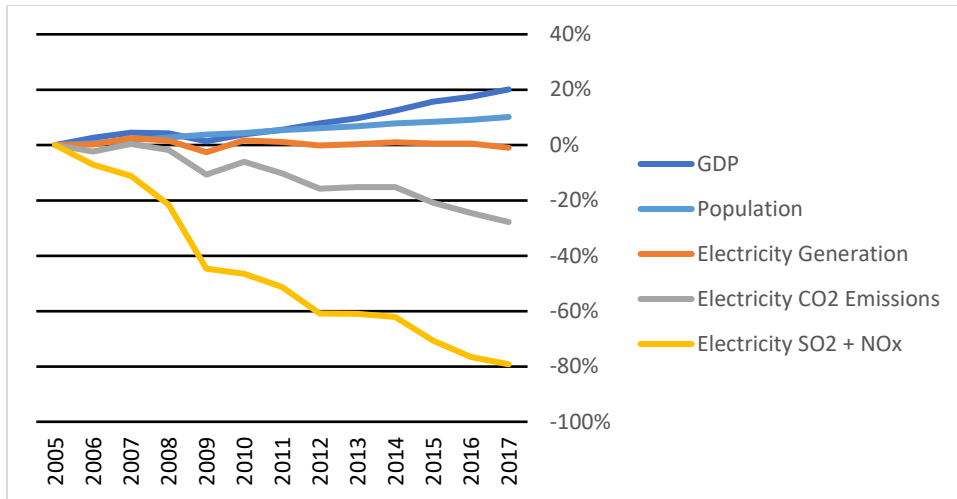**FACT SHEET**
Proposed ACE Rule – CO₂ Emissions Trends

- On August 21, 2018, the U.S. Environmental Protection Agency (EPA) proposed the Affordable Clean Energy (ACE) rule which would establish emission guidelines for states to develop plans to address greenhouse gas (GHG) emissions from existing coal-fired power plants.

- The ACE rule would replace the 2015 Clean Power Plan (CPP), which EPA has proposed to repeal because it exceeded EPA's authority. The CPP was stayed by the U.S. Supreme Court and has never gone into effect.

- The proposed ACE rule is informed by the more than 270,000 public comments that EPA received on its December 2017 Advance Notice of Proposed Rulemaking.

- The ACE rule has several components: a determination of the best system of emission reduction (BSER) for GHG emissions from coal-fired power plants, a list of "candidate technologies" states can use when developing their plans, a new preliminary applicability test for determining whether a physical or operational change made to a power plant may be a "major modification" triggering New Source Review, and new implementation regulations for emission guidelines under Clean Air Act section 111(d).

CO₂ EMISSIONS STEADILY DECLINING

- EPA projects that, compared to a no CPP scenario, the ACE rule will reduce carbon dioxide (CO₂) emissions in 2025 by between 13 and 30 million short tons, resulting in $1.6 billion in monetized domestic climate benefits.

- EPA evaluated three illustrative implementation scenarios. EPA estimates that the ACE rule could reduce 2030 CO₂ emissions by an amount equivalent to the annual emissions of up to 5 million cars. The rule could also reduce co-pollutant emissions by up to 2%.

- These illustrative scenarios suggest that when states have fully implemented the ACE rule, U.S. power sector CO₂ emissions could be around 34% below 2005 levels.

- CO₂ emissions in the power sector have steadily declined in recent years due to a range of factors including: market forces, technology improvements, regulatory and policy changes. As a result, the industry has increased the use of natural gas and renewable energy sources. These trends have resulted in CO₂ 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. The ACE rule will continue this trend.

