CAP-AND-INVEST FOR MARYLAND

ISSUE BRIEF 8: LINKAGE

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Climate Law & Policy Project

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Climate Law & Policy Project is a 501(c)(3) non-profit organization. CLPP's mission is to help formulate and advocate environmentally, socially, and scientifically sound policies to reduce emissions and protect communities around the world from the impacts of climate change.

CLPP operates like a think tank – seeking practical and politically viable strategies – while simultaneously advocating for strong responses to avert the increasingly urgent problem of climate change.

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Introduction

Maryland's Department of the Environment (MDE) has discussed the possibility of developing an economy-wide cap-and-invest program for the state. This paper explores the issues involved in *whether Maryland should link its cap-and-invest program to similar programs in other jurisdictions*.

Maryland has some of the most ambitious greenhouse gas (GHG) reduction targets in the country. By law, it must reduce emissions 60% from 2006 levels by 2031 and achieve net-zero emissions by 2045.

In December 2023, MDE released *Maryland's Climate Pollution Reduction Plan* (CPRP) laying out a strategy to achieve the state's near-term climate goal and place the state on a path to achieve its 2045 goal. The CPRP includes an economy-wide cap-and-invest program, both to close a 3.5 million metric ton emissions gap remaining after MDE's other policy recommendations are implemented and to raise the roughly $1 billion per year in new revenue the CPRP estimates is needed to fund several of these policy programs. (Alternative mechanisms, such as a carbon fee, are also included as potential revenue-raising options.) There is little detail in the CPRP about how a cap-and-invest system might be designed to best serve Maryland's needs.

In December 2024, the annual report from the Maryland Commission on Climate Change (MCCC) included a recommendation that the General Assembly authorize a study to evaluate the design of a cap-and-invest program. The MCCC's 2025 recommendations include a similar directive to the Moore Administration.

Not all stakeholders may be familiar with cap-and-invest and how it works. **Put simply, a cap-and-invest approach establishes a declining cap on emissions levels, requires polluters to acquire and retire emission allowances, and invests the proceeds of allowance sales (which can be substantial) in achieving a rapid, effective, and equitable transition to a decarbonized economy.**

CLPP previously produced a primer that offered an overview of cap-and-invest, briefly described how it is being implemented in other jurisdictions, and identified some key design elements that must be considered to ensure cap-and-invest supports and complements other facets of Maryland's efforts to address climate change.

This issue brief is part of a series taking deeper dives into those and other design elements. Each brief focuses on one design element (or set of elements), reviews how other jurisdictions address that element, and discusses the issues at play as Maryland considers its own cap-and-invest program.

This brief focuses on the issue of whether Maryland should pursue linkage of its cap-and-invest program with cap-and-invest programs in other jurisdictions.

For reasons discussed in this paper, Maryland should design a cap-and-invest program with an eye towards linking with other jurisdictions, but it should first carefully analyze whether linkage would in fact aid the state in achieving its goals related to climate, overburdened communities, revenue and investment needs, and more.

What Has to Be Decided Regarding Linkage?

Maryland is looking at establishing an economy-wide cap-and-invest program, but the state will have to decide whether to keep it as a stand-alone program or link it with similar programs in other jurisdictions.

A state cap-and-invest program could exist either as an independent initiative or as part of a broader market alongside other jurisdictions' cap-and-invest programs. There are pros and cons to weigh in deciding whether to link a cap-and-invest program with other jurisdictions.

Linkage to other programs would create a bigger market, which should expand emission reduction opportunities and increase market efficiency. That, in turn, should reduce compliance costs, as well as improve market security. In addition, sharing functions such as auctions and registries with other jurisdictions would reduce administrative costs.

On the other hand, linkage requires significant alignment in program objectives, stringency, and methods. The need for similarity between programs means linkage could reduce a state's ability to be innovative with its program. Linkage could also mean that the weaknesses of other jurisdictions are imported into a state's program. Alternatively, linkage could give older programs opportunities to adopt some of the innovative design features in newer programs.

What Do Other Jurisdictions Do?

Cap-and-invest programs already exist or are under development in some other North American jurisdictions. Maryland can learn from others' experiences and approaches.

California's cap-and-invest program has been linked with *Quebec*'s cap-and-invest system under the Western Climate Initiative (WCI) since 2014. (California and Quebec also briefly linked with Ontario's system for the first half of 2018, before the Ontario government repealed its cap-and-trade program.)

