting to say the least. We are facing challenging obstacles: partisan gridlock, the fossil fuel industry, and time itself as global carbon emissions approach a point of no return. But if past is prologue, recent history has shown that when we bring enough people together toward a common goal, with a smart strategy and tough-minded opposition, we can muster the power it takes to tackle challenges previously thought impossible.

Environment America in 2014



The electricity for 15 million homes is generated by American wind energy.



A home or business went solar every 3 minutes in 2014.

State carbon caps will

each year by 2020.

reduce carbon pollution by 270 million metric tons each year by 2020.

> State Carbon Clean Power caps Plan



294 Washington St., Suite 500 Boston, MA 02108 (617) 747-4449

www.EnvironmentAmerica.org

Federal Advocacy Office: 218 D Street SE Washington, DC 20003 (202) 683-1250

Design: Chloe Coffman | Public Interest GRFX Primary Contributor: Julian Boggs

300 million metric tons

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