



States of Progress Update:

Existing Clean Energy
Commitments Put Most States in
Strong Position to Meet the
EPA's Final Clean Power Plan

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**Union of
Concerned Scientists**

Key Takeaways

- The EPA's Final Clean Power Plan (CPP) and its timeline and trajectory for emission cuts are achievable
- At least 31 states are on track to be more than halfway toward meeting their 2022 targets thanks to existing commitments to clean energy
- At least 21 states are on track to surpass their 2022 emissions reduction targets, including 3 states expected to sue the EPA
- At least 16 states are on track to achieve their 2030 targets based on existing clean energy commitments
- By prioritizing renewable energy and energy efficiency, and collaborating with their neighbors, states can reliably and cost-effectively meet their emissions reduction goals



Photo: Wayne National Forest

UCS Analysis of State Progress Toward Final Clean Power Plan's Targets

- Examines actions states have taken or will take place after 2012 to cut emissions:
 - Retiring coal plants*
 - Deploying additional renewable energy to meet mandatory state renewable electricity standards (RES)
 - Ramping up energy efficiency to meet mandatory state energy efficiency resource standards (EERS)
 - Pursuing multi-state efforts to collectively cap power plant carbon emissions
 - Bringing online under construction nuclear power plants
- Assesses how far existing commitments take states toward achieving their emission reduction targets for years 2022 and 2030 under both rate-based and mass-based approaches for compliance**

*Per the EPA's final rule, we assume that renewable energy and energy efficiency directly displace fossil generation in proportion of each state's generation mix. Where generation from retiring coal units exceeds RES and EERS projections, we assume it is replaced with natural gas. However, if all retiring coal generation were replaced with renewables, efficiency or other zero carbon generation, states would be even further along in meeting their emissions reduction targets.

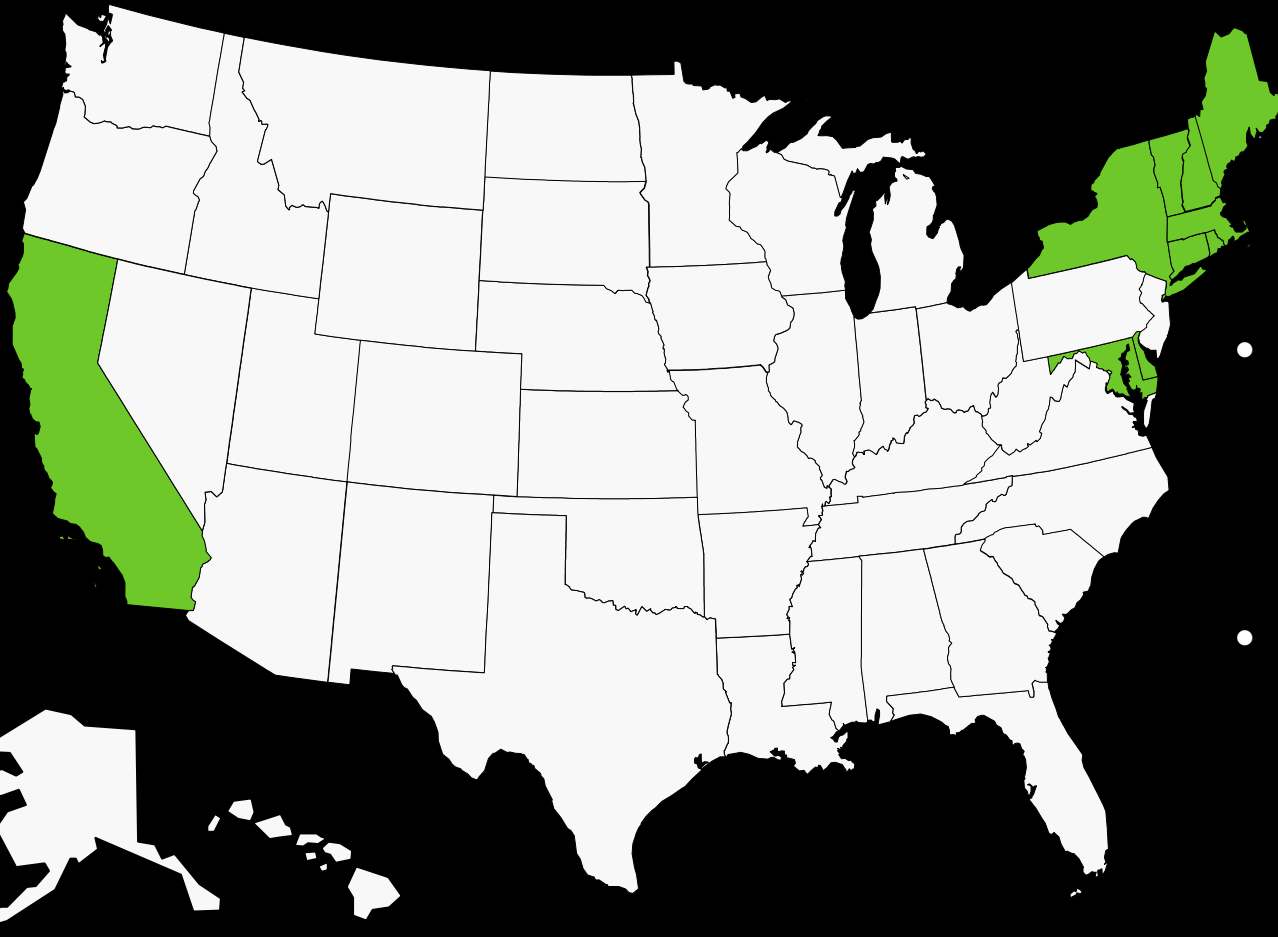
**While the 2022 emissions reduction target is not a requirement for states, it is a helpful benchmark against which to measure a state's progress toward meeting the CPP's interim and final targets.



