



# COMPONENTS OF THE CLEAN POWER PLAN

## *SETTING STATE GOALS TO CUT CARBON POLLUTION*

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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.

### HOW THE CLEAN POWER PLAN WORKS

- The Clean Air Act – under section 111(d) – creates a partnership between EPA, states, tribes and U.S. territories – with EPA setting a goal and states and tribes choosing how they will meet it.
- The final Clean Power Plan follows that approach. EPA is establishing interim and final carbon dioxide (CO<sub>2</sub>) emission performance rates for two subcategories of fossil fuel-fired electric generating units (EGUs):
  - Fossil fuel-fired electric generating units (generally, coal- fired power plants)
  - Natural gas-fired combined cycle generating units
- To maximize the range of choices available to states in implementing the standards, and to utilities in meeting them, EPA is establishing interim and final statewide goals in three forms:
  - A rate-based state goal measured in pounds per megawatt hour (lb/MWh);
  - A mass-based state goal measured in total short tons of CO<sub>2</sub>;
  - A mass-based goal with a new source complement measured in short tons of CO<sub>2</sub>.

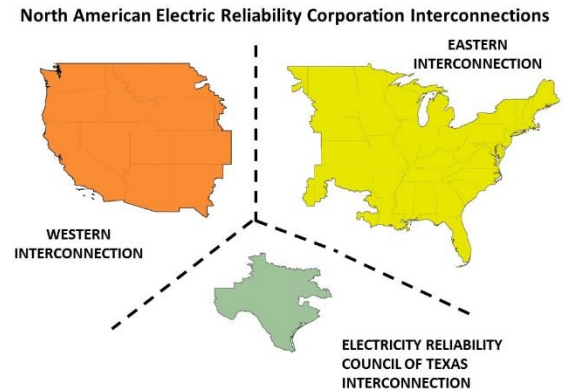
- States then develop and implement customized plans that ensure that the power plants in their state – either individually, together or in combination with other measures – achieve the interim CO<sub>2</sub> emissions performance rates over the period of 2022 to 2029 and the final CO<sub>2</sub> emission performance rates, rate-based goals or mass-based goals by 2030.
- In developing its plan, each state will have the flexibility to select the measures it prefers in order to achieve the CO<sub>2</sub> emission performance rates for its affected plants or meet the equivalent statewide rate- or mass-based CO<sub>2</sub> goal. States will also have the ability to shape their own emissions reduction pathways over the 2022-29 period since their affected sources together must only meet the states’ interim goals “on average” over the eight-year span.
- One cost-effective way that states can meet their goals is emissions trading, through which affected power plants may meet their emission standards via emission rate credits (for a rate-based standard) or allowances (for a mass-based standard).
- Trading is a proven approach to address pollution and provides states and affected plants with another mechanism to achieve their emission standards. Emission trading is a market-based policy tool that creates a financial incentive to reduce emissions where the costs of doing so are the lowest and clean energy investment enjoys the highest leverage.
- EPA is committed to supporting states in the tracking of emissions, as well as tracking allowances and credits, to help implement multi-state trading or other approaches.

## HOW EPA DETERMINED EMISSION PERFORMANCE RATES

- Under section 111(d) of the Clean Air Act, EPA determines the best system of emissions reduction (BSER) that has been demonstrated for a particular pollutant and a particular group of sources by examining technologies and measures already being used.
- Consistent with previous BSER determinations in 111(d) rulemakings, the agency considered the types of strategies, technologies and measure that states and utilities are already using to reduce CO<sub>2</sub> from fossil fuel-fired power plants.
- In the final Clean Power Plan, EPA determined that BSER is comprised of three building blocks:
  - Building Block 1 – reducing the carbon intensity of electricity generation by increasing the operational efficiency of existing coal-fired power plants.
  - Building Block 2 – reducing the carbon intensity of electricity generation by shifting electricity generation from higher emitting fossil fuel-fired steam power plants (generally coal-fired) to lower emitting natural gas-fired power plants.

- Building Block 3 – reducing the carbon intensity of electricity generation by increasing electricity generation from zero-emitting renewable sources of energy like wind and solar.
- In determining the BSER, EPA considered the ranges of reductions that can be achieved at coal, oil and gas plants at reasonable cost by application of each building block, taking account how quickly and to what extent the measures encompassed by the building blocks could be used to reduce emissions.

- In assessing the BSER, EPA recognized that the power plants operate through broad interconnected regional interconnected grids that determine the generation and distribution of power, and thus we based our analysis on the three established regional electricity interconnects: the Western interconnection, the Eastern interconnection and the Electricity Reliability Council of Texas interconnection.



- EPA applied the building blocks to all of the coal plants and all of the natural gas power plants in each region to produce regional emission performance rates for each category.
- From the three resulting regional coal plant rates, and the three regional natural gas power plant rates, EPA chose the most readily achievable rate for each category to arrive at equitable CO<sub>2</sub> emission performance rates for the country that represent the best system of emission reductions.
- The same CO<sub>2</sub> emission performance rates were then applied to all affected sources in each state to arrive at individual statewide rate-based and mass-based goals. Each state has a different goal based upon its own particular mix of affected sources.
- The agency is setting emission performance standards for tribes with affected EGUs— Navajo, Fort Mojave, and Ute (Uintah & Ouray). At this time, EPA is not setting CO<sub>2</sub> emission performance goals for Alaska, Hawaii, Guam or Puerto Rico so that the agency can continue to collect data that can form the basis of standards for power plants there in the future.