

CAP-AND-INVEST FOR MARYLAND

ISSUE BRIEF 7: REPORTING

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**Climate Law &
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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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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 *establishing a reporting rule to gather the information needed to implement a cap-and-invest 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 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.) The MCCC also recommended that MDE "adopt a reporting rule requiring major polluters to begin reporting data in 2027 ... [to] be used to establish the baseline performance of major polluters...."

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 should construct a **reporting rule** to underpin its cap-and-invest program.

For reasons discussed in this paper, Maryland should follow the consistent approach pursued in other jurisdictions' reporting rules, including setting balanced emissions thresholds and requiring third-party verification from major emitters.

What Has to Be Decided Regarding a Reporting Rule?

Maryland is looking at establishing an economy-wide cap-and-invest program, but a vital precursor is to establish a reporting rule to gather the necessary data on the baseline performance of major emitters.

Data reporting provides the basis for a jurisdiction to establish emissions baselines, whether in aggregate or for particular entities. Jurisdictions must craft reporting rules that are tailored to the types of emitters within a jurisdiction.

Establishing a reporting rule requires determining which types of emitting sources are required to report, what the emissions thresholds are for having a mandatory reporting

obligation, what kind of information needs to be reported, whether that information needs to be independently verified, how much of the information should be available to the public, and much more. Indeed, while reporting may sound straightforward, there is a lot of detail in reporting regulations, specifying how different types of emitters must account for and report various types of emissions under a range of circumstances and situations.

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](#) is accompanied by and was preceded by the [Regulation for the Mandatory Reporting of Greenhouse Gas Emissions](#), known as the Mandatory Reporting Regulation or MRR. ([17 CCR § 95100 et seq](#)) While the cap-and-trade regulation was first [formally approved](#) in 2011 (with the program starting in 2013), the MRR was [first approved](#) in 2007 (and amended several times since).

The MRR applies to electricity generators, industrial facilities, fuel suppliers, and electricity importers, who must report their GHG emissions to the California Air Resources Board (CARB) every year. Some entities must report their emissions regardless of emissions level, including some electricity generators, cement producers, petroleum refineries, and facilities

that inject or geologically sequester carbon dioxide (CO₂). Other entities only have to report if they exceed 10,000 metric tons of CO₂e in a calendar year, including some electricity generators, iron and steel production, pulp and paper manufacturing, and petroleum and natural gas systems. ([17 CCR § 95101](#)) This reporting threshold is lower than the threshold for having a compliance obligation under the cap-and-trade system, which is 25,000 metric tons or more of CO₂e per year (as explained in [CLPP brief #4](#) on program coverage).

Emitters must submit emissions data reports by a specified date every year (April 10 for facility operators and fuel suppliers, June 1 for electric power entities). ([17 CCR § 95103](#)) The reports must follow federal regulations for the [U.S. EPA's GHG Reporting Rule](#) and must also

contain data on a facility's energy input and output. ([17 CCR § 95104](#)) All GHG reports have to be independently [verified](#) every year by entities accredited by CARB. Reporting entities cannot use the same verification bodies or verifiers more than six years in a row and must wait at least three years before using a previously utilized verifier. ([17 CCR §§ 95103, 95130](#))

If a facility subject to the cap-and-trade regulation has its emissions increase or decrease by more than 5% in a single year, its emissions data report must also include a brief narrative description of what caused it. ([17 CCR § 95104](#))

Emitters (other than fuel suppliers and electric power entities) that have no current compliance obligation under the cap-and-trade program, are not subject to the U.S. EPA GHG reporting requirements, and have total emissions below 25,000 metric tons of CO₂e can submit abbreviated emissions data reports that do not have to be independently verified. ([17 CCR § 95103](#))

The emissions data submitted to CARB in the reports is considered public information. ([17 CCR § 95106](#))

Quebec's cap-and-invest [system](#), which is linked with California's, is accompanied by and was preceded by the [Regulation respecting mandatory reporting of certain emissions of contaminants into the atmosphere](#) (RMRCECA). ([Q-2, r.15](#)) While the cap-and-trade regulation was first [formally approved](#) in 2011 (with the program starting in 2013), the RMRCECA GHG provisions were [first approved](#) in 2010 (and amended several times since). In addition to GHGs, RMRCECA covers other forms of air pollution (e.g., sulfur dioxide, nitrogen oxides, particulate matter, volatile

organic compounds) and toxic pollutants (e.g., metals, organic compounds).