State-level Carbon Cutting Commitments

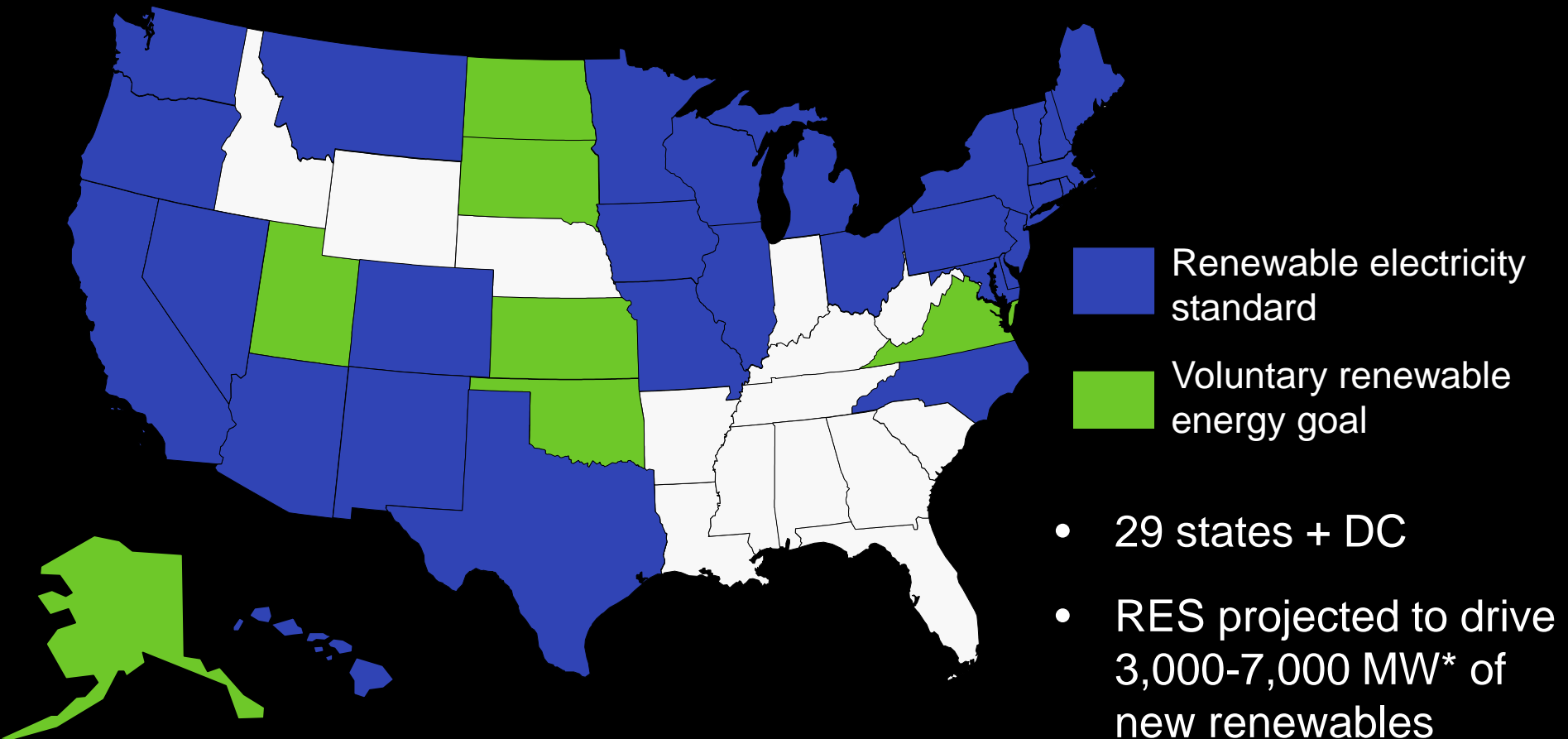


States with Power Plant Carbon Cap Programs



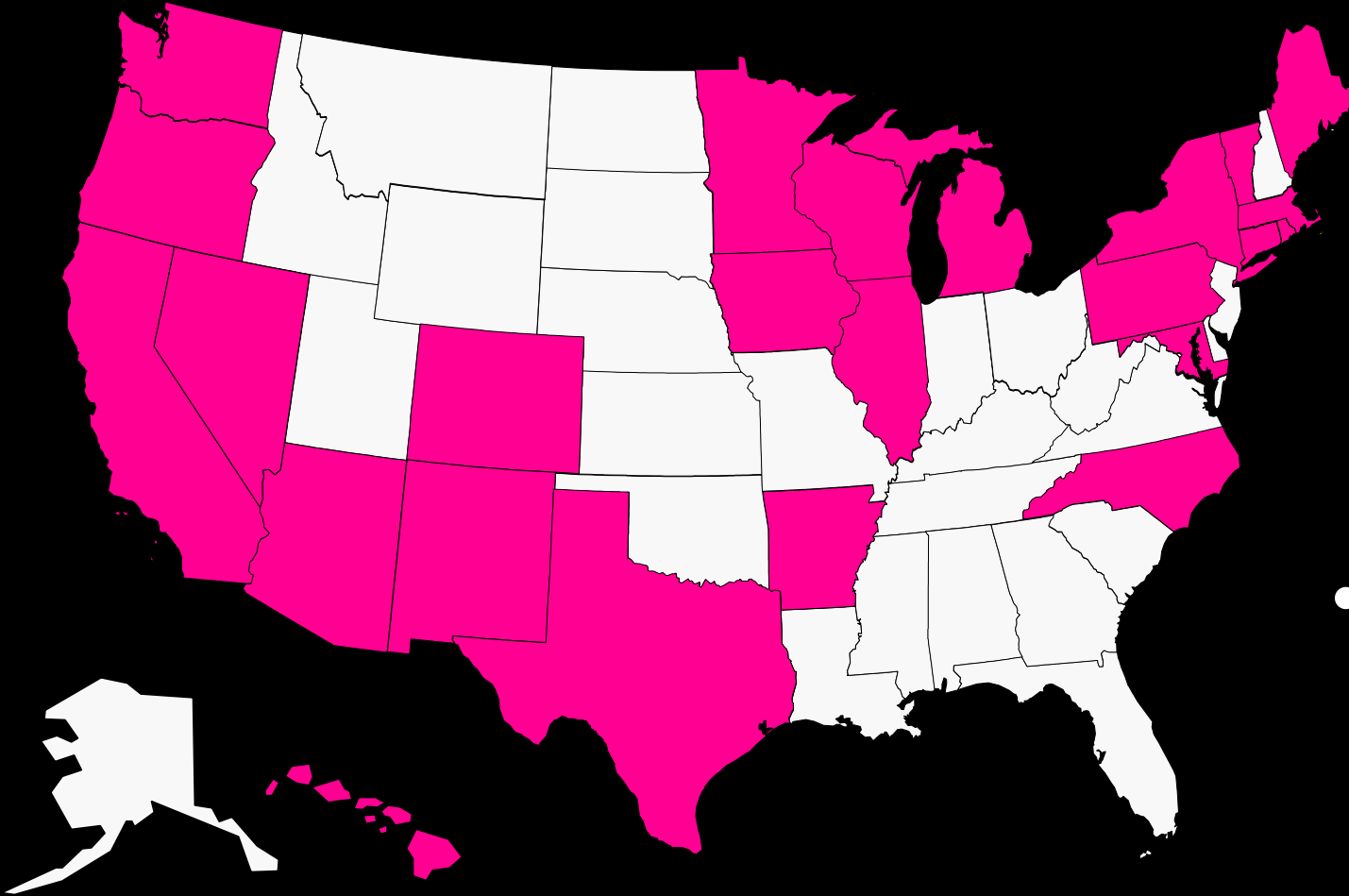
- 9 states collaborating under Northeast Regional Greenhouse Gas Initiative (RGGI)
- California: Cut global warming pollution economy-wide to 1990 levels by 2020

