
The RECORD

President Obama *on* Climate & Energy

A HISTORIC COMMITMENT TO PROTECTING THE ENVIRONMENT AND ADDRESSING THE IMPACTS OF CLIMATE CHANGE

President Obama believes that no challenge poses a greater threat to our children, our planet, and future generations than climate change — and that no other country on Earth is better equipped to lead the world towards a solution.

That's why under President Obama's leadership, the United States has done more to combat climate change than ever before, while growing the economy. In fact, since the President took office, carbon emissions have decreased 9 percent, while the U.S. economy grew more than 10 percent.

Cut Carbon Pollution

- Established the first-ever national carbon pollution standards for power plants, the largest source of carbon pollution in our country. The Clean Power Plan gives states flexible, cost-effective tools to cut carbon pollution from these plants by 32% from 2005 levels by 2030, while preventing thousands of premature deaths and tens of thousands of childhood asthma attacks by reducing dangerous co-pollutants.
- Set standards that will nearly double the fuel economy of passenger vehicles by 2025 and established ground-breaking fuel economy standards for medium and heavy-duty trucks.

- Set new energy-efficiency standards for appliances and equipment, which have cut consumers' electricity bills by hundreds of billions of dollars. Taken together, the final energy conservation standards completed during this Administration will avoid 2.5 billion metric tons of carbon emissions by 2030.
- Launched the American Business Act on Climate Pledge, with major American companies voicing support for a strong international climate agreement in Paris and making major new commitments to cut carbon pollution, boost clean energy, and increase low-carbon investment.
- Developed and are implementing a strategy to reduce methane emissions, including new standards to cut emissions from new sources of oil and gas development and landfills, taking the first step to regulate existing sources in the oil and gas sector, and provided support for new technologies to detect and measure methane emissions
- Announced two rounds of private-sector commitments and executive actions that will slash U.S. reliance on HFCs and reduce cumulative global consumption of these greenhouse gases by the equivalent of more than 1 billion metric tons of CO₂ through 2025.
- Reduced the Federal Government's greenhouse gas emissions by more than 17 percent and set a new aggressive goal of reducing Federal emissions by 40 percent from 2008 levels by 2025
- Collaborated with agricultural producers to cut emissions and increase carbon sequestration in the agricultural and forestry sectors through voluntary and incentive-based measures, and improved monitoring and measurement of land-sector greenhouse gas emissions
- Released the U.S. Mid-Century Strategy for Deep Decarbonization alongside Canada and Mexico, setting out a long-term vision for cost-effectively decarbonizing our economy
- Announced support for strong international climate action by more than 300 colleges and universities, who signed the American Campus Act on Climate Pledge

Expanded the Clean Energy Economy

- Made the largest single investment in clean energy in history through the American Recovery and Reinvestment Act (Recovery Act), providing more than \$90 billion in strategic clean energy investments and tax incentives to promote job creation and the deployment of low-carbon technologies, and leveraging approximately \$150 billion in private and other non-federal capital for clean energy investments resulting in dramatic increases in clean energy – with wind power tripling and solar power increasing by 30-times since the President took office.

- Technology improvements in clean energy--in significant part due to Federal investment--have resulted in substantial costs reductions. Since 2008, the cost of solar has dropped 64 percent, wind 41 percent and LEDs 94 percent.
- Approved the first-ever large-scale renewable energy projects on Federal public lands, and permitted more than 15 GW of renewable energy capacity approved as of 2016. Established the first program for offshore wind leasing and permitting, which Administration analysis show could produce up to 86 GW of renewable energy off our coasts by 2050.
- Performed energy-efficiency upgrades in nearly two million homes across the country.
- Launched the Clean Energy Investment Initiative to expand private-sector investment in promising technologies aimed at reducing carbon pollution, including inspiring more than \$4 billion in private-sector commitments and executive actions to scale up investment in clean-energy innovation.
- Made \$1 billion in additional loan guarantee authority available and announced new guidelines for distributed energy projects utilizing innovative technologies, like rooftop solar panels with storage, and unlocked \$10 billion in current loan guarantees for these technologies
- Launched a new cross government partnership – the Clean Energy Savings For All Initiative to increase access to solar energy and promote energy efficiency across the United States with a particular focus on expanding access for low- and moderate- income communities and creating a more inclusive workforce.
- Unlocked more than \$850 million from the United States Department of Agriculture to invest in helping hundreds of small businesses improve energy efficiency, adopt renewable energy systems.
- Expanded and modernized the electric grid through technology upgrades and permitting reforms
- On track to deploy 3 GW of renewable energy generation at U.S. military installations
- Announced the 21st Century Clean Transportation Plan in the 2016 State of the Union, unlocked \$4 billion in funding for electric vehicle fueling infrastructure, established the first national electric vehicle charging infrastructure, and partnered with the private sector to building a lasting commitment to scale up electric vehicles
- Established the Better Buildings Challenge to enlist cities, states, utilities, manufacturers, school districts, and businesses to improve energy efficiency, targeting heavy users such as data centers and outdoor lighting systems
- Worked with companies, mayors, university presidents, and labor leaders to drive \$4 billion of investment in energy-efficiency upgrades for public and private buildings