The RMRCECA applies to all emitters of the covered pollutants above various thresholds, as well as to all operators engaged in capturing, storing, re-using, or eliminating any of the GHGs. ([Q-2, r.15 § 1](#)) The reporting threshold for GHG emissions is 10,000 metric tons of CO₂e, except for fuel distributors, which have a threshold of 200 liters. ([Q-2, r.15 § 6.1](#))

Emitters must submit emissions data reports by a specified date every year (June 1). The GHG emissions report must contain the total amount of GHGs emitted, the amount of each type of GHG emitted (or attributable to the fuel distributed), and information related to calculating emissions, including fuels used, production data, materials, and emission factors. ([Q-2, r.15 § 6.2](#)) The emissions data is public; the data related to calculation is treated as confidential. ([Q-2, r.15 § 2](#))

Emitters covered by the cap-and-invest program must also submit third-party verification of their emissions reports. As in California, emitters may not use the same verifier more than six years in a row and must wait three years before using a previously used verifier. ([Q-2, r.15 § 6.6](#))

Washington's cap-and-invest [program](#) started in 2023, following passage of the Climate Commitment Act (CCA) in 2021. The state's [mandatory GHG reporting](#), however, began in 2012, though it was broadened in 2022 to align with the requirements of the cap-and-invest program. ([WAC 173-441](#)) The CCA built off of the existing framework, while also adding some [reporting requirements](#) unique to the cap-and-invest program.

The mandatory GHG reporting requirements apply to the owners and operators of facilities

that directly emit GHGs, fuel suppliers, and electric power entities; the threshold for each is 10,000 metric tons CO₂e or more per year. ([WAC 173-441-030](#)) As in other jurisdictions, the threshold for having a compliance obligation under the cap-and-invest program is 25,000 metric tons CO₂e.

Annual GHG reports must be submitted by March 31 for most emitters and by June 1 for electric power entities. The reports must contain data on the annual emissions of each GHG, generated and purchased electricity, fuel use, and facility product data. If emissions go up or down by 5% compared to the previous year, emitters must provide a brief narrative describing why. ([WAC 173-441-050](#))

Beginning with the 2023 emissions year (reported in 2024), an entity emitting 25,000 metric tons CO₂e or more per calendar year or that has a cap-and-invest compliance obligation must have the annual GHG reports [verified](#) by a third party. Full verification reports are required at least once every three reporting years; the other two years can utilize less intensive verification services. As in California and Quebec, emitters cannot use the same verifier for more than six years in a row and must wait at least three years before re-using a previously used verifier. ([WAC 173-441-085](#))

Emissions data submitted to the Department of Ecology is public information. ([WAC 173-441-150](#))

Natural gas utilities, electric utilities, and emissions-intensive, trade-exposed (EITE) industries — which receive free allocations of allowances under the cap-and-invest program (as explained in [CLPP issue brief #5](#) on auctions and allocations) — had to provide [additional information](#) so Ecology could

determine the number of allowances they should be allocated. ([WAC 173-446-220 to 240](#))

New York is in the process of developing an economy-wide cap-and-invest [program](#). As [the first](#) part of that, the Department of Environmental Conservation (DEC) in December 2025 [finalized](#) a [mandatory GHG reporting rule](#) (6 NYCRR Part 253). The Mandatory Greenhouse Gas Reporting Program Rule describes the GHG sources that have to report to DEC, as well as the emissions thresholds. As in other jurisdictions, the scope of reporting under the rule (in terms of entities and emissions thresholds) is broader than would be expected to be covered under the cap-and-invest program.

New York [applies](#) the reporting rule requirements to owners and operators of facilities that directly emit GHGs, fuel suppliers, waste haulers and transporters, electric power entities, suppliers of agricultural lime and fertilizer, and anaerobic digestion and liquid storage of waste. Some entities must report their emissions regardless of emissions level, including fuel suppliers, electric power entities, and suppliers of agricultural lime and fertilizer. The reporting threshold for facilities, waste haulers and transporters, and anaerobic digestion and liquid storage of waste is 10,000 metric tons of GHG emissions per year.

New York requires emissions data reports by June 1 each year, with reports following the requirements of the U.S. EPA's GHG Reporting Program. Large emission sources — which include facility owners/operators and waste haulers/transporters above 25,000 metric tons of GHG per year, as well as fuel suppliers above particular volumes — have to obtain third-party verification for emissions reports. As in other jurisdictions, New York limits emitters to using the same verifier for no more than six

years in a row and waiting at least three years before re-using a previously used verifier.

As other jurisdictions do, New York collects supporting data in addition to GHG emissions data, such as information on facility-level energy inputs and outputs. If emissions go up or down by 5% compared to the previous year, emitters have to provide a brief narrative describing why.

Emissions data submitted to DEC is public information (unless some is specifically claimed to be confidential).

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 — has a different reporting history and structure, due to the electric-only nature of the program. RGGI simply applies to any electric generator with a nameplate capacity of 25 megawatts or higher. ([Subpart XX-1.4](#)) Each state's regulations require each generating unit to install continuous monitoring systems and to [collect, record, and report data](#) on CO₂ mass emissions. That data is recorded in a [U.S. EPA power plant emissions database](#) quarterly, and then the data is transferred automatically to the RGGI CO₂ Allowance Tracking System (COATS). Emissions reports from RGGI COATS are available quarterly, annually, and by compliance period.

Discussion

The experiences and approaches of other North American jurisdictions can be instructive as Maryland considers establishing a reporting rule to underpin a cap-and-invest program.

While each jurisdiction with a cap-and-invest program tailors the details of reporting to fit the circumstances of that jurisdiction, there is substantial similarity among the jurisdictions' reporting rules (with the exception of RGGI). One of those similarities is the timing: each jurisdiction adopted the reporting rule prior to implementing the cap-and-invest program, so that it could base the program on the best information available.