States with Renewable Electricity Standards



*Depending on availability of existing renewable energy capacity.

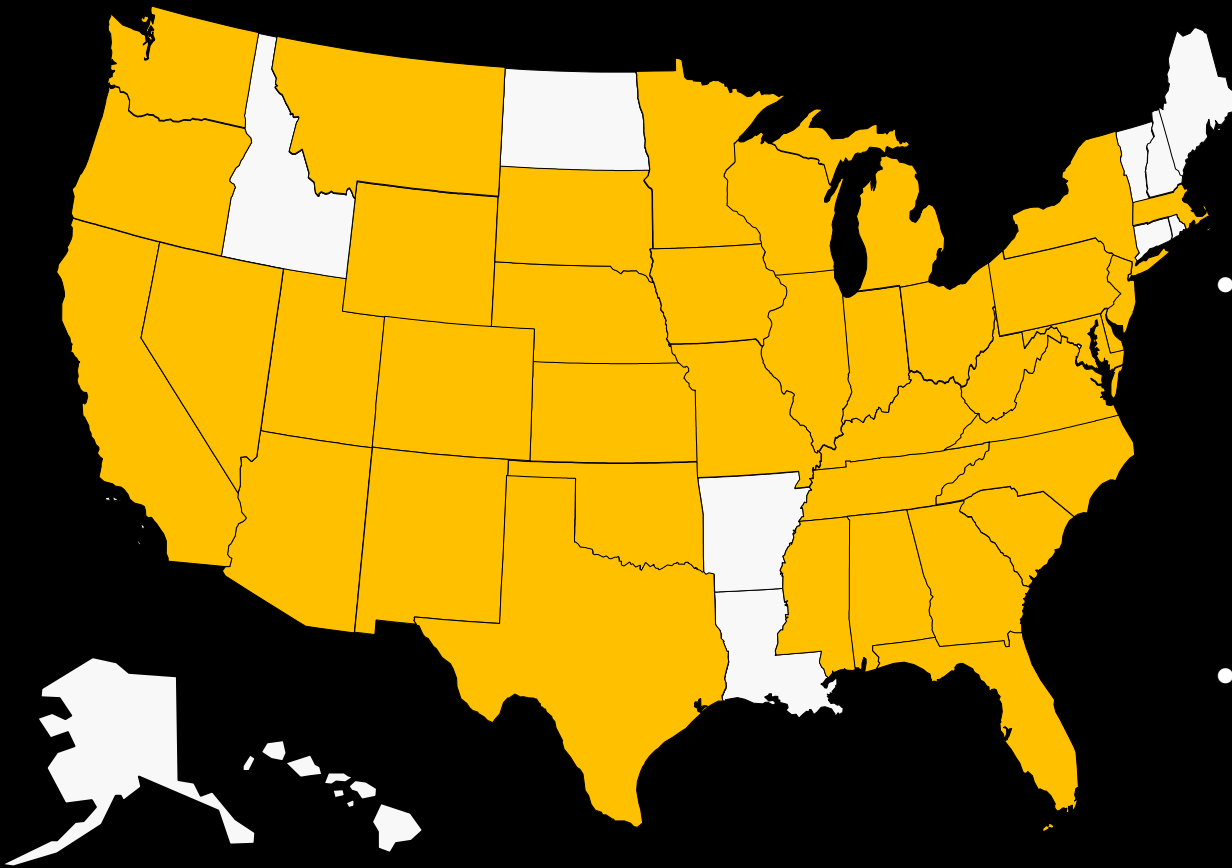
States with Energy Efficiency Resource Standards



