

## North America

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Environmental Markets | Emissions

# California Proposes CPP Compliance Based on Existing Cap-and-Trade Scheme

## Proposal adds Momentum to Integrating Market-Based Emissions Programs with the CPP

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Policy Brief

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### Key Takeaways:

- The California Air Resources Board (CARB) proposed a plan to comply with the Clean Power Plan (CPP) despite pending judicial review of the rule
- California would rely on the economy-wide cap-and-trade program, together with complementary state policies, such as renewable fuel standards and energy efficiency requirements, to achieve CPP targets
- The CARB proposal provides a model for other states through regional integration with federal programs and employing cap-and-trade as an efficient means of CPP compliance

### Entities Mentioned:

- California Air Resources Board
- Environmental Protection Agency
- U.S. Court of Appeals for the District of Columbia Circuit
- U.S. Supreme Court

### Related Research

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[Court Stay of Regional Haze Rule Adds to Judicial Scrutiny of EPA Authority](#)

[RGGI Examines Tightening Emissions Cap to Comply with Clean Power Plan](#)

## Insight for Industry – California Designates Cap-and-Trade as Key for CPP Compliance, Boosts Support for Market-Based Schemes as Way to Lower Emissions

On August 5, 2016, the California Air Resources Board ([CARB](#)) issued a [proposal](#) to comply with the Environmental Protection Agency's ([EPA](#)) Clean Power Plan ([CPP](#)), making California the first state to forge ahead with implementation efforts despite pending judicial review of the CPP. The proposal would entail a mass-based, "state measures" approach based on California's landmark cap-and-trade program, along with complementary programs, such as renewable fuel standards and energy efficiency requirements.

Under this approach, CPP-affected electric generating units (EGUs) participating in the cap-and-trade program would have a federally-enforceable obligation to meet key program requirements, while non-EGU participants would keep only state-enforceable obligations. The CARB proposal includes a backstop trading program for affected EGUs to achieve the CPP targets in the event its existing programs fail to drive the required emission reductions. The current proposal does not include a provision for the Clean Energy Incentive Program (CEIP) – an additional incentive for efficiency investments in low-income communities – as CARB is evaluating the CEIP to take appropriate action before finalizing its plan.

[CARB](#) is considering amendments to extend the cap-and-trade program through 2031 to align it with the CPP timeline. The [CPP](#) establishes carbon dioxide emission guidelines for existing fossil fuel-fired EGUs, setting a 2030 emissions reduction target of 32 percent relative to 2005 levels. Mandatory emissions reductions begin in 2022, with requirements phased in gradually until 2030, when states must meet their overall target.

California has been a national leader in reducing greenhouse gas emissions under its cap-and-trade program. Relying on this scheme for CPP compliance would support the state's carbon market and the related policies, minimize additional regulatory requirements for stakeholders, and integrate state and federal climate programs for the sector. Moreover, the CARB proposal, along with potential reforms of the Regional Greenhouse Gas Initiative ([RGGI](#)), adds momentum for the use of market-based mechanisms as a means to advance emissions reduction measures. While RGGI has gained more attention for its power-sector focused approach compared to California's economy wide approach, the new CARB proposal will serve to better inform "state measure" plans with regard to integrating a broader program with CPP.

CARB prepared the [proposal](#) with the help of an interagency working group which includes the California Energy Commission and California Public Utilities Commission. The proposal opens a public comment period until September 19.

**Relying on the cap-and-trade program for CPP compliance would support the state's carbon market and the related policies, minimize additional regulatory requirements, and integrate state and federal climate programs**

## California's Landmark Cap-and-Trade Forms Basis of CPP Compliance through Mass-Based, State Measure Approach

California intends to rely on the economy wide cap-and-trade program, together with complementary state programs, such as renewable fuel standards and energy efficiency requirements, to achieve CPP targets. The CARB proposal would use a mass-based limit compatible with mass emissions compliance instruments used in the cap-and-trade program. CARB's scheme establishes a declining limit on covered entities – approximately 400 industrial facilities with annual emissions of 25,000 tons of CO<sub>2</sub> equivalent or more – and creates an economic incentive for investments in clean and efficient energy. According to CARB's calculations, the CPP would affect 246 existing units plus three units under construction.