California's cap-and-trade regulation provides for potential linkage with other jurisdictions. Under the regulation, a compliance instrument from a linked jurisdiction can be used to meet the requirements of the California program, and vice versa. (17 CCR §§ 95940, 95942) Allowances from one system are treated the same as allowances from the other; offset credits from one system likewise are treated the same as offset credits from the other. (17 CCR § 95942) While credits are fungible, California does have restrictions on offset credits (as described in CLPP brief #6 on offsets), stating that no more than half of an entity's quantitative usage limit can come from projects that do not provide direct in-state environmental benefits (i.e., do not reduce or avoid air or water pollution in California). (17 CCR §§ 95854, 95802)

Quebec law likewise authorizes linkage with another jurisdiction to harmonize and integrate cap-and-trade systems. (Q-2, Environmental Quality Act, § 46.14) Quebec's cap-and trade regulation specifies that allowances issued by California are deemed to be equivalent to emission units and early reduction credits in Quebec, that offset credits in each jurisdiction are considered equivalent, and that California's allowance price containment reserve tiers and price ceiling account are equivalent to the three tiers of Quebec's Minister's reserve (as described in CLPP brief #2 on program reviews, automatic adjustments, and price certainty mechanisms). (Q-2, r. 46.1, Appendix B.1)

Linkage in California requires a public rulemaking process to amend the cap-and-trade regulation. Under SB 1018 (2012), the California Air Resources Board must also notify the Governor of the proposed linkage, and the Governor must issue specified written findings, including that the proposed jurisdiction has GHG requirements (including for offsets) that are equivalent to or stricter than California's.

California and Quebec have a non-binding agreement that describes the jurisdictions' intentions to consult and coordinate with each other as they harmonize and integrate their cap-and-invest programs. This includes agreeing to hold joint auctions, have a common program registry, and continually evaluate any differences in regulations to determine whether they need to be harmonized for the systems to function and integrate properly. (Linked systems can have differences in program design, so long as they do not hinder the integration of the systems into a joint market.)

In the non-binding agreement, the jurisdictions also agree to develop and implement an accounting mechanism to attribute to each jurisdiction the emission reductions jointly achieved by the linked programs. According to that mechanism, from 2015 onward, the annual net flow of compliance instruments has been from California to Quebec; in other words, every year, entities in Quebec acquire and retire more allowances and offset credits from California than vice versa.

Washington, which launched its cap-and-invest program in 2023 following adoption of the Climate Commitment Act (CCA) in 2021, wants to link its program with California's and Quebec's in the WCI, and all three jurisdictions have expressed mutual interest in linking. The CCA specifically directed the Department of Ecology to develop and implement a cap-and-invest program "in a manner that allows linking the state's program with those of other jurisdictions" (RCW 70A.65.060) and to seek linkage agreements in order to broaden GHG reduction opportunities, reduce compliance costs, increase market security, and reduce administrative costs. (RCW 70A.65.210)

However, before entering into a linkage agreement, the statute requires Ecology to "evaluate and make a finding regarding whether the aggregate number of unused allowances in a linked program would reduce the stringency of Washington's program and the state's ability to achieve its greenhouse gas emissions reduction limits." Ecology must also make a finding that linkage meets certain criteria, including that the linking jurisdiction "has provisions to ensure the distribution of benefits from the program to vulnerable populations and overburdened communities" and that linkage would "not yield net adverse impacts to either jurisdictions' highly impacted communities". (Ecology has since done a preliminary analysis of the linkage criteria.) In addition, Ecology must conduct a public comment process and consider the input received; it must also conduct an Environmental Justice Assessment. If Ecology decides full linkage would not meet the criteria, the statute allows for linkage with limitations, such as limits on the share of compliance that can be met with allowances from linked jurisdictions. (RCW 70A.65.210)

Washington designed its program from the outset to facilitate linkage with California and Quebec. Even so, the legislature passed legislation in 2024, and Ecology has been undergoing a regulatory process, to make further changes to the cap-and-invest program to improve alignment with the other jurisdictions; topics range from the length of compliance periods to allowance purchase limits. California and Quebec will have to undergo their own regulatory processes and revisions if they decide to link with Washington. As of September 2025, Ecology estimates linkage could happen in 2026.

While allowances would be usable in any of the jurisdictions if they link, Washington has some restrictions on offsets (as described in CLPP brief #6 on offsets). Currently, Washington regulations require all offset credits to provide direct environmental benefits to the state, but the regulations specify that if Washington links with another program, then a portion can come from linked jurisdictions. (WAC 173-446-595)

New York is in the process of developing an economy-wide cap-and-invest program. The program website notes that one of the core principles for the cap-and-invest program is "climate leadership" — under which it states: "The program will be designed with the capacity to link with other current or future programs to further catalyze a nationwide movement towards carbon pricing, which can lower the price of the transition overall." New York's December 2023 pre-proposal outline, however, makes no reference at all to linkage with other jurisdictions, so there is little information available at this point regarding whether and how New York is designing its program to facilitate linkage.

The Regional Greenhouse Gas Initiative (RGGI) — a cooperative regional cap-and-invest program among several Northeastern and Mid-Atlantic states (including Maryland) that covers just the electric power sector — is itself a program of linkage. Individual states adopt their own regulations and issue their own allowances in a linked market-based effort. A new state interested in joining RGGI must develop a state electricity cap-and-invest program that the current states deem to be compatible with the RGGI Model Rule, including with respect to alignment of program elements, stringency of the allowance budget, and consistency of regulatory language. A new state would also contract with, fund a portion of, and join the board of RGGI, Inc., which administers the joint initiative.