- 24 states

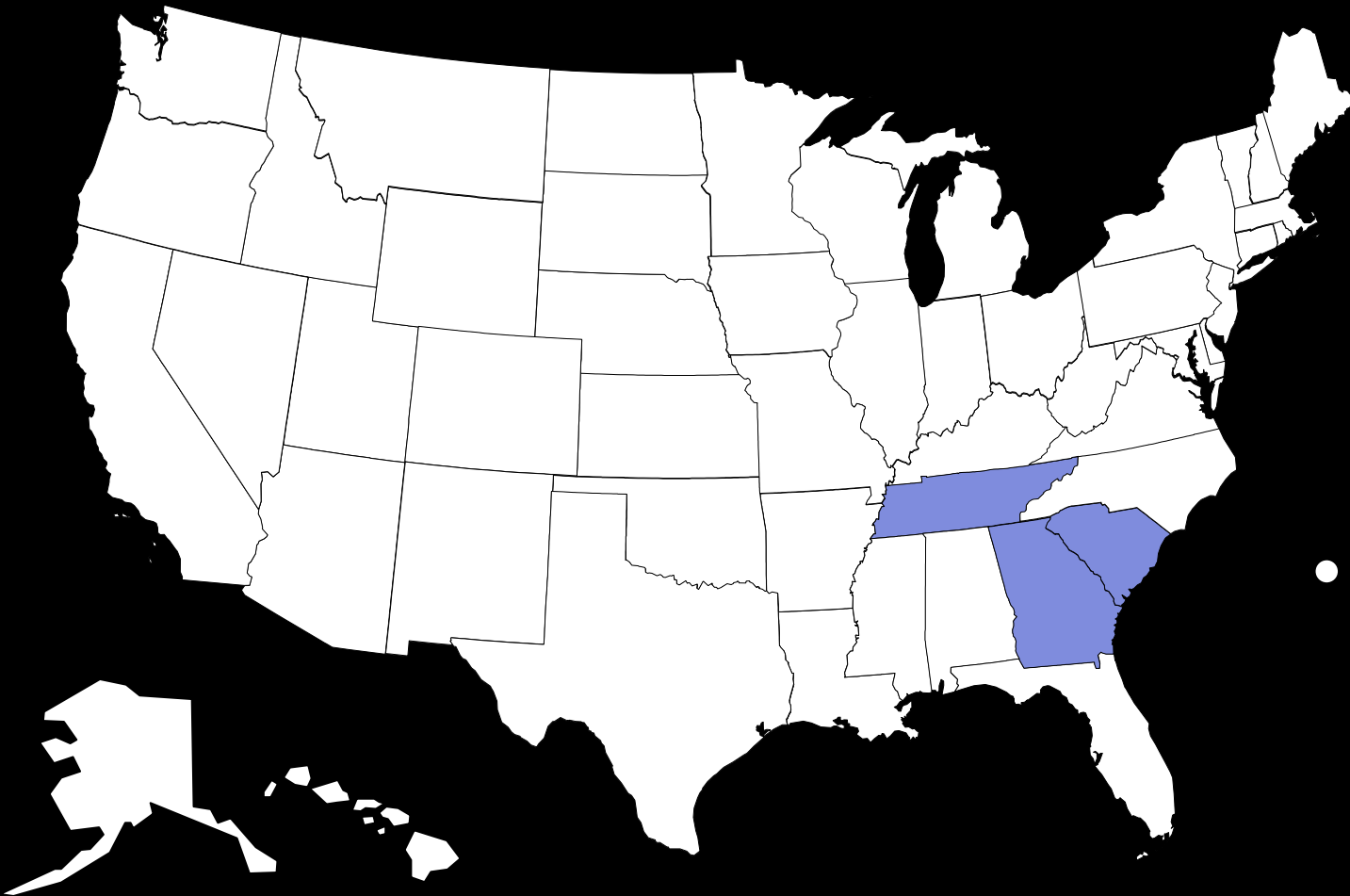
Note that Florida, Indiana, and Ohio repealed their EERS policies within the last year. The impact of the repeals is included in our analysis, but these states still see small improvements from previously implemented efficiency measures.

States with Coal Generator Retirements (2012-2030)



- More than 370 coal generating units in 39 states have either retired since 2012 or are scheduled to close through 2030
- Represents more than 65,000 MW of coal power capacity, equivalent to 11.1% of total U.S. coal generation in 2012

