

CAP-AND-INVEST FOR MARYLAND

ISSUE BRIEF 3: BANKING & BORROWING

***Donald Goldberg
Dave Grossman***

***UPDATED
December 2025***

**Climate Law &
Policy Project**

Climate Law & Policy Project

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.

Additional information is available at www.clppproject.org.

About the Authors

Donald Goldberg is the executive director and founder of CLPP. Previously, he directed the climate program at the Center for International Environmental Law.

Dave Grossman is a senior advisor to CLPP and is the principal and founder of Green Light Consulting, a consulting practice specializing in research, analysis, writing, and strategic guidance on climate change and clean energy issues.

Table of Contents

Introduction.....	1
What Has to Be Decided Regarding Banking & Borrowing?	2
What Do Other Jurisdictions Do?	3
Discussion	4
What Should Maryland Do?	5

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 the *banking and borrowing of emissions allowances*.

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 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 cap-and-invest 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 will focus on one design element (or set of elements), review how other jurisdictions address that element, and discuss the issues at play as Maryland considers its own cap-and-invest program.

This brief focuses on the **banking and borrowing** of emissions allowances — in other words, whether and how allowances can be saved by emitters for future use (banking) or procured by emitters from future auctions to be used in the present (borrowing).

For reasons discussed in this paper, Maryland should permit banking of allowances with limits, including on the amount emitters can hold and possibly on how long they can hold them. Maryland should follow the precedent set by other jurisdictions and not allow borrowing of allowances.

What Has to Be Decided Regarding Banking & Borrowing?

One way to provide flexibility to emitters in a cap-and-invest system is to allow some choice in the timing of when emissions allowances can be utilized for compliance.

The fundamental instrument of cap-and-invest is the allowance. For each ton of covered emissions, emitters must acquire and retire one allowance. The number of allowances available through auction or allocation — the allowance budget — is determined by a jurisdiction's emissions cap.

Emitters may want to protect themselves against an unexpected rise in their emissions or a spike in allowance prices. To accommodate this need, cap-and-invest systems can allow emitters and other purchasers to buy more allowances than necessary to cover their emissions during a given compliance period and bank unused allowances for future use. To keep things straight, allowances are *vintaged*, that is, labeled with the date of origin.

Having a large stock of banked allowances, however, could weaken emitters' efforts to reduce emissions and could place achievement of a jurisdiction's emissions reduction goals in jeopardy in later years, especially if those goals are tightened over time.

Maryland will have to decide whether to allow banking of allowances, and if so, whether to place any restrictions on such banking. Potential ways to minimize the risks of excess

banking while still providing emitters with flexibility include limiting the quantity of banked allowances that can be held for compliance and limiting the lifespan of allowances, so they cannot be banked indefinitely.

In setting limits on banking, Maryland must also be cognizant of the interplay between offsets (if Maryland allows them) and banked allowances. To the extent offsets are used instead of allowances to meet entities' compliance obligations, more allowances will be left unused by emitters and can be banked. By leaving in play the allowances that would otherwise have been used to cover emissions, offsets both inflate the emissions budget and lower allowance prices. Lower allowance prices can be expected to encourage additional banking.

While banking enables current allowances to be used in the future, flexibility in the timing of allowance usage could also flow in the other direction. Cap-and-invest systems could, in theory, permit emitters to borrow against future allowance purchases to cover current allowance shortfalls, but such borrowing would have the effect of delaying near-term reductions. MDE will have to decide whether to allow for borrowing in a Maryland cap-and-invest program, and if so, with what limitations.

Borrowing by the State

In contrast to borrowing by individual entities, a state may utilize borrowing as part of an automatic adjustment mechanism, as discussed in CLPP's second [issue brief](#). In Washington, for instance, the state's allowance price containment reserve (APCR) was stocked from the beginning of the program with 5% of the allowances to be issued from 2023 through 2030, with the amounts available in any given year front-loaded so that higher volumes are available in the early years. In response to high allowance prices in the early auctions, the state in late 2023 [further front-loaded](#) the APCR allowances, moving allowances from 2026 availability into the 2024 pool of available allowances.

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](#) allows entities to bank allowances. Under California regulations (§ [95922](#)), emission allowances can be banked, and the banked allowances do not expire. California does have a holding limit, however, that restricts the number of allowances entities can hold at any point in time (§ [95920](#)).

California, in each allowance auction, sells current (and sometimes past) vintage allowances ("Current Auctions") and also future allowances ("Advance Auctions"), but those future allowances cannot be used for current compliance. Under California regulations (§ [95856](#)), compliance instruments for a given period have to be from a current or prior allowance vintage. Borrowing is thus not allowed in the California program.

Quebec's cap-and-invest [system](#), which is linked with California's, has the same features as its partner's. Banking of allowances is [permitted](#) in the Quebec system, but like California, Quebec has a holding limit that restricts the number of allowances entities can hold at one time (§ [32](#)).