- Launched Solar Ready Vets at ten U.S. military bases to train veterans for jobs in the solar power industry
- Released the first installment of the Quadrennial Energy Review, which focuses on U.S. energy transmission, storage, and distribution to examine how to modernize our nation's energy infrastructure to promote economic competitiveness, energy security, and environmental responsibility
- Supported research and public-private partnerships to pursue new innovations in biofuel technologies
- Dedicated new federal resources for economic diversification, job creation, training, and other employment services for workers and communities impacted by layoffs at coal mines and coal-fired power plants
- Increased Federal investment in hydroelectric power, including in the construction of the Red Rock Hydroelectric Plant in Iowa
- Recognized independent commitments by more than 350 leading companies and state and local leaders to deploy solar energy and increase energy efficiency across the nation

Led Global Efforts on Climate Change

- Led global efforts on climate change, resulting in a historic Paris Climate Agreement, with more than 190 countries coming together to adopt the most ambitious climate change agreement in history. The Paris Agreement establishes a long-term, durable global framework to set the world on a course to reduce global greenhouse gas emissions and mitigate the most dangerous levels of climate change.
- Led an unprecedented international effort to push the Paris Agreement into force, faster than all but a handful of international agreements
- Led an international coalition of countries to secure an amendment to the Montreal Protocol to phase down HFCs, potent greenhouse gases. The amendment, which has strong support from U.S. industry, will avoid more than 80 billion metric tons of carbon dioxide equivalent by 2050 – equivalent to more than a decade of emissions from the entire U.S. economy – and could avoid up to 0.5°C of warming by the end of the century.
- Forged a historic joint announcement with China, under which the United States launched an ambitious but achievable U.S. target to reduce greenhouse gas emissions to 26 to 28 percent below 2005 levels by 2025, while China announced for the first time its intent to peak carbon emissions around 2030 and increase the share of zero-carbon energy capacity to 20 percent
- Announced an additional Joint Presidential Statement on Climate Change with China's President Xi Jinping that further defined implementation of the countries' post-2020 emissions targets

- Led over 190 countries in securing both a global standard to reduce carbon emissions from commercial aircraft and an innovative, market-oriented, and industry supported agreement to limit emissions across the aviation sector
- Launched Mission Innovation, a landmark commitment to double public funding for clean energy research and development to \$30 billion in five years
- Pledged \$3 billion to support the Green Climate Fund to reduce carbon pollution and strengthen resilience in developing countries, especially the poorest and most vulnerable. The GCF will play an important role in improving resilience to climate impacts and addressing the security risks associated with climate change.
- Along with Canada and Mexico, proposed an amendment to the Montreal Protocol to phase down production and consumption of hydrofluorocarbons (HFCs), potent greenhouse gases. At the Meeting of the Parties to the Montreal Protocol in November, Parties agreed to work together on an amendment in 2016. Phasing out these substances could avoid up to 0.5°C of warming by the end of the century
- Committed to doubling the \$400 million per year of grant-based resources in global climate adaptation by 2020
- Fostered a commitment by more than 30 countries of the Organization for Economic Cooperation and Development (OECD) to dramatically reduce financing for coal-fired power plants overseas
- Announced joint measures with Brazil, in which both countries will increase the share of renewables, beyond hydropower, in their respective electricity generation mixes to 20 percent by 2030, and Brazil will restore and reforest 12 million hectares of forests, roughly the size of Pennsylvania, by 2030
- Announced climate cooperation with Indonesia, including an unprecedented level of collaboration to conserve ecosystems, promote climate change adaptation, and foster the next generation of scientists. The partnerships represent approximately \$60 million under the Tropical Forest Conservation Act and \$50 million under the Millennium Challenge Corporation compact
- Announced bilateral cooperation with India to adopt and develop clean energy solutions to help transition toward a climate-resilient, low-carbon economy
- Announced a new public-private partnership to ensure that the climate data and products made available by U.S. technical agencies are useful to developing countries
- Built deeper collaborations with North American Leaders Canada and Mexico, including expanded efforts to combat climate change and promote clean energy, and joined Canada and Mexico in committing to reduce methane emissions from the oil and gas sector by 40 to 45% below 2012 levels by 2025.

