CAP-AND-INVEST FOR MARYLAND

ISSUE BRIEF 9: EQUITY CONSIDERATIONS

Donald Goldberg
Dave Grossman

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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.

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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.

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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 *how Maryland can incorporate equity considerations into the program*.

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. (Other 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 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 how Maryland can help ensure equity in the development and implementation of its cap-and-invest program.

For reasons discussed in this paper, Maryland should ensure there is an empowered environmental justice advisory council with power to weigh in on program design and implementation. Maryland should also consider measures to promote more equitable outcomes, including various protections and prioritizations for underserved or overburdened communities. In addition, Maryland should ensure that investments of allowance auction revenues provide benefits to disadvantaged communities and vulnerable populations.

What Has to Be Decided Regarding Equity?

Maryland is looking at establishing an economy-wide cap-and-invest program, but the state will have to decide how best to ensure that equity is considered at all stages of program development and implementation.

Environmental justice (EJ) organizations have traditionally been wary of market-based mechanisms, such as cap-and-invest systems, out of concern that the disproportionate impacts that disadvantaged, pollution-burdened communities experience could be perpetuated (or exacerbated) if emitters can pay to continue polluting. Emission reductions may occur in some places, but there are concerns that pollution hotspots may occur in others — particularly in communities that have already borne the brunt of pollution impacts. There are concerns that some of the places most in need will not see significant benefits from market mechanisms such as cap-and-invest.

To ensure that the transition to a decarbonized economy is an equitable one, decisions will have to be made about how to incorporate equity into cap-and-invest development, design, and implementation. Equity is a multi-faceted concept. Two of the core elements of equity are procedural equity and distributional (or outcome) equity. *Procedural equity* involves inclusive engagement and representation during development, design, and implementation processes, in order to ensure that voices, perspectives, and concerns that have historically been minimized or ignored are instead heard. *Distributional equity* involves the fair distribution of program burdens and benefits, in order to avoid further burdening and to ensure benefits are accruing to communities that are disadvantaged and/or already overburdened with the environmental, health, and other impacts of pollution.

Maryland will need to figure out how best to advance the various aspects of equity. For example, Maryland will have to determine what kind of participation and engagement measures, such as advisory councils, should be adopted during program design and implementation. Decisions will also need to be made about whether to adopt specific protections and prioritizations for underserved or overburdened communities, such as instituting facility-specific emissions limits on emitting facilities in or near those communities and explicitly considering the benefits of reducing co-pollutants that negatively impact community health. Maryland will need to decide which protective measures should be incorporated explicitly into the cap-and-invest program and which should be addressed through complementary programs and regulations.

In addition, Maryland will have to determine how to ensure that investments of allowance auction revenues benefit disadvantaged communities, such as by achieving goals akin to the Justice40 initiative under the Biden Administration. Maryland will likewise have to determine which types of investments should provide those benefits, potentially including energy-related programs, transportation programs, other programmatic investments, and dividends for low- and moderate-income households.

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 came out of AB 32 in 2006, which set the state's 2020 emission reduction target, directed the California Air Resources Board (CARB) to develop a Scoping Plan laying out a strategy to meet it, and authorized CARB to create a cap-and-trade program. AB 32 also called for CARB to convene an Environmental Justice Advisory Committee (EJAC), made up of representatives of communities with the most significant exposure to air pollution, to provide advice on the Scoping Plan and on implementation. (Health and Safety Code § 38591) CARB created a new EJAC for each scoping plan update until, in 2023, CARB approved an ongoing EJAC.

In 2012, California enacted SB 535, which required that a minimum of 25% of cap-and-invest revenues be invested in ways that provide benefits to disadvantaged communities. In 2016, AB 1550 upped that to a minimum of 35% of benefits flowing to disadvantaged communities, low-income communities, and low-income households ("priority populations"). Over the last decade, California has invested $11 billion of cap-and-invest revenues in projects to address climate change and pollution. Roughly three-quarters of the funds (more than $8 billion) have been spent in underserved, over-burdened, low-income communities, including projects to locate affordable housing near job centers, expand low-emission transit and mobility, plant urban trees, support low-income home solar and weatherization, and more.