As one would expect, the reporting rules all apply to the main sources of GHG emissions in a jurisdiction — and the scope of those sources is broader than those that might have a compliance obligation under the cap-and-invest program. This data can help determine compliance obligations under the cap-and-invest program, but it can also help improve a

jurisdiction's understanding of its GHG emissions sources. With more comprehensive information from a broader range of reporting entities, a jurisdiction can also better determine what additional programs and policies may be needed to address emissions from emitters not covered by the cap-and-invest program.

The issue of setting reporting thresholds requires balancing the need for comprehensive GHG accounting with the ability of different types and sizes of emitters to report. All the jurisdictions reviewed in this paper, when adopting a quantitative reporting threshold, generally adopted the same one: 10,000 metric tons CO₂e or more per year. Washington adopted that threshold for all emitters, while Quebec did so for all but fuel suppliers (which have a liter-based threshold). California and

New York require some emitters to report regardless of emissions level and use the 10,000 metric ton threshold for others.

Verification requirements present similar questions of balance — balancing integrity and accuracy against the burden of requiring third-party assessment. All of the jurisdictions reviewed in this brief require independent verification of emissions reports from emitters that emit more than 25,000 metric tons CO₂e or that have a compliance obligation under the cap-and-invest program. All of the jurisdictions with programs in operation (California, Quebec, and Washington) have the same requirements limiting the re-use of verifiers to six years in a row, followed by a three-year hiatus, to ensure the independence of the verification services; New York has the same limitations.

The contents of the emissions report are also similar across jurisdictions: emissions data for all GHGs, as well as the data needed to calculate emissions, such as fuel use. The former is public in all jurisdictions, while the latter is or can be confidential.

All of the jurisdictions drew on existing U.S. EPA GHG reporting, though it is worth considering what changes may need to be made in state regulations if the EPA programs are [dismantled](#) under the Trump Administration, which has [targeted](#) and [proposed eliminating](#) the GHG Reporting Program (among numerous other programs). (New York [made clear](#) that its references to the federal program are considered static references to a specific version of the federal regulation and would be unaffected by a potential repeal.) Some

jurisdictions, such as Washington, also built on existing state GHG reporting.

Broadening the lens beyond individual emitter reports, accurate reporting and tracking of progress in reducing emissions depends on having methodologically consistent state GHG accounting systems. California is instructive in this regard. In California, the Independent Emissions Market Advisory Committee (IEMAC) has [identified](#) past and current inconsistencies in California's three GHG accounting systems — its reporting rules, its statewide GHG inventory, and its method for establishing base year emissions (against which progress toward state emission reduction targets are measured). For years, the reporting rule used different global warming potentials than the other two accounting systems, but that problem was corrected in 2021. In 2022, California changed the methodology for calculating the state's GHG inventory to rely primarily on reporting rule data, resulting in substantial downward revisions, but it did not make a similar adjustment to the base year methodology, which has the practical effect of making the state's reduction targets weaker. There is also inconsistency in the way California's three accounting systems treat land use emissions and removals, as they are included in base year emissions but not in the reporting rule and the inventory. It is important to use consistent methodologies across all state GHG accounting systems to get an accurate picture of how a jurisdiction is progressing in achieving its GHG targets. It is worth considering whether and to what extent the goal of consistency should be pursued between states as well, for comparability and to facilitate linkage.

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*. A key precursor to establishing such a program is to gather the necessary data on the baseline performance of major emitters.

Maryland already collects some GHG information, which is part of what is used to generate the state's triennial [GHG inventory](#). For instance, MDE's [Emission Certification Reports](#) include reporting of GHG emissions from electricity generators and industrial facilities. MDE is also developing a Heating Fuel Provider Reporting Program, expected to launch in 2026, which is designed to inform a new [Clean Heat Standard](#) and the statewide greenhouse gas inventory. Maryland should build on its new and existing GHG reporting to gather the information needed to implement a cap-and-invest program. Given the strong similarities among other jurisdictions' reporting rules, Maryland has robust templates to follow in establishing its own reporting rule.

Maryland's rule should encompass the main sources of emissions in the state. Maryland could either adopt a numeric emissions threshold for all types of emitters (e.g., 10,000 metric tons CO₂e) or require some types of emitters to report regardless of emissions levels. The reports should include emissions data and supporting data, with at least the former being public information. Larger emitters that are likely to have compliance obligations under a cap-and-invest program (e.g., above 25,000 metric tons CO₂e) should be required to provide third-party verification of the emissions reports, and Maryland should replicate other jurisdictions' requirements to ensure the independence of the verifiers.

Drawing on California's experiences, and with the benefit of starting from scratch on a reporting rule, Maryland should make sure that its GHG inventory, its base year emissions estimates, and its reporting requirements use consistent accounting methods, including with respect to global warming potentials and land use emissions and removals. As noted above, Maryland should also consider whether and to what extent to utilize accounting methods that are consistent with methods used in other jurisdictions.

In addition, Maryland should craft its reporting rule to be coherent and resilient should there be any changes in or elimination of EPA regulations and programs, as looks increasingly likely.