The “state measure” approach allows states to use or extend existing state programs for CPP compliance, provided the state includes federally enforceable emission standards for CPP-covered EGUs and a backstop measure to ensure CPP compliance if the state program underperforms. Under the [CPP](#), the state program requirements on sources not regulated by the CPP are state-enforceable, while requirements on CPP-affected EGUs, as well as backstop requirements, are federally enforceable. The alternative “emission standards” approach includes source-specific requirements for affected EGUs to meet their required emissions performance rates or state-specific rate-based or mass-based goal. The CPP establishes both a rate- and mass-based, state specific CO<sub>2</sub> emissions limit for each state.

The [CARB proposal](#) includes a federally enforceable backstop emission standard to minimize disruptions to the state program, while ensuring that affected EGUs reduce their emissions on schedule. The backstop provision would be triggered if annual emissions targets are exceeded by more than 10 percent, bringing the state back into compliance within 18 months through an additional pool of allowances that could be traded among affected EGUs, but not auctioned. The pool would be closed once progress would be restored.

However, [CARB](#) underscored that backstop provisions would likely not be triggered, since projected EGU emissions currently fall well below federal targets even under relatively conservative scenarios. Overall, California is on track to meet its 2020 emissions reduction goals, with the help of a diverse electricity generation portfolio focused on clean generation. The state will also likely meet its renewable portfolio standard of 33 percent by 2020 and is currently pursuing efforts to meet a 50 percent renewable target by 2030, as required by [SB 350](#) enacted in October 2015.

The [cap-and-trade system](#), authorized by the Global Warming Solutions Act of 2006 ([AB 32](#)) took effect in 2012 and forms a core component in the state's climate strategy to meet emissions targets of 1990 levels by 2020. The program is currently under review to consider post-2020 climate policy to facilitate emissions reductions of 40 percent below 1990 levels by 2030, and 80 percent below 1990 levels by 2050. To facilitate seamless integration of the state program with federal requirements, CARB is developing the CPP

**The CARB proposal includes a federally enforceable backstop emission standard to minimize disruptions to the state program, while ensuring that affected EGUs reduce their emissions on schedule**

compliance plan in coordination with next phase of the program and its annual mandatory reporting regulation. As a result, the state program – including affected EGUs – would continue to operate as an integrated system, without the need for a distinct CPP-only system for affected EGUs.

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**California Spearheads States Contemplating CPP Compliance Options Despite Pending Litigation**

As the first state to develop its [CPP](#) compliance plan, California currently leads the way in preparing for the potential lifting of the U.S. Supreme Court's [stay](#) of CPP, issued in February and pending review in the U.S. Court of Appeals for the District of Columbia Circuit and possibly the Supreme Court. Although states do not have to comply with CPP deadlines or requirements pending judicial review, several states have been considering available options. More recently, in April, environmental regulators from 14 states sent a letter to the EPA requesting additional information on the CEIP and technical assistance to better inform their planning efforts. The CEIP offers an optional incentive for early investments in renewable generation and demand-side energy efficiency programs in low-income communities to deliver results during 2020-2021. States that enable such investments could receive allowances or emission rate credits (ERCs) from EPA. Generally, states that have made early investments in zero-emitting generation to reduce CO2 prior to the CPP are better positioned to meet their goals, as emissions reductions that occur from 2022 from measures implemented after 2012 can help meet interim goals.

In April, EPA sent its voluntary CEIP to the White House Office of Management and Budget (OMB) for review, saying that many states had indicated plans to move forward with voluntary efforts, supported by EPA.

As for the lawsuit, several states, including California, Connecticut, Hawaii, Illinois, Maine, Massachusetts, Maryland, New Hampshire, New Mexico, New York, Oregon, Rhode Island, Vermont, Virginia, Washington, and the District of Columbia have expressed their determination to defend the rule.

Furthermore, several states have pursued legislation in support or opposition of CPP (Table 1).

**Table 1 – CPP-Related Legislation Enacted or Proposed in 2016**

State	Bill Number	Date of Last Action/Status	Description
Illinois	<a href="#">SB 2920</a>	Enacted July 8, 2016	Requires the Commission on Environmental Justice to review any proposed CPP compliance plan and provide comments to the Illinois Environmental Protection Agency before submittal to EPA
Kansas	<a href="#">SB 318</a>	Enacted May 6, 2016	Requires the CPP implementation study committee review and provide input on any proposed CPP compliance plan before submittal to EPA