The California cap-and-invest program has been accused of making local air pollution worse in environmental justice communities. The California Air Resource Board (CARB) maintains that there is no evidence of such an effect and that studies indicate improvements in air pollution in overburdened communities. CARB also points to other regulations that directly target air pollution from large stationary sources and from short-haul trucks. A 2023 study from Resources for the Future found that "emissions from stationary sources in disadvantaged communities have fallen overall as quickly and often more quickly than the state average, but with notable outliers often in densely populated areas."

The EJAC's recommendations for the 2022 Scoping Plan included a strong preference for relying on direct emission reductions at facilities, particularly in environmental justice communities, rather than on the cap-and-trade market mechanism. In addition, it called for eliminating offsets and free allocations of allowances and establishing no-trading zones in EJ communities. These recommendations have not been adopted.

California's ongoing exploration of amendments to the cap-and-invest program have included ways to "protect low-income households from disproportionate impacts of energy prices". It is not clear what regulatory changes, if any, will actually be proposed and implemented to address that or other equity considerations, but recent cap-and-invest legislation has included provisions focused squarely on affordability.

In September 2025, California enacted AB1207, which, as explained in CLPP brief #5 on allowance auctions and allocations, directed that free allowance allocations transition from gas to electric utilities by the beginning of 2031 and that auction revenues received by electric utilities be credited directly to residential customers on their bills, "in no more than four high-billed months of each year to maximize customer electric bill affordability". As explained in CLPP brief #2 on automatic adjustments and price certainty mechanisms, AB1207 also redirected the proceeds from potential price ceiling sales, which used to be required to achieve emissions reductions on at least a ton-for-ton basis, to instead be deposited in a new California Climate Mitigation Fund that the Legislature can appropriate for "purposes including, but not limited to, providing direct rebates and investments to reduce household energy costs, including incentives to transition to zero-emission vehicles and energy efficient housing." AB1207 also gave CARB the power to alter the allowance price containment reserve and/or the price ceiling if it finds that one or both is not adequately protecting California consumers.

Quebec's cap-and-invest system, which is linked with California's, sends revenues to the Electrification and Climate Change Fund, which finances initiatives in the 2030 Plan for the Green Economy, among other efforts. One of the core principles of the 2030 Plan is ensuring a "just climate transition", in which "the social, economic and environmental benefits and costs are distributed equitably and fairly between the various societal stakeholders and our current and future generations." The concept includes making sure that economic sectors are competitive, giving citizens options for reducing emissions, and focusing on the climate risks facing different regions and groups.

While it is a core principle that is somewhat infused throughout Quebec's program, there do not appear to be specific mechanisms in the province's cap-and-invest system or the Electrification and Climate Change Fund to ensure equity in design, implementation, or revenue investment. Some investments of revenue provide benefits to disadvantaged communities, but there do not appear to be any mandatory revenue investment goals or targets related to equity.

In terms of process, the Advisory Committee on Climate Change offers recommendations to respond to climate change and promote a just transition, including recommendations to improve the cap-and-invest program. Implementation of the 2030 Plan also includes collaboration and engagement with the public and indigenous communities. The Committee's focus, however, appears to be more on climate goals than on equity, and there do not appear to be specific processes focused on incorporating concerns from disadvantaged communities.

Washington, which launched its cap-and-invest program in 2023 following adoption of the Climate Commitment Act (CCA) in 2021, has the newest cap-and-invest program in operation. Equity is explicitly incorporated into the program and associated policies in numerous ways.

To ensure that the cap-and-invest program reduces not only GHGs but also air pollution in overburdened communities, Section 3 of the CCA directed the Department of Ecology to identify overburdened communities and then, in those communities, deploy an air monitoring network, develop a priority list of significant emitters of criteria pollutants, conduct biannual reviews of GHG and criteria pollutant levels and health impacts, establish air quality targets,

adopt stricter air pollutant standards, and develop a plan for engaging with overburdened communities and vulnerable populations to identify emitters and monitor emissions. (RCW 70A.65.020)

Section 4 of the CCA required an Environmental Justice Assessment every year or two (as appropriate) related to the investment of cap-and-invest revenues. It also directed agencies to have a minimum of 35% and a goal of 40% of investments providing direct and meaningful benefits to vulnerable populations in overburdened communities. (RCW 70A.65.030, 230) Another 10% of auction revenue must be used for projects with tribal support. (RCW 70A.65.230) Revenue from allowance auctions goes into three accounts, one of which is the Air Quality & Health Disparities Improvement Account, which funds projects that reduce criteria pollutants and health disparities in overburdened communities. Across 2023-2025 budgets, Washington estimates that of the $1.4 billion in CCA investments, 42% of investments are directed to benefit overburdened communities and 7.8% to benefit tribes. Investments include vouchers for low- and moderate-income electricity consumers, rebates for high-efficiency electric equipment (e.g., heat pumps), clean energy projects, weatherization, urban tree planting, bike and pedestrian grants, vehicle electrification, transit, and more.

