

Percentage Changes to Achieve Proposed State Carbon Pollution Rate Goals

Based on Goals and Figures in EPA's Proposed Clean Power Plant Rule

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Please note that the percentage change numbers are provided here for illustrative purposes based on proposed EPA state goals, but they do not necessarily represent the different levels of additional effort that would be required by states. EPA proposes or takes comment on a number of factors in the proposed rule that would bear on what a state would additionally need to do to meet its goal. For example, EPA is proposing that states could receive credit for reductions from existing state programs that reduce emissions after the date that the proposal was issued but before the start of the plan performance period.

A	B	C	D	E	F	G	H	I
State	2012 Fossil Rate (lbs/MWh)	2012 Emission Rate with Fossil, Creditable RE & Nuclear	Building Block 1	Building Blocks 1 & 2	Building Blocks 1, 2 & 3	Building Blocks 1, 2, 3 & 4 (2030 Final State Goal)	% change from 2012 fossil rate to 2030 final state goal	% change from 2012 rate with fossil, creditable RE & nuclear to 2030 final state goal
Alabama	1,518	1,444	1,385	1,264	1,139	1,059	-30%	-27%
Alaska	1,368	1,351	1,340	1,237	1,191	1,003	-27%	-26%
Arizona	1,551	1,453	1,394	843	814	702	-55%	-52%
Arkansas	1,722	1,634	1,554	1,058	996	910	-47%	-44%
California	900	698	697	662	615	537	-40%	-23%
Colorado	1,959	1,714	1,621	1,334	1,222	1,108	-43%	-35%
Connecticut	844	765	764	733	643	540	-36%	-29%
Delaware	1,255	1,234	1,211	996	892	841	-33%	-32%
Florida	1,238	1,199	1,169	882	812	740	-40%	-38%
Georgia	1,598	1,500	1,433	1,216	926	834	-48%	-44%
Hawaii	1,783	1,540	1,512	1,512	1,485	1,306	-27%	-15%
Idaho	858	339	339	339	291	228	-73%	-33%
Illinois	2,189	1,894	1,784	1,614	1,476	1,271	-42%	-33%
Indiana	1,991	1,924	1,817	1,772	1,707	1,531	-23%	-20%
Iowa	2,197	1,552	1,461	1,304	1,472	1,301	-41%	-16%
Kansas	2,320	1,940	1,828	1,828	1,658	1,499	-35%	-23%
Kentucky	2,166	2,158	2,028	1,978	1,947	1,763	-19%	-18%
Louisiana	1,533	1,455	1,404	1,043	978	883	-42%	-39%
Maine	873	437	437	425	451	378	-57%	-14%
Maryland	2,029	1,870	1,772	1,722	1,394	1,187	-41%	-37%
Massachusetts	1,001	925	915	819	661	576	-42%	-38%
Michigan	1,814	1,690	1,603	1,408	1,339	1,161	-36%	-31%
Minnesota	2,013	1,470	1,389	999	1,042	873	-57%	-41%
Mississippi	1,140	1,093	1,071	809	752	692	-39%	-37%
Missouri	2,010	1,963	1,849	1,742	1,711	1,544	-23%	-21%
Montana	2,439	2,246	2,114	2,114	1,936	1,771	-27%	-21%
Nebraska	2,162	2,009	1,889	1,803	1,652	1,479	-32%	-26%

Nevada	1,091	988	970	799	720	647	-41%	-35%
New Hampshire	1,119	905	887	710	532	486	-57%	-46%
New Jersey	1,035	928	916	811	616	531	-49%	-43%
New Mexico	1,798	1,586	1,513	1,277	1,163	1,048	-42%	-34%
New York	1,096	978	970	828	652	549	-50%	-44%
North Carolina	1,772	1,647	1,560	1,248	1,125	992	-44%	-40%
North Dakota	2,368	1,994	1,875	1,875	1,865	1,783	-25%	-11%
Ohio	1,897	1,850	1,751	1,673	1,512	1,338	-29%	-28%
Oklahoma	1,562	1,387	1,334	1,053	964	895	-43%	-35%
Oregon	1,081	717	701	565	452	372	-66%	-48%
Pennsylvania	1,627	1,531	1,458	1,393	1,157	1,052	-35%	-31%
Rhode Island	918	907	907	907	867	782	-15%	-14%
South Carolina	1,791	1,587	1,506	1,342	866	772	-57%	-51%
South Dakota	2,256	1,135	1,067	732	900	741	-67%	-35%
Tennessee	2,015	1,903	1,797	1,698	1,322	1,163	-42%	-39%
Texas	1,420	1,284	1,235	979	861	791	-44%	-38%
Utah	1,874	1,813	1,713	1,508	1,454	1,322	-29%	-27%
Virginia	1,438	1,302	1,258	1,047	894	810	-44%	-38%
Washington	1,379	756	728	444	298	215	-84%	-72%
West Virginia	2,056	2,019	1,898	1,898	1,687	1,620	-21%	-20%
Wisconsin	1,988	1,827	1,728	1,487	1,379	1,203	-39%	-34%
Wyoming	2,331	2,115	1,988	1,957	1,771	1,714	-26%	-19%

Data Source

Columns B-G

EPA, Goal Computation Technical Support Document, Appendix 5 (page 25)

<http://www2.epa.gov/sites/production/files/2014-05/documents/20140602tsd-goal-computation.pdf>

Columns H-I

Calculated by Georgetown Climate Center

% change = (goal - 2012 rate) / 2012 rate

Key to Columns

Column B: 2012 state emission rate for fossil sources: coal; oil/gas steam; NGCC; other fossil sources likely subject to 111(d) rulemaking but not subject to building block abatement measures

Column C: 2012 emission rate that includes generation from existing fossil sources *and* generation from renewable and nuclear sources that could count toward the state goal (creditable renewable energy and at-risk nuclear as applied by EPA)

Columns D-G: Resulting emission rate following application of each successive BSER building block (see Key to Blocks, below)

EPA notes that block-by-block values are illustrative, meant to assist in understanding of state goals. Not prescriptive in terms of abatement measures or magnitude of the measure.

Column H: Percentage change from 2012 fossil rate (Column B) to 2030 final state goal

Column I: Percentage change from 2012 overall rate (Column C) to 2030 final state goal

Key to Blocks (Columns D-G)

Block 1: Heat rate improvement

Block 2: Coal-to-gas redispatch

Block 3: New renewable (RE) and nuclear generation

Block 4: End-use energy efficiency