In its joint auctions with California, as noted, future allowances are sold in Advance Auctions. Quebec's regulation (§ [20](#)), however, like California's, does not permit allowances to be used for compliance if those allowances are vintaged for a subsequent compliance period. Borrowing is thus not allowed in the Quebec program.

Washington's cap-and-invest [program](#) has banking and borrowing provisions very similar

to California's and Quebec's. As laid out in Washington regulations ([173-446-080](#)), allowances can be banked for future use and do not expire. Like other jurisdictions, Washington has a holding limit restricting the number of allowances entities can hold at one time ([173-446-150](#)). Also like other jurisdictions, Washington has auctions for future allowances ([173-446-365](#)), but allowances from future vintage years (with small exceptions) cannot be used to meet current or past compliance obligations ([173-446-080](#), [173-446-600](#)).

The Regional Greenhouse Gas Initiative (RGGI) — a cooperative regional cap-and-invest [program](#) among several Northeastern and Mid-Atlantic states (including Maryland) that solely covers the electric power sector — allows entities to bank allowances (Model Rule § [XX-6.6](#)). Unlike other jurisdictions, though, there is no holding limit. RGGI does not allow borrowing by covered entities, requiring allowances submitted for compliance during a control (compliance) period to have been issued during or prior to the control period (§§ [XX-1.5](#), [XX-6.5](#)).

New York is in the process of developing an economy-wide cap-and-invest [program](#). Based on New York's December 2023 [pre-proposal outline](#), the cap-and-invest program, with one exception, would allow banking of allowances, and allowances would not expire. The exception is that allowances issued during the first compliance period (2025 and 2026) would not be usable for compliance purposes in subsequent years. In other words, 2025 allowances could be used only for compliance

for 2025 and 2026 emissions, while 2026 allowances could only be used for 2026 emissions. New York plans to have holding limits restricting the number of allowances entities can hold at a given time. There is nothing explicit in the pre-proposal outline about

borrowing, but given the just-described details about banking in the first compliance period and the fact that no other U.S. jurisdiction allows borrowing, New York seems unlikely to allow it in its program.

Discussion

The experiences and approaches of other North American jurisdictions are highly similar with respect to banking and borrowing in cap-and-invest systems.

California, Quebec, Washington, RGGI, and likely New York all allow banking of allowances in their programs up to their holding limits (if they have holding limits), and all prohibit borrowing.

Restrictions on banking can be important. As noted earlier, having a large stock of banked allowances could weaken emitters' efforts to actually reduce emissions and could place achievement of a jurisdiction's emissions reduction goals in jeopardy in later years.

California is a case in point. Due to a large stock of banked allowances (some [estimate](#) the current level of banked allowances to be about 321 million), there are concerns that the state's emission reduction targets could be met with no additional reductions actually achieved. A 2023 [report](#) by California's [Legislative Analyst's Office](#), for instance, found that California will have about 200 million unused (banked) allowances in the system at the end of 2030, more than enough to meet the state's targets without any additional reductions.

RGGI, too, has had to contend with an excess of banked allowances in its system. RGGI states have had to make three adjustments to the RGGI cap over the years to account for the excess, with the most recent [adjustment](#) involving reductions in emissions budgets

occurring over the 2021-2025 period. The third [program review](#), which concluded in July 2025, made no further adjustments to banked allowances. The estimated number of banked RGGI allowances as of July 2025 was around 67 million tons — greater than the annual allowance budget in 2028 and each year after.

While RGGI has in the past addressed excess banked allowances by revising future emissions budgets downward, New York's potential approach to banking in its initial compliance period suggests another route that jurisdictions can take to limit the risks of excess banking: placing limits on how long banked allowances may be used. As noted, New York is proposing that allowances from its initial compliance period only be usable during that compliance period — so more allowances can be available as the state's emitters ease into the program without putting the state's longer-term emissions reduction goals in jeopardy. Other jurisdictions are considering similar limits. For instance, California and Quebec are in the midst of a program [assessment](#) that is exploring potential changes to rules around banking and holding limits, including whether to adopt duration limits on allowance holdings.

The key in all of these decisions is to strike a balance between providing flexibility to a

jurisdiction's emitters and ensuring the integrity of the jurisdiction's emission reduction goals.

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 emitters will have the flexibility to bank and/or borrow allowances.

Like other North American jurisdictions, a Maryland cap-and-invest system should permit banking of allowances, but with restrictions. For example, the state should limit the quantity of allowances emitters can hold at any given time. It should also consider limiting the quantity of allowances that can be carried over from one compliance period to another and/or the length of time during which allowances can be used, particularly allowances issued early in the program's existence.

With respect to borrowing allowances, Maryland's path seems relatively clear. Like other North American jurisdictions, Maryland should not allow emitters to borrow allowances from future compliance periods.