States with Under Construction Nuclear Power Plants

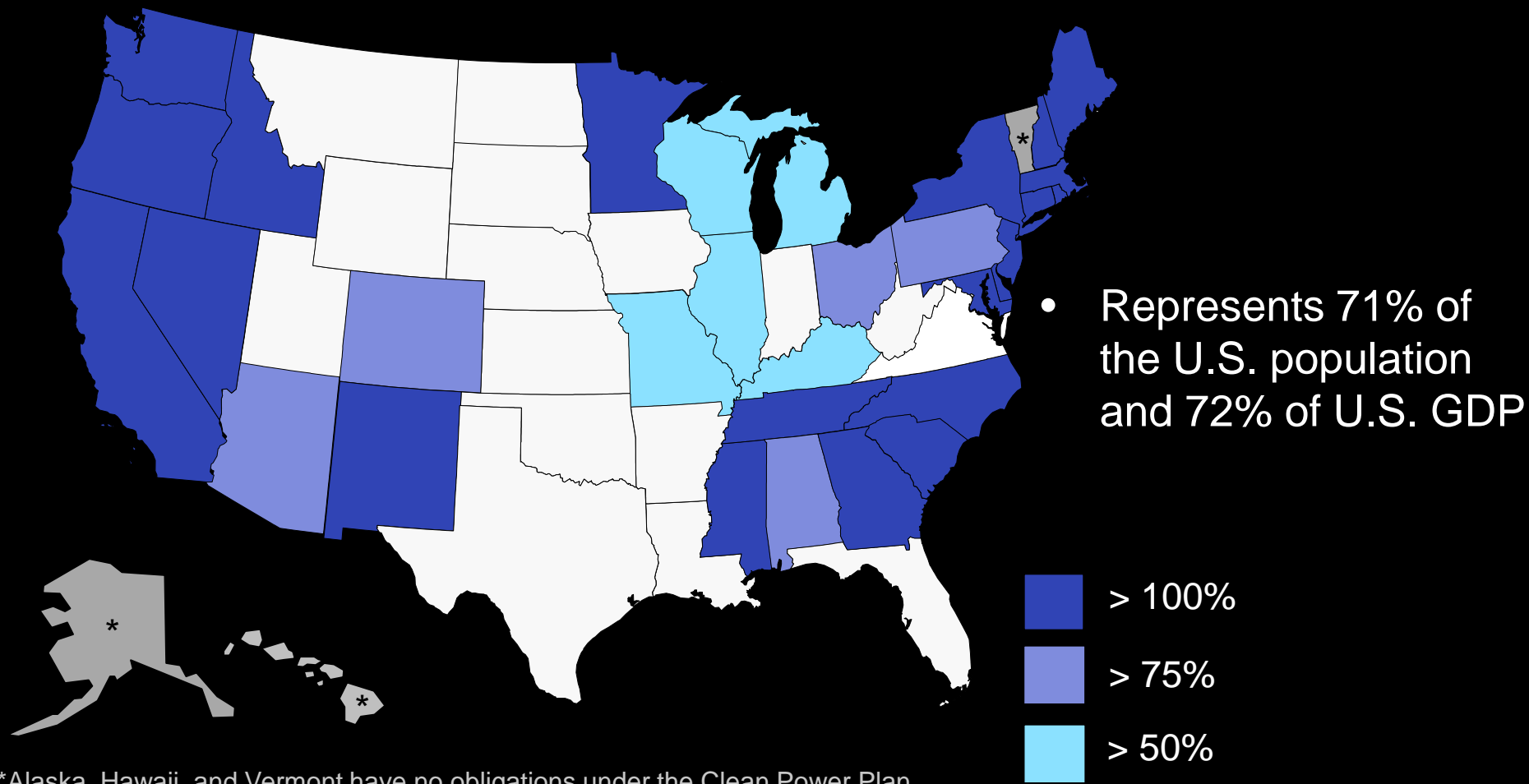


• 3 states

[National Results

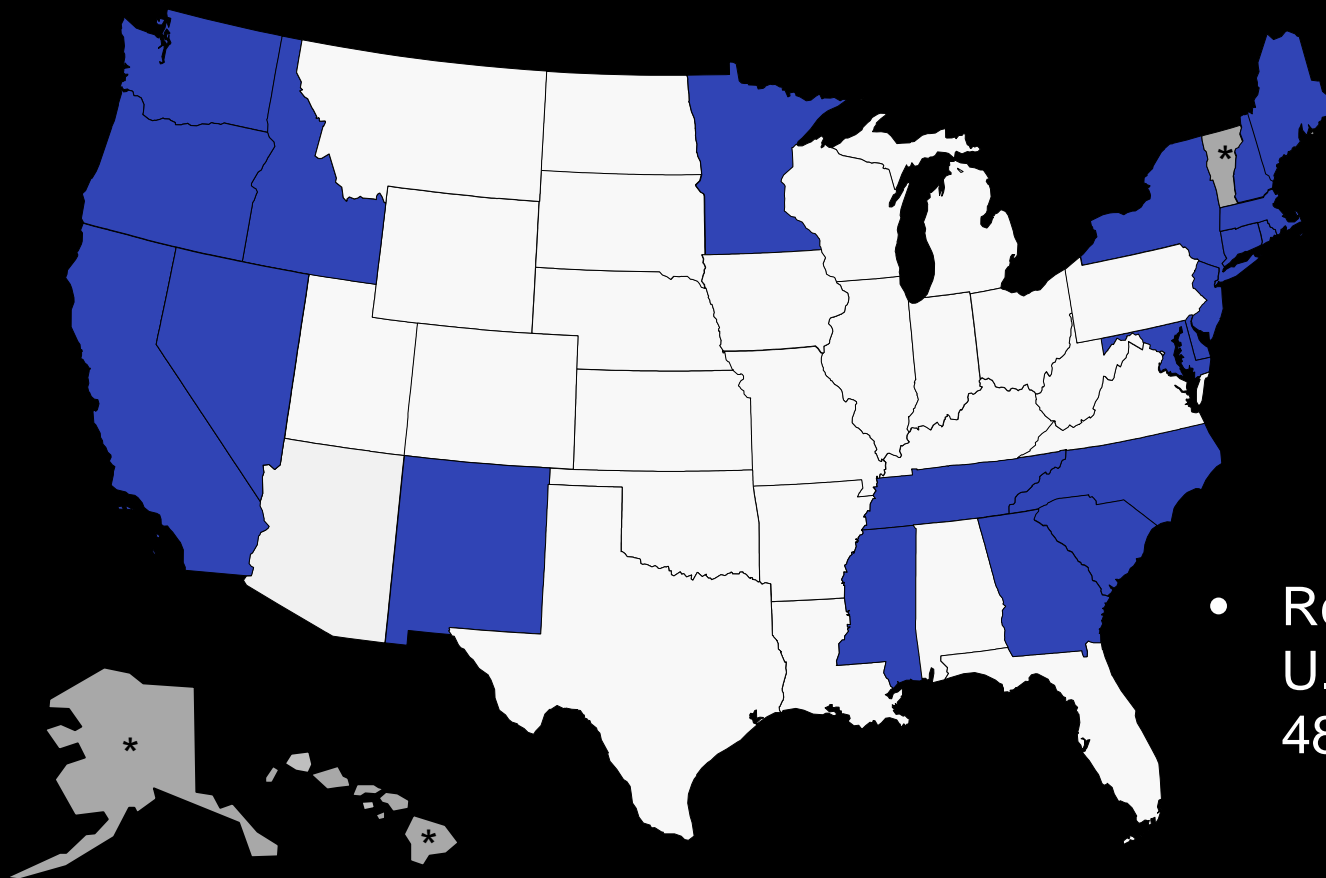


31 States Will Be More Than Halfway Toward Meeting Their 2022 Benchmarks (Rate-Based Compliance)



*Alaska, Hawaii, and Vermont have no obligations under the Clean Power Plan.

