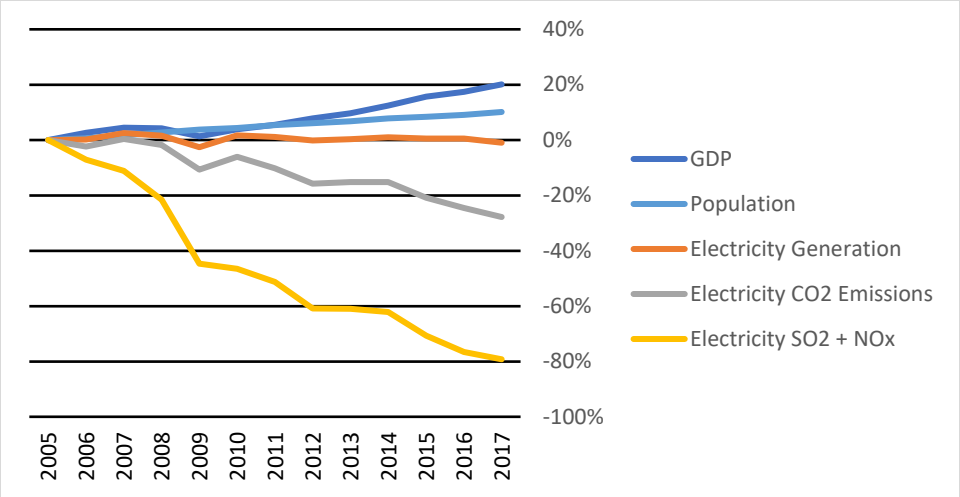
FACT SHEET
Final ACE Rule – CO_2 Emissions Trends

- 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 for existing sources, and all future emission guidelines issued under the authority of Clean Air Act (CAA) section 111(d).
- ACE will provide states with new emission guidelines that will inform the states' development of standards of performance to reduce carbon dioxide (CO_2) emissions from existing coal-fired EGUs — consistent with EPA's role as defined in the CAA.

CO_2 EMISSIONS STEADILY DECLINING

- EPA projects that, compared to a no-CPP baseline, the ACE rule will reduce carbon dioxide (CO_2) emissions in 2030 by about 11 million short tons, resulting in combined domestic climate benefits and ancillary health co-benefits 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.
- ACE, combined with emission reductions expected from industry trends, will reduce CO_2 emissions from the electric sector by as much as 35 percent below 2005 levels in 2030.
- CO_2 emissions in the power sector have steadily declined in recent years due to a range of factors including: market forces, technology improvements, and regulatory and other policy changes. As a result, the industry has increased the use of natural gas and renewable energy sources. These trends have resulted in CO_2 emission reductions even as the U.S. has sustained economic growth and job gains across the economy—and this has all happened **without the CPP** ever going into effect, due to the Supreme Court's unprecedented stay of that rule in February 2016. <u>The ACE rule will continue this trend.</u>



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- The power sector emitted roughly 1.9 billion tons of CO_2 in 2017, compared to 2.6 billion tons in 2005—a 28 percent decrease.[1]
    - Table 1 in the appendix to this fact sheet provides state-level CO_2 emissions data for 2005 and 2017 as well as the state-level percentage of generation by fuel type for 2017.[2]
- Approximately 600 coal-fired electric generating units at 300 facilities could be covered by this rule.
- The U.S. leads the world in reducing CO_2 emissions. The Energy Information Administration (EIA) found that U.S. energy-related CO_2 emissions fell by 14 percent between 2005 to 2017, with coal-related CO_2 emissions down 39 percent over that period. During that time, global energy-related CO_2 emissions rose by 21 percent.

FOR MORE INFORMATION

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

[1] EPA's Inventory of U.S. Greenhouse Gas Emissions and Sinks: 1990-2017, available at: https://www.epa.gov/ghgemissions/inventory-us-greenhouse-gas-emissions-and-sinks-1990-2017.
[2] 2018 state-level data is not yet available from the Energy Information Administration (EIA).

