

US EPA ARCHIVE DOCUMENT



## BY THE NUMBERS

### *CUTTING CARBON POLLUTION FROM POWER PLANTS*

On August 3, President Obama and EPA announced the Clean Power Plan – a historic and important step in reducing carbon pollution from power plants that takes real action on climate change. Shaped by years of unprecedented outreach and public engagement, the final Clean Power Plan is fair, flexible and designed to strengthen the fast-growing trend toward cleaner and lower-polluting American energy. With strong but achievable standards for power plants, and customized goals for states to cut the carbon pollution that is driving climate change, the Clean Power Plan provides national consistency, accountability and a level playing field while reflecting each state’s energy mix. It also shows the world that the United States is committed to leading global efforts to address climate change.

#### ENSURING AND BUILDING ON CLEAN ENERGY MOMENTUM

- Power plants are the **largest source** of carbon dioxide emissions in the United States, making up roughly **one-third** of all domestic greenhouse gas emissions.
- The transition to clean energy is happening faster than anticipated. This means carbon and air pollution is already decreasing, improving public health **each and every year**.
- The Clean Power Plan accelerates this momentum, putting us on pace to cut this dangerous pollution to **historically low levels** in the future.
- When the Clean Power Plan is fully in place in 2030, carbon pollution from the power sector will be **32 percent below** 2005 levels – or **870 million tons less** carbon pollution – securing progress and making sure it continues.
- That’s equal to the annual emissions from more than **166 million cars**, or **70% of the nation’s passenger vehicles**.
- The transition to cleaner sources of energy will better protect Americans from other harmful air pollution, too. By 2030, emissions of SO<sub>2</sub> from power plants will be **90 percent lower** compared to 2005 levels, and emissions of NO<sub>x</sub> will be **72 percent** lower.

- Because these pollutants can create dangerous soot and smog, the historically low levels mean we will **avoid thousands of premature deaths** and mean thousands fewer asthma attacks and hospitalizations **in 2030 and every year beyond**.
- Within this larger context, the CPP itself is projected to contribute significant pollution reductions, resulting in important benefits.

## THE CLEAN POWER PLAN HAS BIG PUBLIC HEALTH AND CLIMATE BENEFITS

- 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
  - **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
- From the soot and smog reductions alone, for every dollar invested through the Clean Power Plan – American families will see **up to \$4** in health benefits.
- The Clean Power Plan will reduce pollutants that contribute to the soot and smog that make people sick by **over 20 percent** in 2030.
  - **318,000 tons** of sulfur dioxide
  - **282,000 tons** of nitrogen dioxide
- In EPA’s nearly **45-year history**, air pollution has decreased dramatically across the county, improving public health protection for all Americans while the economy has grown.

## EPA LISTENED TO THE PUBLIC

- The plan takes into account the unprecedented input we received through numerous outreach efforts, including the **4.3 million comments** that were submitted to the agency during the **6-month public comment period**.

## LOWER ELECTRICITY BILLS

Due to increased energy efficiency, the Clean Power Plan is projected to reduce electric bills by about **\$7 per month** by 2030.

## NUMBER OF POWER PLANTS COVERED BY THE CLEAN POWER PLAN

- In the U.S., there are **1,000 fossil fuel fired power plants** with about **3,100 units** covered by this rule.
- Utility planners are already making plans to address an aging fleet. The average age of coal units is **43 years**. The average age of oil units is **46 years**. The average age of natural gas combined cycle units is **15 years**.

## STATE CLIMATE, ENERGY EFFICIENCY AND RENEWABLE ENERGY POLICY STATISTICS

- States, cities and businesses are already leading the way with proven, widely adopted renewable energy and energy efficiency strategies that are substantially and cost-effectively lowering CO<sub>2</sub> emissions from the power sector. States will be able to use these types of programs in their plans to cut carbon pollution under the Clean Power Plan.
  - **50** states with demand-side energy efficiency programs
  - **37** states with renewable portfolio standards or goals
  - **10** states with market-based greenhouse gas emission programs
  - **25** states with energy efficiency standards or goals

## STATE PLANS

- **September 6, 2016** – Initial submittal with request for extension or complete plan due.
- **September 6, 2017** – If state got an extension, submit a progress update.
- **September 6, 2018** – If state got an extension, submit final plan.

## COMPLIANCE TIMEFRAME

- States and utilities will have **15 years** to meet the final goals by **2030**. Investment can begin **now**, with the period for mandatory reductions beginning in **2022**.