Section 5 of the CCA directs the Environmental Justice Council (which was created by the companion Healthy Environment for All Act in 2021) to provide recommendations on the development and implementation of the cap-and-invest program and on the investment of revenues generated by the program. That includes recommendations on potential linkage with other jurisdictions, offsets, and investment plans. (RCW 70A.65.040)

As mentioned in CLPP brief #8 on linkage, before Washington can enter into an agreement to link its cap-and-invest program with one in another jurisdiction, the statute requires Ecology to 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". (RCW 70A.65.210) (Ecology has already done a preliminary analysis of the linkage criteria.) Ecology must also conduct an Environmental Justice Assessment prior to linkage. (RCW 70A.65.060)

As mentioned in CLPP brief #6 on offsets, Washington also has the ability to reduce the number of offset credits an entity can use if the state determines that the entity contributes substantively to the cumulative air pollution burden in an overburdened community. (RCW 70A.65.170)

New York is in the process of developing an economy-wide cap-and-invest program, following the 2019 enactment of the Climate Leadership and Community Protection Act (CLCPA). The CLCPA established a Climate Action Council to develop a Scoping Plan to meet the state's GHG reduction targets. In developing the Plan, the Council is directed to consult with the Environmental Justice Advisory Group and the Climate Justice Working Group (created by the CLCPA in § 75-0111). The Council is also directed to convene a Just Transition Working Group that includes representatives of EJ communities and labor organizations. (§ 75-0103) Regulations to achieve the state targets must be designed and implemented to be equitable, ensure that activities to comply with the regulations do not

lead to an increase in co-pollutants or otherwise disproportionately burden disadvantaged communities, and prioritize measures to reduce GHGs and co-pollutants in disadvantaged communities. (§ 75-0109)

In addition, the CLCPA directed agencies to invest resources such that disadvantaged communities receive at least 35% of the benefits of spending on clean energy and energy efficiency programs and projects, with a goal of 40%. (§ 75-0117) Following the direction of the CLCPA, one of the core principles of the proposed New York Cap-and-Invest (NYCI) program is investing in disadvantaged communities. Two recent studies found that higher allowance prices in NYCI could make low-income populations better off by increasing the amount of money that can be invested in community priorities and returned as dividends (as well as by spurring greater reductions in both GHGs and co-pollutants).

New York's December 2023 pre-proposal outline also explains the regulatory provisions being considered to ensure that NYCI does not place disproportionate burdens on disadvantaged communities. As mentioned in CLPP brief #6 on offsets, New York does not intend to include any provisions for offsets in NYCI because many GHG sources in the state are located in or near disadvantaged communities, and allowing these sources to meet some of their compliance obligation with offsets could enable more on-site emissions. New York is also considering adopting facility-specific emissions caps (either on GHGs, co-pollutants, or both) for emitters located in or near disadvantaged communities, in order to protect against the possibility of net increases in on-site emissions; these caps would be established through existing permitting processes and regulations, rather than through the new cap-and-invest program.

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 — currently does not explicitly consider environmental justice and equity in its operations. Studies have found that in RGGI states, EJ communities live closer to power plants and are exposed to more pollution from power plants than other populations, but there is no reference in the Model Rule to equity considerations.

That said, RGGI states operate their own programs, and the states within RGGI have expressed commitments to equity, including in the investment of RGGI auction proceeds. In 2022, around 30% of state investments of RGGI proceeds went towards EJ and equity, including clean transportation, electrification infrastructure, and low-income rate relief, weatherization, and efficiency. Most RGGI states also have EJ and equity advisory boards. In addition, as part of the third program review of RGGI, which concluded in July 2025, the participating states solicited feedback on equity and EJ considerations and said they prioritized opportunities for robust engagement from overburdened communities, although the revisions ultimately made to the RGGI design were not explicitly about equity. (For instance, they did not include options that had been raised for states to incorporate equity more explicitly into RGGI, such as studying the impact of RGGI on local air pollution in overburdened communities or requiring that minimum percentages of investments of revenue flow to overburdened and low-income communities.)