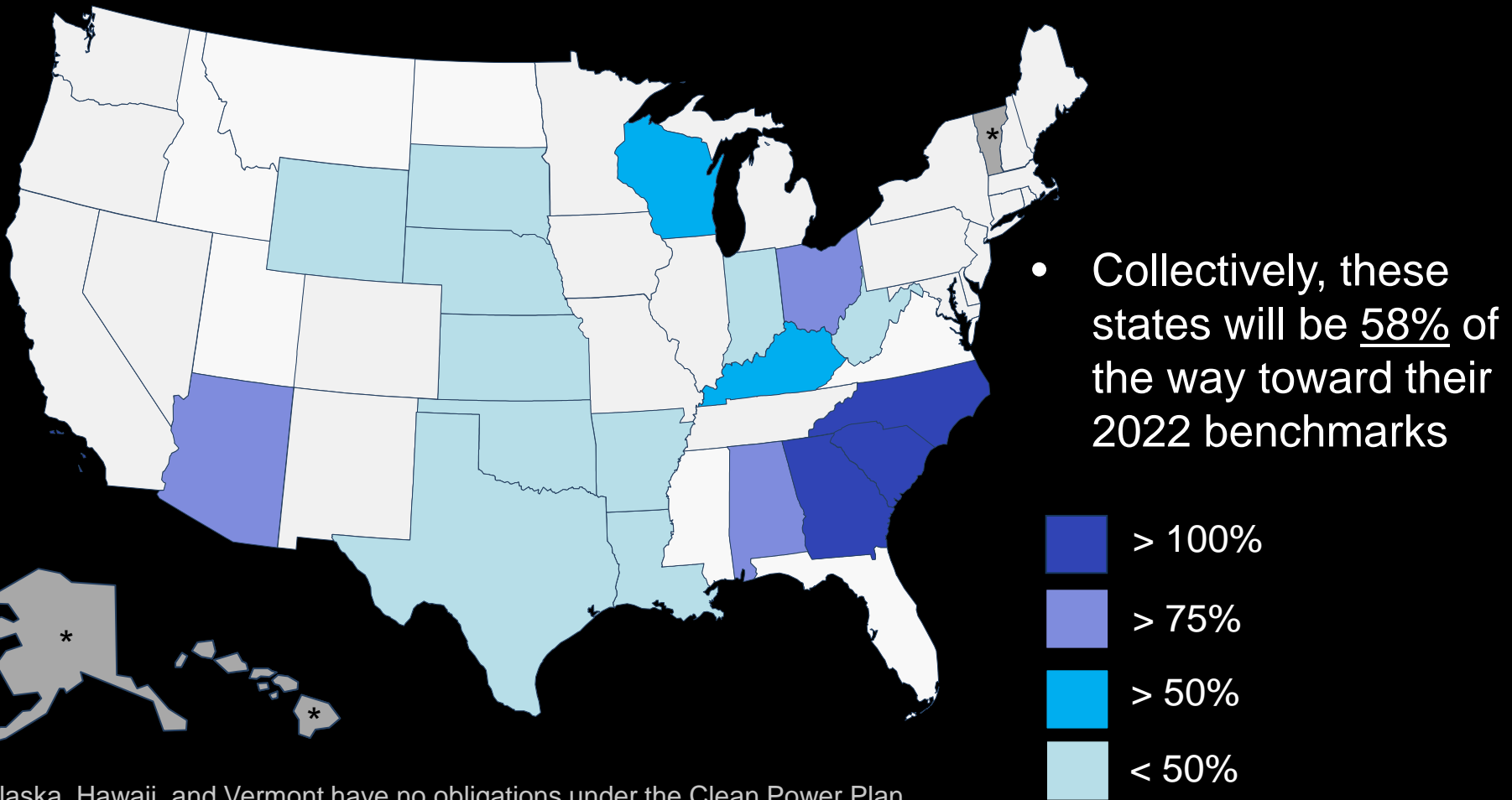
21 States are Already on Track to Surpass Their 2022 Clean Power Plan Benchmarks (Rate-Based Compliance)