****

- The power sector emitted roughly 1.9 billion tons of CO_2 in 2017, compared to 2.7 billion tons in 2005—a 28% decrease.[1]

    - Table 1 in the appendix to this fact sheet provides state-level CO_2 emissions data for 2005 and 2016 as well as the state-level percentage of generation by fuel-type for 2016.[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 proposed rule and accompanying Regulatory Impact Analysis are available on EPA's website at https://www.epa.gov/stationary-sources-air-pollution/proposal-affordable-clean-energy-ace-rule

---

[1] EIA Table 12.6, available at
https://www.eia.gov/totalenergy/data/browser/index.php?tbl=T12.06#/?f=A&start=2005&end=2017&charted=0-1-6-9.
[2] 2017 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]

	CO₂ Emissions (million short tons)		2016 Generation Mix (percent of total generation by fuel-type)[4]				
	2006	2016	Coal	Natural Gas	Nuclear	Renewable[5]	Other[6]
Alaska	3.9	3.4	8%	50%	0%	28%	13%
Alabama	92.1	61.2	25%	41%	29%	5%	0%
Arkansas	31.0	34.1	40%	30%	23%	6%	0%
Arizona	58.6	49.0	28%	31%	30%	11%	0%
California	52.0	41.0	0%	47%	10%	43%	0%
Colorado	46.4	39.6	55%	23%	0%	22%	0%
Connecticut	11.9	8.7	0%	48%	47%	3%	2%
District of Columbia	0.1	0.0	0%	0%	0%	100%	0%
Delaware	6.2	4.0	6%	91%	0%	1%	1%
Florida	138.0	119.0	17%	67%	13%	1%	2%
Georgia	94.5	63.6	29%	41%	27%	3%	0%
Hawaii	9.6	7.4	16%	0%	0%	12%	71%
Iowa	40.7	27.4	45%	5%	9%	40%	0%
Idaho	0.6	1.4	0%	21%	0%	79%	0%
Illinois	103.7	73.3	31%	9%	54%	6%	0%
Indiana	134.5	91.9	74%	20%	0%	6%	1%
Kansas	39.8	28.1	49%	4%	17%	30%	0%
Kentucky	103.7	79.5	84%	10%	0%	5%	2%
Louisiana	42.5	40.2	16%	53%	23%	2%	6%
Massachusetts	25.1	13.2	6%	66%	17%	7%	4%
Maryland	32.6	19.3	38%	13%	40%	7%	1%
Maine	3.4	2.1	1%	33%	0%	63%	3%
Michigan	80.5	60.8	37%	26%	29%	6%	2%
Minnesota	39.5	30.4	39%	15%	24%	21%	1%
Missouri	87.6	68.8	77%	8%	12%	3%	0%
Mississippi	28.2	28.5	9%	82%	10%	0%	0%
Montana	21.3	18.1	51%	2%	0%	44%	3%
North Carolina	78.4	56.1	29%	30%	33%	7%	0%
North Dakota	34.2	32.5	70%	3%	0%	27%	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	24.0	23.9	60%	1%	26%	13%	0%
New Hampshire	7.6	2.7	2%	24%	56%	17%	0%
New Jersey	20.9	22.5	2%	57%	39%	2%	1%
New Mexico	37.0	25.5	56%	30%	0%	14%	0%
Nevada	18.3	15.4	6%	73%	0%	22%	0%
New York	53.6	32.1	1%	42%	31%	24%	1%
Ohio	141.0	87.9	58%	24%	14%	2%	1%
Oklahoma	56.3	39.4	24%	47%	0%	29%	0%
Oregon	7.2	8.7	3%	26%	0%	71%	0%
Pennsylvania	136.0	91.1	26%	31%	39%	3%	0%
Rhode Island	2.6	2.8	0%	96%	0%	4%	0%
South Carolina	43.6	30.1	22%	17%	59%	2%	0%
South Dakota	4.0	2.9	18%	8%	0%	74%	0%
Tennessee	62.5	39.7	39%	14%	38%	8%	0%
Texas	255.0	233.1	30%	45%	10%	15%	0%
Utah	39.6	30.1	69%	22%	0%	9%	0%
Virginia	41.1	37.3	18%	45%	33%	3%	1%
Vermont	0.0	0.0	0%	0%	0%	100%	0%
Washington	10.9	10.6	4%	10%	9%	77%	0%
Wisconsin	48.6	42.7	52%	24%	16%	8%	0%
West Virginia	93.2	74.9	95%	1%	0%	3%	0%
Wyoming	48.8	45.7	88%	0%	0%	12%	0%