- Joined ten other countries in announcing contributions totaling \$248 million to the Least Developed Countries Fund (LDCF), which plays a key role in addressing urgent and immediate adaptation needs of least developed countries
- Launched an international public-private partnership, the Climate Services for Resilient Development, to empower developing nations to boost their own climate resilience by providing needed climate services — including actionable science, data, information, tools, and training.
- Announced a contribution of \$30 million to support insurance initiatives under the Pacific Catastrophic Risk Assessment and Financing Initiative, expand the Caribbean Catastrophic Risk Insurance Facility to cover Central American countries, and support the African Risk Capacity program
- Released high-resolution elevation data globally to help local communities mitigate the impacts of frequent river basin flooding, storm surges, and sea-level rise
- Reduced tariffs on environmental goods, which range from clean technology for air conditioners to wind turbines to bicycles, to fulfill a commitment made by the 21 Leaders of the Asia-Pacific Economic Cooperation (APEC) forum and pursued an expansion of that commitment through a more comprehensive agreement on environmental goods among interested members of the WTO.
- Issued an executive order requiring that federal agencies screen their international development investments and programs for climate risks
- Launched a public-private partnership with Norway and the United Kingdom to reduce emissions from deforestation and forest deregulation

Protected Our Climate, Our Air, and Our Water

- Established the first-ever national limits for mercury, arsenic, and other toxic air pollutants emitted by power plants
- Set standards to limit mercury and other pollutants from the largest sources of industrial air pollution, including cement plants, industrial boilers, and waste incinerators
- Established new standards for cleaner gasoline and vehicles to reduce harmful air pollution
- Signed, as the culmination of years of bipartisan effort, a bill to reform the Toxic Substances Control Act (TSCA), the first major update to an environmental statute in 20 years. The updated law gives EPA the authorities we needed to help protect American families from the health effects of dangerous chemicals.
- Set tighter standards for ozone pollution that will deliver 2-4 dollars in benefits for every dollar spent—reducing premature deaths, childhood asthma attacks, and cases of acute bronchitis among children

- Updated drinking water standards, protected drinking water sources, and modernized the tools available to communities to meet their clean water requirements, while providing affordable clean water services in rural communities
- Promulgated the Clean Water Rule to provide the clarity and certainty businesses and industry need about which waters are protected by the Clean Water Act, and ensure that these waters can be protected from pollution
- Overhauled our nation's offshore energy program by raising the bar at every stage of oil and gas development through new standards for safety and environmental systems, well design, production systems, blowout prevention, well control equipment and emergency response; ensuring that any oil and gas exploration offshore Alaska is subject to strong standards specifically tailored to the region's challenging and unforgiving conditions; and strengthening federal oversight by restructuring to create three independent regulatory agencies that have clear missions and better resources to keep pace with a rapidly evolving industry.
- Adopted a balanced approach to best meet the nation's energy needs by making available for leasing areas offshore with high resource potential and mature infrastructure while protecting regions with critical ecological resources

Cut Energy Waste

- Established the Better Buildings Challenge to enlist cities, states, utilities, manufacturers, school districts, and businesses to improve energy efficiency, targeting heavy users such as data centers and outdoor lighting systems
- Set new energy efficiency standards for appliances and equipment, which have cut consumers' electricity bills by hundreds of billions of dollars. Taken together, the final energy conservation standards completed during this Administration add up to more than 2 billion metric tons of carbon emissions by 2030, and we are on track to meet the Climate Action Plan's goal of cutting 3 billion metric tons of energy waste by 2030
- Worked with companies, mayors, university presidents, and labor leaders to drive \$4 billion of investment in energy efficiency upgrades for public and private buildings
- Performed energy efficiency upgrades in nearly two million homes across the country
- Prepared Our Communities for the Impacts of Climate Change
- Established the State, Local, and Tribal Leaders Task Force to advise the Administration on how to better support communities preparing for climate change on the local level
- Directed federal agencies to develop adaptation plans to reduce the vulnerability of federal programs, assets, and investments to the impacts of climate change