- Represents 46% of the U.S. population and 48% of U.S. GDP

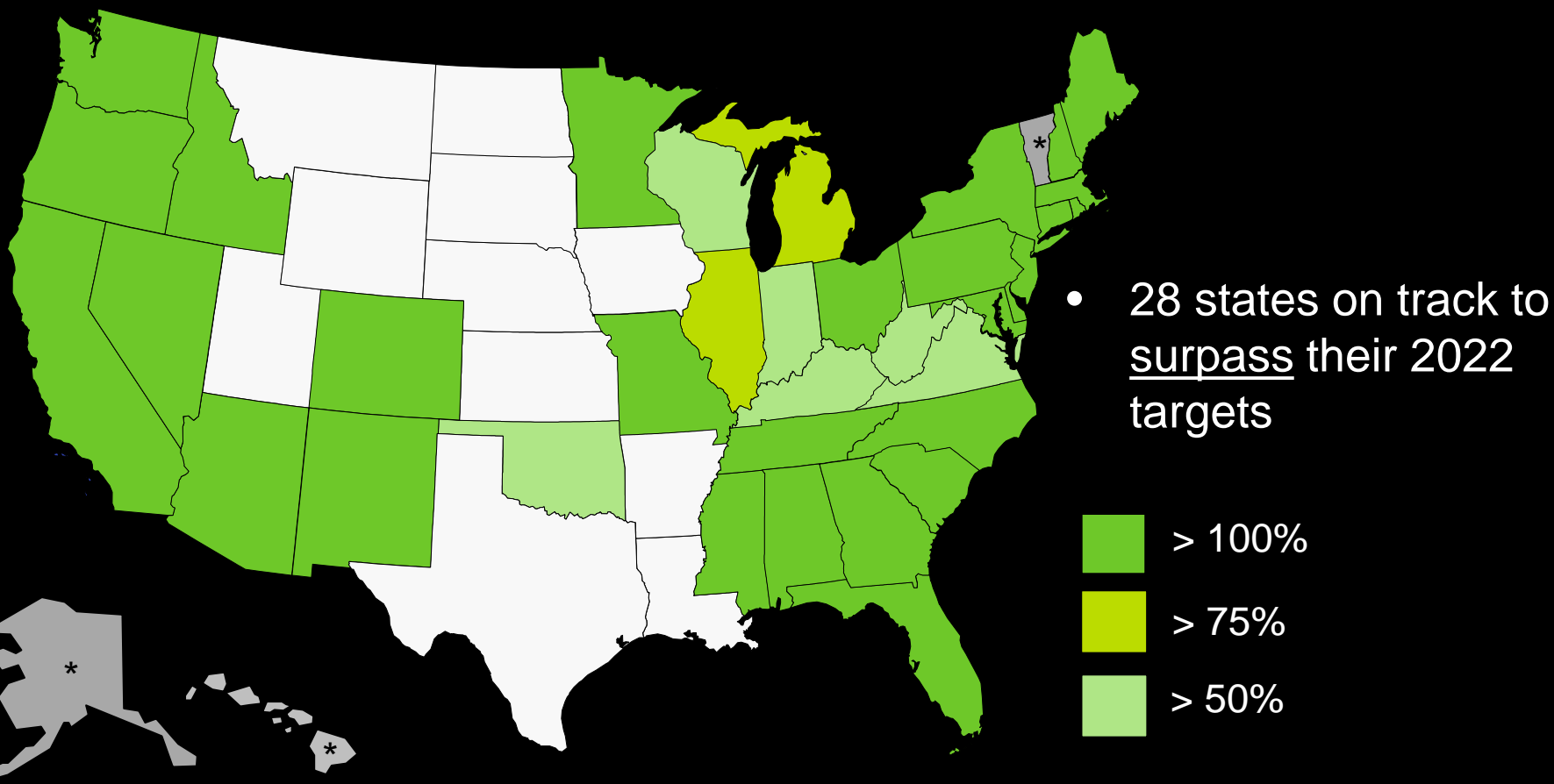
*Alaska, Hawaii, and Vermont have no obligations under the Clean Power Plan.

Even States Expected to Sue the EPA are Making Progress Toward Their 2022 Benchmarks (Rate-Based Compliance)



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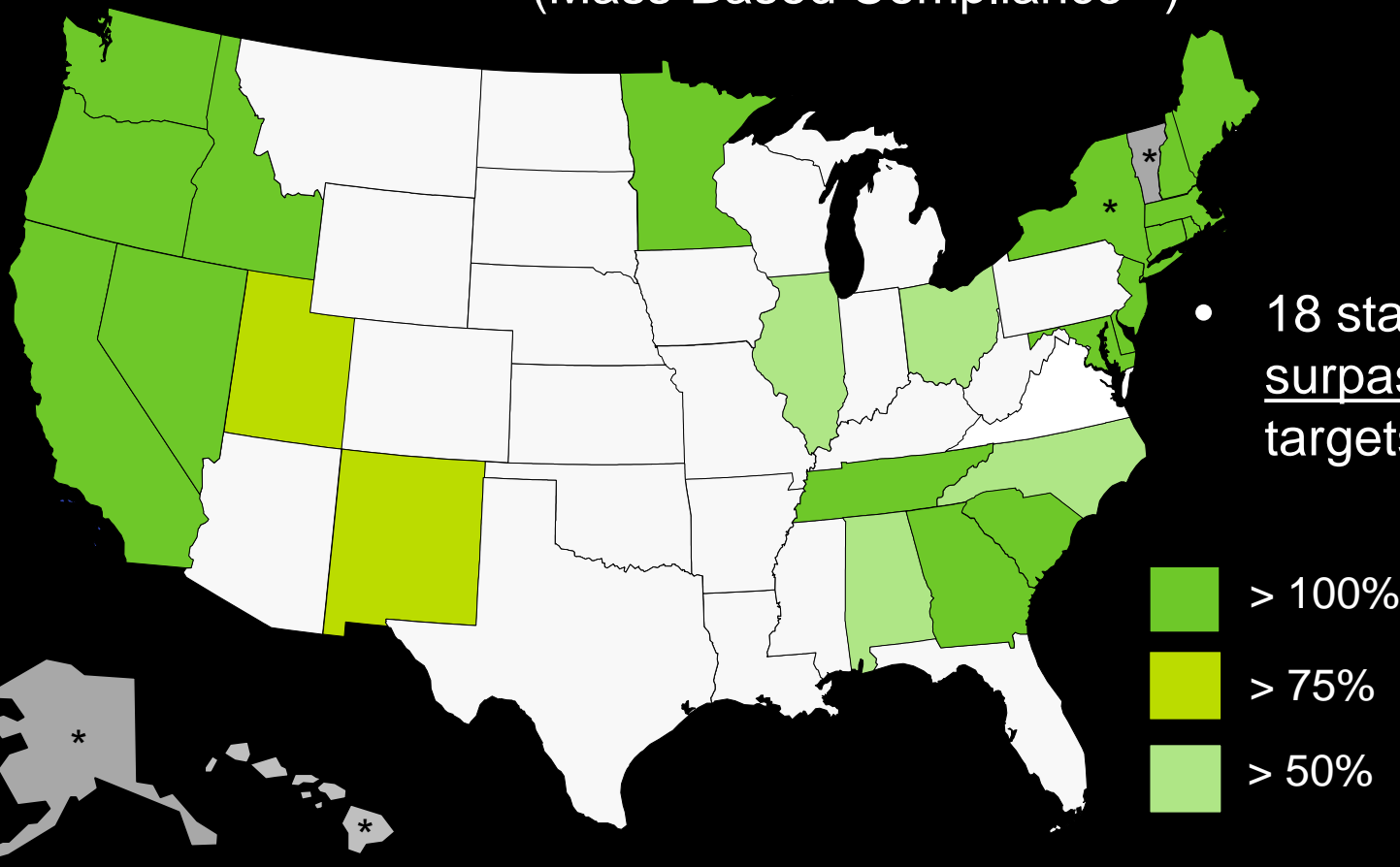
36 States Will Be More Than Halfway Toward Meeting Their 2022 Benchmarks (Mass-Based Compliance**)



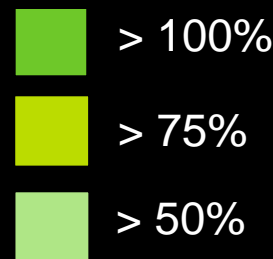
*Alaska, Hawaii, and Vermont have no obligations under the Clean Power Plan.