Discussion

The experiences and approaches of other North American jurisdictions can be instructive in considering how Maryland should advance procedural and distributive equity in a cap-and-invest program.

The other jurisdictions with cap-and-invest programs (or plans to develop such a program) have some similarities in how they have approached incorporation of equity considerations (with the exception of Quebec, which seems to have no explicit equity-related mechanisms). Jurisdictions have pursued measures both within and outside their cap-and-invest programs to advance procedural equity and distributive equity.

In general, the newer programs incorporate more — and more explicit — considerations of equity. Within the cap-and-invest program itself, Washington has equity requirements on the investment of revenue, findings that must be made prior to linkage, the ability to restrict offsets, and the involvement of an EJ advisory council to provide recommendations. Outside of the program, but tied to making sure it reduced air pollution in overburdened communities, Washington requires the Department of Ecology to monitor and set air pollution standards for emitters in those communities. New York is similarly considering a mix of inside-the-program and outside-the-program approaches, with no offsets allowed and revenue investment requirements, as well as potential facility-specific emissions caps and the convening of working groups to advise on the state's overall approach to meeting climate targets.

There are some measures in the older programs too. California has long had a minimum equity requirement for cap-and-trade revenue investments, and it has an EJ advisory committee to offer recommendations to the state on the broader Scoping Plan. While RGGI has no formal mechanisms to incorporate equity, the RGGI states certainly do.

California, RGGI, and Washington highlight some of the many ways that cap-and-invest revenues can be invested to provide benefits to overburdened and disadvantaged communities. Those programs have made numerous investments in transportation, weatherization, clean energy, energy efficiency, urban canopy, affordable housing, and much more.

The older programs (at least California and RGGI) have encountered criticisms that the measures in place (if any) have not adequately accounted for the disparate impacts that disadvantaged, overburdened communities face. Given the current federal onslaught against any program focused on promoting equity, state measures to ensure that cap-and-invest programs achieve equitable outcomes become even more important.

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 how to incorporate procedural and distributional equity into the development and implementation of the program.

A Maryland cap-and-invest program must consider equity in all aspects of program design. To advance procedural equity, participation and engagement measures, such as empowered advisory councils that have the power to weigh in on program design and implementation, are essential. Existing bodies, such as the Commission on Environmental Justice and Sustainable Communities, could potentially fill this role, but Maryland could also consider the New York approach of creating additional working groups focused more squarely on climate justice and a just transition.

To advance distributive equity, Maryland should consider various protections and prioritizations for underserved or overburdened communities, including prioritizing those communities for clean energy projects and workforce development, adopting facility-specific emissions caps for emitting facilities in those communities, restricting offset usage for those facilities (if Maryland allows offsets), and explicitly considering the benefits of reducing co-pollutants that negatively impact community health.

Importantly, achieving equity goals will require focused investment of allowance auction revenues and allocated allowance value to provide benefits to disadvantaged communities and vulnerable populations. In a 2024 executive order, Governor Moore directed every state agency (including MDE) to advance environmental justice, including applying Justice40 goals — which means 40% is MDE's target for the percentage of state climate funding that should be used for the benefit of disproportionately affected communities. MDE tracks state spending on GHG reductions, including the percentage benefitting disproportionately affected communities, and it was around 31% in FY24. MDE should continue to try to ensure that a meaningful percentage of the overall benefits from revenue investments flow to those communities.

Following the lead of California and Washington, as well as its own experiences in RGGI, Maryland should direct benefits to disadvantaged and overburdened communities through a wide variety of investments. These could include electrification of low-and moderate-income housing, enhanced weatherization and efficiency improvements, installation of electric vehicle charging infrastructure, increased access to and electrification of public transit and other mobility solutions, increased electrification of port traffic, clean energy workforce training initiatives, urban tree planting, and much more. MDE could also consider using a small portion of the revenues to provide dividends to low- and moderate-income households to counteract any potential regressive effects of a carbon price, although robust deployment of some of the measures just listed — such as electrification (possibly including solar), weatherization, efficiency, and increased public transit — could reduce energy costs enough to offset the effects of a carbon price and reduce the need for rebates.