- Worked with communities to support investments in resilient infrastructure in the areas impacted by Hurricane Sandy and elsewhere, ensuring that infrastructure is built to withstand future disasters
- Launched the National Disaster Resilience Competition to help communities that have experienced major natural disasters to rebuild and better prepare for extreme weather
- Released the third U.S. National Climate Assessment — the most comprehensive scientific report on domestic climate change impacts ever generated — and advanced the development of a “sustained assessment” process to provide a steady stream of information on the current and projected impacts of climate change in the United States
- Released “The Impacts of Climate Change on Human Health in the United States: A Scientific Assessment,” which significantly advanced scientific knowledge regarding the impacts of climate change on public health
- Convened the first Summit on Climate Change and Health to stimulate a national dialogue on preventing the health impacts of climate change
- Launched the Climate Data Initiative — a broad effort to leverage the federal government’s extensive, freely-available, climate-relevant data resources to stimulate innovation and private-sector entrepreneurship in support of national climate-change preparedness
- Developed the Climate Resilience Toolkit to provide centralized, authoritative, easy-to-use information to help communities prepare for the impacts of climate change
- Launched the Partnership for Resilience and Preparedness, a public-private collaboration among federal agencies, non-governmental organizations, private-sector companies, and civil-society organizations, focused on identifying priority climate-information needs, reducing barriers to data access and usability, and developing an open-source platform to enable sharing and learning on the availability and use of data and information for climate resilience.
- Announced Resilience Dialogues, an online consultation service, currently in beta form, that will allow community leaders to engage in facilitated, expedited, and tailored dialogues with scientists, resilience practitioners, and subject-matter experts
- Hosted the first White House Water Summit to shine a spotlight on the importance of cross-cutting, creative solutions to solving the water problems of today
- Issued a Presidential Memorandum and supporting Action Plan on building national capabilities for long-term drought resilience in the United States, including by setting drought resilience policy goals, directing specific drought resilience activities
- Established the Arctic Executive Steering Committee to coordinate national efforts in the Arctic, and to strengthen cooperation among Federal agencies, State, local, tribal, academic, private and other groups to mitigate the impacts of climate change in the Arctic.

- Announced a comprehensive agenda to enhance the resilience of America's natural resources to the impacts of climate change and promote their ability to absorb carbon dioxide
- Supported tribes preparing for climate change through adaptation and training, data and information, and improved federal collaboration
- Launched the Resilience AmeriCorps to increase civic engagement and community resilience in low-income areas
- Launched the Climate Education and Literacy Initiative to ensure that all students and citizens have the knowledge and training they need to address the climate change challenge
- Announced the commitments of 97 colleges, universities, associations, and academic centers around the country to ensure that the next generation of design professionals are prepared to design and build for extreme weather events and the impacts of climate change
- Developed and is implementing a national wildfire management strategy focused on fire adapted communities, response to wildfires, and restoring and maintaining landscapes
- Issued an Executive Order on mitigating wildfire risk to federal buildings located in the Wildland-Urban Interface (WUI) to reduce risks to people and to help minimize property loss to wildfire
- Supported expanded use of green infrastructure techniques to improve natural management of stormwater and boost community resilience to flooding and other impacts of climate change
- Established a new flood standard to reduce the cost of future flood disasters by requiring federally funded projects to meet higher flood risk standards
- Hosted a White House Conference on Resilient Building Codes and announced new federal and private sector efforts to advance the principles of resilience in building codes and standards, and building design.
- Hosted a White House Forum on Smart Finance for Disaster Resilience to highlight innovations in disaster mitigation and resilience finance, including emerging public-private collaborations with banking, insurance, and financial services sectors
- Invested in health and retirement programs for mineworkers and their families, and funded the accelerated cleanup of abandoned mine lands
- Trained more than 15,000 religious and community leaders on how to prepare for, respond to and recover from disasters

Protected Treasured Natural Resources

- Permanently protected more than 550 million acres of America's public lands and waters, more than any other president in history
- Signed the Omnibus Public Land Management Act of 2009, the most extensive expansion of land and water conservation in more than a generation, which designated more than 2 million acres of Federal wilderness and protected thousands of miles of trails and more than one thousand miles of rivers
- Developed an aggressive program to combat illegal fishing and enforce fishery rules
- Created the largest marine monument in the world, which is completely off-limits to commercial resource extraction
- Dedicated unprecedented attention and resources to restoring iconic places like the Chesapeake Bay, California Bay-Delta, Great Lakes, and Everglades
- Announced more recoveries under the Endangered Species Act than has been done under any previous administration
- Released the National Strategy for Pollinator Health and a Pollinator Research Action Plan in order to coordinate and expand Federal efforts to protect honeybees, monarch butterflies, and other pollinators nationwide
- Launched an "Every Kid in a Park" initiative that provides all fourth-grade students and their families free admission to all Federal lands and waters for a full year
- Taken unprecedented steps to prevent wildlife trafficking and implement the strongest environmental standards in an international trade deal
- Established the Gulf Restoration Council through the RESTORE Act, bringing five states and six Federal agencies together to restore Gulf Coast ecosystems and communities