Considering RGGI as a single market, however, the RGGI system is not linked with any external jurisdictions (such as the WCI jurisdictions); the RGGI market operates on its own. It also remains unclear if and how the RGGI system would link to an economy-wide cap-and-invest program within one of the RGGI states. Among RGGI states, New York is the furthest along in developing an economy-wide cap-and-invest program, and New York's December 2023 pre-proposal outline provided no insight on the question, instead seeking comments on whether and how the state's electricity sector should have compliance obligations.

Discussion

The experiences and approaches of other North American jurisdictions can be instructive in considering whether Maryland should link its cap-and-invest program with similar programs in other jurisdictions.

The cap-and-invest programs in California and Quebec have been linked for more than a decade, and Washington is actively exploring linking its relatively new program to theirs. RGGI has been linking states' cap-and-invest programs for the electricity sector for more than 15 years. There are some clear insights that can be drawn from these programs' experiences.

Linkage requires a great deal of alignment among participating programs. For compliance instruments to be fungible, the programs have to be similar enough that the allowances (and offsets) mean the same thing. Linkage does not, however, require absolute uniformity. There can be variations in design. California, for instance, has a price ceiling, while Quebec does not. Likewise, while linkage means compliance instruments are fungible across jurisdictions, the fungibility does not have to be absolute, as can be seen in the requirements in some jurisdictions that a certain percentage of offset credits must provide in-state benefits.

Linkage clearly requires significant coordination among the jurisdictions to ensure smooth functioning and accurate emissions accounting within the joint market. California and Quebec have a non-binding agreement spelling out the intent to coordinate, while RGGI has a Board of Directors made up of state representatives.

The linkage pre-requisites in Washington law highlight some of the challenges that a new state cap-and-invest program must consider. For example, Washington law requires the Department of Ecology to "evaluate and make a finding regarding whether the aggregate number of unused allowances in a linked program would reduce the stringency of Washington's program and the state's ability to achieve its greenhouse gas emissions reduction limits." This is, in particular, a reference to California, which has a large stock of banked allowances that has raised concerns that California's emission reduction targets could be met with no additional reductions actually achieved (as explained in CLPP brief #3 on banking and borrowing of allowances). Linking to a system with a large bank of unused allowances could lead to state emissions targets being breached. In this situation, a jurisdiction contemplating linkage may want to consider whether it would be effective to discount or disallow allowances from linked jurisdictions that were created prior to linkage.

Washington law also requires Ecology to determine whether linkage would harm highly impacted communities. Especially when linking to a much larger market, there is a risk that the flow of compliance instruments will mostly be from the larger jurisdiction to the smaller jurisdiction, leaving local communities (particularly overburdened and underserved ones) in the smaller jurisdiction to face more continued pollution. To prevent this, the California and Washington Environmental Justice Advisory Councils recommend mechanisms such as facility-specific emissions caps (as discussed in the CLPP issue brief on equity). Another ramification of linking to a much larger market is that allowance prices in the linked system would likely track more closely with prices in the larger market, which may be lower than in the smaller one; lower prices translate into reduced compliance costs but also into lower levels of revenue that can be invested, including in vulnerable communities.

A recent analysis by Resources for the Future found that, compared to remaining unlinked, linkage of Washington's program with California's would lead to: higher allowance prices in California and lower prices in Washington; greater overall emission reductions in the region and in California but fewer reductions in Washington; and lower levels of revenue in Washington.

What Should Maryland Do?

MDE has discussed the possibility of developing an economy-wide cap-and-invest program to close an emissions gap and raise the substantial revenues needed to support the sectoral programs in its *Climate Pollution Reduction Plan*. One of the key elements to consider is whether to link the program with other jurisdictions' cap-and-invest programs.

The pros and cons of linkage must be weighed carefully, but on balance, linkage seems to offer significant benefits for Maryland. The state could access existing architecture (e.g., auctions, registries), improve market stability and efficiency, and bring down compliance costs for Maryland emitters. Maryland is also used to linkage from its experience in RGGI. Maryland should design its cap-and-invest program in ways that enhance alignment with other jurisdictions. That may mean California, Quebec, and Washington, but MDE should also continue to play close attention to developments in New York. If New York does not link with the Western Climate Initiative (or even if it does), there could be opportunities for Maryland and New York to lead a linked market within the RGGI footprint.

With respect to some sort of linkage with or within RGGI, as noted in CLPP brief #4 on program coverage, Maryland first must decide whether the electricity sector will be covered under the economy-wide cap-and-invest program or covered solely under RGGI. Either way, Maryland should examine how best to coordinate its program with the RGGI program.

While Maryland should design a cap-and-invest program with an eye to future linkage, Maryland should also follow Washington's lead in being cautious about linkage. It may be that the process of Washington's likely linkage with California and Quebec addresses some of the issues of concern (e.g., excess banked allowances), creating a smoother path for Maryland to follow, but Maryland should still carefully analyze whether linkage ultimately facilitates achievement of the state's goals regarding emissions reductions, overburdened communities, revenue raising and investment, and more.