

FACT SHEET
Regulatory Impact Analysis
for the Affordable Clean Energy Rule (ACE) and Clean Power Plan Repeal

ACTION

- On Wednesday, June 19, 2019, EPA issued the Affordable Clean Energy rule (ACE), an effort to provide existing coal-fired electric utility generating units, or EGUs, with achievable and realistic standards for reducing greenhouse gas (GHG) emissions.
- This action was finalized in conjunction with two related, but separate and distinct rulemakings:
 - The repeal of the Clean Power Plan (CPP).
 - Revised implementing regulations for ACE, ongoing emission guidelines, and all future emission guidelines for existing sources issued under the authority of Clean Air Act (CAA) section 111(d).
- ACE provides states with new emission guidelines that will inform the state’s development of standards of performance to reduce carbon dioxide (CO₂) emissions from existing coal-fired EGUs — consistent with EPA’s role as defined in the CAA.

ILLUSTRATIVE POLICY SCENARIO

- The Regulatory Impact Analysis (RIA) for ACE presents a benefit-cost analysis of an illustrative policy scenario that models heat rate improvements (HRI) at coal-fired EGUs.
- The RIA compares the modeled outcomes of ACE to a projected baseline of what EGU emissions would be in the future if there were no Federal action under Section 111.
- EPA evaluated the potential impacts of an illustrative policy scenario using the present value (PV) of costs, benefits, and net benefits, calculated for the years 2023-2037 from the perspective of 2016, using both a three percent and seven percent end-of-period discount rate. In addition, the Agency presents the assessment of costs, benefits, and net benefits for specific snapshot years, consistent with historic practice. These specific snapshot years are 2025, 2030, and 2035.
- The RIA evaluates assumptions about the availability and cost of HRI across and within groups of units with similar generating capacity and heat rates.
- States are afforded considerable flexibility in the final action, and thus the impacts could be different, to the extent states make different choices than those assumed in the illustrative analysis.

EMISSION REDUCTIONS OF ACE

- ACE, combined with emission reductions expected from various other industry trends, will reduce CO₂ emissions from the electric sector by as much as 35 percent below 2005 levels in 2030.
- Overall, the impacts of the illustrative policy scenario in terms of change in emissions, compliance costs, and other energy-sector effects are small compared to the recent market-driven changes that have occurred in the electric sector.
- EPA estimates that ACE would reduce 2030 CO₂ emissions from EGUs by 11 million short tons from projected levels absent the rule.

- ACE reduces electric sector emissions, including CO₂, mercury, and fine particulate matter (PM_{2.5}) precursors, as well as any resulting mortality and morbidity effects (like cases of aggravated asthma, hospitalizations, emergency room visits, and non-fatal heart attacks).
- In 2030, the ACE rule is projected to:
 - Reduce CO₂ emissions by 11 million short tons
 - Reduce SO₂ emissions by 5,700 tons
 - Reduce NO_x emissions by 7,100 tons
 - Reduce PM_{2.5} emissions by 400 tons
 - Reduce mercury emissions by 59 pounds

NET BENEFITS OF ACE

- EPA projects the ACE rule would result in annual net benefits of \$250 million to \$730 million at a 3 percent discount rate, or \$120 million to \$450 million at a 7 percent discount rate. This includes costs, domestic climate benefits, and health co-benefits.
 - The annual value of targeted pollutant net benefits is -\$82 million at a 3 percent discount rate, or -\$100 million at a 7 percent discount rate.

BENEFITS AND COSTS OF ACE

- EPA projects compliance costs in 2030 of \$280 million.
- EPA projects combined domestic climate benefits and ancillary health co-benefits in 2030 of \$570 million to \$1.3 billion at a 3 percent discount rate, and \$470 million to \$1.1 billion at a 7 percent discount rate.
 - At a 3 percent discount rate, the total benefits include \$81 million in domestic climate benefits and \$490 million to \$1.2 billion in ancillary health co-benefits.
 - At a 7 percent discount rate, the total benefits include \$14 million in domestic climate benefits and \$460 million to \$1.1 billion in ancillary health co-benefits.
- Ancillary health benefits of ACE include avoiding 50 to 122 premature deaths in 2030, 14,000 asthma attacks, 4,600 lost work days, and 8,200 school absence days.

STATES ALREADY ON TRACK TO MEET CPP

- The impacts of ACE are measured against a baseline that does not assume implementation of the CPP because updated analysis shows the CPP would have no effect on future CO₂ emissions.
- Current market trends and other factors have most states on track to meet their CPP targets – even though CPP was never implemented, due to the Supreme Court’s historic stay in February 2016.
- EPA modeled several scenarios for CPP implementation and assessed other evidence demonstrating there is likely to be no difference between a future scenario with the CPP and one without it.
 - Significant changes in the electric sector since the CPP was issued in August 2015 lead EPA to different conclusions about the potential impacts of the CPP.

- These include fundamental shifts in fuel supply, continued advances and cost declines for key power generating technologies, market operation and policy evolution, and end-use demand influences.
- These changes are evident in recent historical data trends, current utility operations and planning, and utility announcements and power sector projections.
- Current market trends would result in compliance with the CPP targets with little or no additional effort by states and utilities. In other words, the electric sector is already on track to meet the goals of the CPP, even though it is not being implemented.

FOR MORE INFORMATION

- Additional fact sheets along with copies of the final rule and accompanying Regulatory Impact Analysis are on EPA's website at <https://www.epa.gov/stationary-sources-air-pollution/affordable-clean-energy-rule>.