State	Bill Number	Date of Last Action/Status	Description
Illinois	<a href="#">HB 5946</a>	Introduced May 30, 2016	Would require the Commission on Environmental Justice to review any state implementation plan for CPP compliance and provide comments before submittal to EPA
Ohio	<a href="#">HCR 29</a>	Passed one chamber May 19, 2016	Resolution to oppose CPP as EPA lacks legal authority to establish the state's energy policy
Ohio	<a href="#">HB 541</a>	Introduced May 5, 2016	Would prohibit any state agency from implementing CPP
Missouri	<a href="#">SB 858</a>	Introduced May 13, 2016	Would require the Department of Natural Resources to submit a two-year extension to EPA for submitting a final CPP compliance plan
Missouri	<a href="#">HCR 69</a>	Passed one chamber May 11, 2016	Would encourage the Attorney General to take necessary legal actions regarding final CPP to prevent unlawful obligations being imposed on states and others
Missouri	<a href="#">HB 2543</a>	Introduced May 5, 2016	Would require the Department of Natural Resources or any other state agency to suspend CPP-related activity until litigation regarding CPP has been fully adjudicated and the General Assembly has approved resumption of such activity
Missouri	<a href="#">HB 2514</a>	Introduced March 3, 2016	Would prohibit the Department of Natural Resources from submitting or implementing a state plan for CPP compliance and require submission of a two-year extension request
Missouri	<a href="#">HB 1967</a>	Introduced February 17, 2016	Would require electrical corporations to track costs for complying with CPP and itemize such costs on customer bills
Missouri	<a href="#">SB 687</a>	Introduced January 11, 2016	Would require electrical corporations to track costs for complying with the Clean Power Plan and itemize such costs on customer bills
Colorado	<a href="#">SB 16-157</a>	Passed one chamber April 27, 2016	Would suspend activities in furtherance of developing a state plan to for CPP implementation until the Supreme Court's stay is lifted and new deadlines for submission of state plans have been established.
Colorado	<a href="#">SB 16-046</a>	Introduced March 17, 2016	Would direct a public input process to make the initial submittal to qualify for the two-year extension without making any binding commitments in anyway not required by the express provisions of the CPP, including to submit a state plan in the future; would consider specific factors in developing the state plan; and require approval of the General Assembly to submit any draft plan to EPA
Virginia	<a href="#">HB 2</a>	Passed one chamber April 20, 2016	Would require the Department of Environmental Quality to receive approval from the General Assembly for a state plan to comply with CPP prior to submittal to EPA
Virginia	<a href="#">SB 21</a>	Passed both chambers March 3, 2016	Would require the Department of Environmental Quality to receive approval from the General Assembly for a state plan for CPP implementation prior to submittal to EPA
Virginia	<a href="#">SB 482</a>	Introduced January 21, 2016	Would require the Department of Environmental Quality to receive approval from the General Assembly for a state plan for CPP implementation prior to submittal to EPA

State	Bill Number	Date of Last Action/Status	Description
Pennsylvania	<a href="#">HB 1327</a>	Passed both chambers April 4, 2016	Would require the Department of Environmental Protection to receive approval from the General Assembly for any state plan for CPP compliance prior to submittal to the EPA
Pennsylvania	<a href="#">SR 277</a>	Introduced February 5, 2016	Would urge the Department of Environmental Protection to request a two-year extension for submitting a state plan for CPP implementation and direct the Legislative Budget and Finance Committee to conduct a cost compliance study prior to submission of the final plan to EPA
Minnesota	<a href="#">SF 3191</a>	Introduced March 24, 2016	Would prohibit the development or submission of any CPP implementation plan to EPA unless the plan has been approved by state law
Minnesota	<a href="#">SF 2972</a>	Introduced March 21, 2016	Would allocate 10 percent of emission credits granted under CPP to certain cities or towns in which coal-fired plants have ceased operation largely due to CPP implementation
Minnesota	<a href="#">HF 2817</a>	Introduced March 10, 2016	Would allocate 10 percent of emission credits granted under CPP to certain cities or towns in which coal-fired plants have ceased operation largely due to CPP implementation
Oklahoma	<a href="#">SB 1379</a>	Passed one chamber March 21, 2016	Would prohibit the development or adoption of a state plan for CPP compliance unless such action is determined to be required by the Attorney General or a court of competent jurisdiction, in addition to written authority by the Governor
Washington	<a href="#">SB 6217</a>	Passed one chamber March 10, 2016	Would require any state plan submitted to EPA for CPP implementation or any rule adopted under CPP to provide for the use of new or uprated nuclear generation including small modular reactors to the maximum extent allowable
Alabama	<a href="#">HB 329</a>	Introduced February 25, 2016	Would adopt the Interstate Compact to provide that states and local governments have the primary responsibility in adopting standards for air pollution control
Mississippi	<a href="#">HB 1129</a>	Introduced February 23, 2016	Would create the Environmental Impact Litigation Act and require that the Attorney General be granted resources to participate in timely litigation against CPP to prevent imposition of onerous obligations on states, electricity providers, business, and citizens
Nebraska	<a href="#">LB 1069</a>	Introduced February 17, 2016	Would require the State Investment Officer to create a plan to divest from fossil fuels and invest in clean energy, finding that clean energy investments provide benefits and there are increasing opportunities for such investment as a result of CPP, renewable portfolio standards and international climate agreements
Kentucky	<a href="#">HB 104</a>	Introduced January 5, 2016	Would prohibit the promulgation of regulations or imposition of permit conditions on carbon emissions under any federal rule or plan until authorized by the General Assembly or Congress adopts legislation designating carbon dioxide as criteria pollutant under the Clean Air Act