APPENDIX

Table 1: CO_2 Emissions and Generation Mix by State[3]

	CO_2 Emissions (million short tons)		2017 Generation Mix (percent of total generation by fuel-type)[4]				
	2005	2017	Coal	Natural Gas	Nuclear	Renewable[5]	Other[6]
Alaska	3.6	3.4	7%	52%	0%	26%	14%
Alabama	89.5	56.3	23%	38%	31%	7%	0%
Arkansas	28.6	35.8	44%	29%	21%	5%	0%
Arizona	56.5	48.1	30%	28%	31%	12%	0%
California	47.0	37.0	0%	40%	9%	50%	0%
Colorado	45.3	39.2	54%	23%	0%	22%	0%
Connecticut	12.4	7.9	1%	45%	49%	4%	2%
District of Columbia	0.3	0.0	0%	0%	0%	0%	0%
Delaware	7.1	3.2	6%	92%	0%	2%	0%
Florida	142.1	115.8	16%	68%	13%	2%	1%
Georgia	93.7	57.6	26%	43%	28%	3%	0%
Hawaii	9.7	7.3	15%	0%	0%	13%	72%
Iowa	40.4	28.3	43%	7%	9%	40%	0%
Idaho	0.7	1.3	0%	17%	0%	83%	0%
Illinois	105.2	71.0	31%	8%	54%	7%	0%
Indiana	134.5	87.9	76%	17%	0%	6%	0%
Kansas	42.0	24.3	38%	4%	21%	37%	0%
Kentucky	100.5	69.4	79%	14%	0%	6%	1%
Louisiana	48.0	37.1	18%	50%	23%	1%	7%
Massachusetts	28.5	12.8	4%	68%	16%	9%	3%
Maryland	35.7	13.6	25%	18%	45%	10%	1%
Maine	4.6	1.6	1%	21%	0%	75%	3%
Michigan	84.9	60.8	38%	23%	29%	7%	2%
Minnesota	40.7	28.8	39%	11%	24%	25%	1%
Missouri	88.4	75.4	80%	6%	10%	4%	0%
Mississippi	27.5	26.2	8%	79%	13%	0%	0%
Montana	21.8	17.4	49%	1%	0%	47%	3%
North Carolina	81.3	52.0	27%	30%	34%	8%	0%
North Dakota	35.9	32.6	64%	2%	0%	34%	0%

[3] EIA's Detailed State Data, available at https://www.eia.gov/electricity/data/state/.

[4] These data exclude industrial and commercial sources.

[5] Includes geothermal, hydroelectric (conventional and pumped storage), biomass (including wood and wood derived fuels), solar (thermal and photovoltaic), and wind.

[6] Includes petroleum and other gases.

Nebraska	24.1	23.1	59%	2%	20%	19%	0%
New Hampshire	8.7	2.1	2%	20%	58%	20%	1%
New Jersey	22.2	19.2	2%	50%	46%	2%	1%
New Mexico	36.3	25.3	55%	27%	0%	18%	0%
Nevada	28.9	14.3	5%	70%	0%	25%	0%
New York	63.6	25.8	0%	37%	33%	28%	1%
Ohio	145.0	86.3	58%	24%	15%	2%	2%
Oklahoma	55.4	34.2	23%	41%	0%	35%	0%
Oregon	9.1	8.4	3%	24%	0%	73%	0%
Pennsylvania	136.7	85.1	23%	34%	40%	4%	0%
Rhode Island	2.6	3.1	0%	94%	0%	5%	1%
South Carolina	43.5	27.4	20%	19%	60%	2%	0%
South Dakota	3.7	2.8	19%	6%	0%	75%	0%
Tennessee	60.2	35.5	35%	12%	41%	11%	0%
Texas	257.2	237.1	33%	40%	9%	17%	0%
Utah	39.1	29.7	72%	15%	0%	13%	0%
Virginia	46.1	31.5	12%	50%	35%	3%	1%
Vermont	0.0	0.0	0%	0%	0%	100%	0%
Washington	16.0	11.4	5%	9%	7%	78%	0%
Wisconsin	54.9	44.8	56%	21%	15%	8%	0%
West Virginia	92.6	71.1	95%	1%	0%	4%	0%
Wyoming	49.1	45.8	88%	0%	0%	12%	0%