**Estimates of Clean Power Plan compliance progress under a mass-based system assumes that no affected electric generating units exercise the option to offset an increase in output (and associated emissions) using excess generation from the renewable energy building block. If affected electric generating units do exercise this option, total progress toward compliance would decline accordingly.

24 States Will Be More Than Halfway Toward Meeting Their 2030 Benchmarks (Mass-Based Compliance**)



- 18 states on track to surpass their 2030 targets



*Alaska, Hawaii, and Vermont have no obligations under the Clean Power Plan.

**Estimates of Clean Power Plan compliance progress under a mass-based system assumes that no affected electric generating units exercise the option to offset an increase in output (and associated emissions) using excess generation from the renewable energy building block. If affected electric generating units do exercise this option, total progress toward compliance would decline accordingly.

[State Results



State Progress Toward Clean Power Plan Targets (Rate-Based Compliance)

State	2022	2030	State	2022	2030
Alabama	84%	39%	North Carolina	> 200%	55%
Arkansas	7%	0%	North Dakota	0%	0%
Arizona	84%	37%	Nebraska	15%	8%
California	In compliance	> 200%	New Hampshire*	159%	55%
Colorado	75%	38%	New Jersey	> 200%	196%
Connecticut	In compliance	> 200%	New Mexico	127%	63%
Delaware*	> 200%	93%	Nevada	> 200%	> 200%
Florida	23%	7%	New York*	> 200%	45%
Georgia	160%	78%	Ohio	82%	44%
Iowa	32%	14%	Oklahoma	28%	21%
Idaho	In compliance	0%	Oregon	> 200%	171%
Illinois	62%	48%	Pennsylvania	75%	30%
Indiana	37%	18%	Rhode Island*	> 200%	99%
Kansas	20%	16%	South Carolina	> 200%	165%
Kentucky	51%	25%	South Dakota	6%	3%
Louisiana	0%	0%	Tennessee	176%	103%
Massachusetts	> 200%	> 200%	Texas	11%	5%
Maryland	> 200%	> 200%	Utah	17%	60%
Maine	In compliance	175%	Virginia	35%	17%
Michigan	63%	37%	Washington	> 200%	125%
Minnesota	169%	136%	Wisconsin	55%	35%
Missouri	64%	30%	West Virginia	36%	15%
Mississippi	In compliance	18%	Wyoming	1%	0%
Montana	16%	10%			

States designated "in compliance" reflects emissions rate reduction targets that are greater than baseline (2012) emission rates.

*While as individual states, Delaware, New Hampshire, Rhode Island, and New York fall below 100% of their 2030 final targets, we assume they will be in full compliance as members of the nine-states Northeast Regional Greenhouse Gas Initiative (RGGI). Collectively, the RGGI states are projected to be more than 200% of the way toward their combined 2030 emission reduction targets under the Clean Power Plan.

State Progress Toward Clean Power Plan Targets (Mass-Based Compliance*)

State	2022	2030	State	2022	2030
Alabama	138%	52%	North Carolina	> 200%	74%
Arkansas	10%	0%	North Dakota	0%	0%
Arizona	134%	49%	Nebraska	21%	9%
California	In compliance	> 200%	New Hampshire	> 200%	112%
Colorado	105%	48%	New Jersey	> 200%	> 200%
Connecticut	In compliance	In compliance	New Mexico	193%	81%
Delaware	> 200%	151%	Nevada	> 200%	> 200%
Florida	191%	11%	New York**	In compliance	92%
Georgia	> 200%	101%	Ohio	130%	56%
Iowa	43%	17%	Oklahoma	53%	29%
Idaho	In compliance	In compliance	Oregon	In compliance	> 200%
Illinois	80%	58%	Pennsylvania	131%	40%
Indiana	53%	22%	Rhode Island	In compliance	> 200%
Kansas	25%	19%	South Carolina	> 200%	> 200%
Kentucky	72%	31%	South Dakota	9%	4%
Louisiana	0%	0%	Tennessee	> 200%	127%
Massachusetts	In compliance	> 200%	Texas	19%	7%
Maryland	> 200%	> 200%	Utah	30%	78%
Maine	In compliance	In compliance	Virginia	57%	23%
Michigan	86%	46%	Washington	> 200%	158%
Minnesota	> 200%	165%	Wisconsin	71%	42%
Missouri	101%	38%	West Virginia	58%	19%
Mississippi	In compliance	42%	Wyoming	1%	1%
Montana	19%	11%			

States designated "in compliance" reflects emissions targets that are greater than baseline (2012) emissions.

*Estimates of Clean Power Plan compliance progress under a mass-based system assumes that no affected electric generating units exercise the option to offset an increase in output (and associated emissions) using excess generation from the renewable energy building block. If affected electric generating units do exercise this option, total progress toward compliance would decline accordingly.

**While New York falls below 100% of its 2030 final targets, we assume the state will be in full compliance as a member of the nine-states Northeast Regional Greenhouse Gas Initiative (RGGI)..

Recommendations

- States should prioritize renewable energy and energy efficiency in CPP compliance plans to prevent an over-reliance on natural gas
- States should participate in regional trading systems to facilitate lowest-cost compliance options
- States and federal government should strengthen and enact strong complementary clean energy policies



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