

US EPA ARCHIVE DOCUMENT

EPA FACT SHEET: Reducing Carbon Pollution From Power Plants

Moving Forward On the Climate Action Plan

"In July, I launched a Climate Action Plan aimed at cutting harmful carbon pollution and preparing the United States for the impacts of climate change. Today, we build on that progress by proposing common-sense standards that will begin to put an end to the limitless release of carbon pollution from our power plants, creating cleaner air and a healthier environment for our children and for future generations. By building on the leadership of states and cities that are moving to cleaner energy sources, and many power companies that are already working to modernize their plants, we can spur innovation and investment to help create new jobs and new industries, and be better stewards of the world we leave to our children."

- President Barack Obama, September 2013

On Sept. 20, 2013, the U.S. Environmental Protection Agency (EPA) announced its first steps under President Obama's Climate Action Plan to reduce carbon pollution from power plants. Power plants are the largest stationary source of carbon pollution in the United States: about one third of all greenhouse gas pollution in the U.S. comes from the generation of electricity by power plants.

In the Clean Air Act, Congress recognized that the opportunity to build emissions controls into a source's design is greater for new sources than for existing sources, so it laid out different approaches to set the two types of standards. Today EPA is proposing carbon pollution standards for power plants built in the future and is kicking off the process of engagement with states, stakeholders, and the public to establish carbon pollution standards for currently operating power plants.

The proposed standards for new power plants are the first uniform national limits on the amount of carbon pollution that future power plants will be allowed to emit. The proposed standards are in line with investments in clean energy technologies that are already being made in the power sector. The proposal ensures that the nation will continue to rely on a diverse mix of energy sources, including efficient natural gas, advanced coal technology, nuclear power, and renewable energy like wind and solar.

Standards for currently operating plants are set through a federal-state partnership that includes federal guidelines and state plans to set and implement performance standards. Reflecting the significant differences between currently operating sources and those not yet built, the standards that will be developed for currently operating sources are expected to be different from, and less stringent than, the standards proposed today for future sources. Over the coming months, EPA will be engaging with states and a diverse set of partners, including the power sector, environmental groups, and the public, to identify innovative, pragmatic approaches that build on the leadership that many states have already shown to cut carbon pollution from the power sector.

POWER PLANT CARBON POLLUTION IMPACTS PUBLIC HEALTH AND THE ENVIRONMENT

- Carbon pollution stays in the atmosphere and contributes to climate change, which is one of the most significant public health challenges of our time.
- Unchecked carbon pollution leads to long-lasting changes in our climate, such as rising global temperatures; rising sea level; changes in weather and precipitation patterns; and changes in ecosystems, habitats and species diversity.
- Public health risks include more heat waves and drought; worsening smog (also called ground-level ozone pollution); increasing the intensity of extreme events, like hurricanes, extreme precipitation and flooding; and increasing the range of ticks and mosquitoes, which can spread disease such as Lyme disease and West Nile virus.
- Our most vulnerable citizens, including children, older adults, people with heart or lung disease and people living in poverty are most at risk from the impacts of climate change.

NEW PLANTS WILL USE CLEAN TECHNOLOGIES

- This proposal will protect public health and address climate change while ensuring reliable, affordable, and clean power for American businesses and families.
- This standard ensures that power companies investing in new fossil fuel-fired power plants – which often operate for more than 40 years – will use technologies that limit emissions of harmful carbon pollution.
- This new proposal sets standards for different types of new power plants while maintaining a similar level of environmental protection. It reflects recent trends in the electric power sector and additional information, including the more than 2.5 million comments submitted by the public on the April 2012 proposal.
- The proposed standards will put national limits on the amount of carbon pollution that new power plants, built in the future, are allowed to emit. The standards will minimize carbon pollution by guaranteeing reliance on advanced technologies like efficient natural gas units and efficient coal units implementing partial carbon capture and storage (CCS).
- EPA's rule reflects an ongoing trend in the power sector—a shift toward cleaner power plants that take advantage of modern technologies that will become the next generation of power plants. EPA's rule ensures this progress continues.
- Because these standards are in line with current industry investment patterns, these standards are not expected to have notable costs and are not projected to impact electricity prices or reliability.
- U.S. Department of Energy, EPA and industry projections indicate that new power plants

that are built over the next decade or more would be expected to meet these standards even in the absence of the rule.

SEPARATE STANDARDS FOR COAL AND NATURAL GAS

- EPA is proposing to set separate standards for certain natural gas-fired stationary combustion turbines and for fossil fuel-fired utility boilers and integrated gasification combined cycle (IGCC) units. All standards are in pounds of CO₂ per megawatt-hour (lb CO₂/MWh gross).
- EPA is proposing two limits for fossil fuel-fired utility boilers and IGCC units, depending on the compliance period that best suits the unit. These limits require capture of only a portion of the CO₂ from the new unit. These proposed limits are:
 - o 1,100 lb CO₂/MWh gross over a 12-operating month period, or
 - o 1,000-1,050 lb CO₂/MWh gross over an 84-operating month (7-year) period
- EPA is proposing two standards for natural gas-fired stationary combustion units, depending on size. The proposed limits are based on the performance of modern natural gas combined cycle (NGCC) units. These proposed limits are:
 - o 1,000 lb CO₂/MWh gross for larger units (> 850 mmBtu/hr)
 - o 1,100 lb CO₂/MWh gross for smaller units (≤ 850 mmBtu/hr)

HOW TO COMMENT

- EPA will accept comment on this new proposal for 60 days after publication in the Federal Register.
- Comments submitted in response to the April 2012 proposed rule will not be associated with this new proposal. Commenters who submitted public comments concerning any aspect of the previous proposal will need to consider the applicability of those comments to this current proposal and submit them again, even if the comments are exactly or substantively the same as those previously submitted.
- Comments on the proposed standard should be identified by Docket ID No. EPA-HQ-OAR-2013-0495. All comments may be submitted by one of the following methods:
 - o www.regulations.gov: Follow the on-line instructions for submitting comments.
 - o E-mail: Comments may be sent by electronic mail (e-mail) to a-and-r-Docket@epa.gov.
 - o Fax: Fax your comments to: 202-566-9744.
 - o Mail: Send your comments to: Air and Radiation Docket and Information Center, Environmental Protection Agency, Mail Code: 2822T, 1200 Pennsylvania Ave., NW, Washington, DC, 20460.

- o Hand Delivery or Courier: Deliver your comments to: EPA Docket Center, Room 3334, 1301 Constitution Ave., NW, Washington, DC, 20460. Such deliveries are only accepted during the Docket's normal hours of operation, and special arrangements should be made for deliveries of boxed information.
- EPA will hold a public hearing on this proposal. The date, time, and location of the public hearing will be available soon. This information will be published in the Federal Register and also listed on <http://www2.epa.gov/carbon-pollution-standards>.