Source: EnerKnol

## Like RGGI, California Proposal Would Inform Other States and Increase Potential for Regional Cooperation

The emissions trading programs of [RGGI](#) and [CARB](#) provide viable paths to comply with CPP, as the CPP allows states to develop regional partnerships through trading linkages and agreements on particular elements within state plans. RGGI member states are currently reviewing the program to [examine](#) opportunities to link RGGI with the CPP, including alignment of RGGI control periods with CPP interim step periods to facilitate market expansion. RGGI – the nation’s [first mandatory cap-and-trade program](#) to reduce greenhouse gas emissions – is the primary CPP compliance mechanism for member states (Connecticut, Delaware, Maine, Maryland, Massachusetts, New Hampshire, New York, Rhode Island, and Vermont) and continues to draw attention from non-RGGI states.

California state law also provides for cooperation with other carbon trading schemes, and the state’s carbon market is currently linked with that of the Canadian Province of Québec. Consistent with [AB 32](#), the carbon market program addresses both imported power and native generation that serve the state. Under its current program review, CARB is considering linkages with Ontario and is investigating potential linkages with similar programs developed by other states to meet CPP requirements or their own policies. The California-Quebec tie-in is a critical milestone, demonstrating that a larger market can be created by coordinating separate systems, paving the way for similar linkages.

The proven success of RGGI and CARB trading programs has spurred several initiatives to expand carbon trading. For example, in October 2015, New York Governor Cuomo [announced](#) that the state will engage with RGGI, California, Quebec, and Ontario to explore the possibility of linking their successful carbon markets to increase their cost-effectiveness and stability; and also engage other states and provinces to build a broader carbon market and drive an international discussion to spur government action on carbon emissions.

Recent legislative proposals seeking carbon trading include:

- Rhode Island - [HB 7325](#) (Clean Energy Investment and Carbon Pricing Act of 2016) would price carbon as an incentive to reduce emissions from use of carbon based fuels by residents and businesses in the state.
- New Jersey - [A 1493](#) would require the state to establish a greenhouse gas allowance trading program to rejoin RGGI to curb emissions.
- Washington - [HB 1314](#) would implement a carbon pollution market program to reduce emissions and that is capable of being integrated with emissions programs in other jurisdictions.
- Oregon - [HB 3250](#) would establish carbon cap-and-dividend program creating an auction for allowances under program, and directing certain allowance proceeds to a Pollution Refund Credit Trust Fund.

**The emissions trading programs of RGGI and CARB provide viable paths for CPP compliance, as the CPP allows states to develop regional partnerships through trading linkages and agreements on particular elements within state plans**

Moreover, since EPA regulations require individual state portfolios to reduce power plant emissions, other states could use California's policies, particularly its cap-and-trade program, as examples to craft their own plans. The [CARB proposal](#), along with RGGI, adds momentum for the use of market-based mechanisms as a means to advance GHG reduction measures. A coordinated approach will expand the number of available options, giving companies the flexibility to tailor the most cost-effective compliance strategies, reducing overall emission reduction costs and increasing program efficiency. CARB's early [action](#) provides affected entities with an opportunity to provide comments and seek changes as part of the rulemaking process.

While RGGI has gained more attention for its power-sector focused approach compared to California's economy wide approach, the new [CARB proposal](#) will serve to better inform "state measure" plans integrating a broader program with [CPP](#).

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## Disclosures Section

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### RESEARCH RISKS

Regulatory and Legislative agendas are subject to change.

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