

Secretary, Department of Environmental Protection: Cap-and-Trade program in Pennsylvania

Pennsylvania is a significant contributor to U.S. greenhouse gas (GHG) emissions, mainly due to significant amounts of fossil fuel combustion and the release of harmful gases like methane. Surprisingly, 12 industrial facilities, alongside 287 others that report emissions to the U.S. EPA, contribute almost 60% of the state's total climate pollution. In 2020, Pennsylvania was ranked as the fourth-largest emitter of GHG in the United States¹, which suggests that the state faces the need to act to curtail its GHG emissions. Therefore, we urge the Secretary of the Department of Environmental Protection, Pennsylvania, to institute a Cap-and-Trade program, based on a model implemented by California's Environmental Protection Agency's Air Resources Board, as an instrument to reduce GHG emissions in the state.

California's Cap-and-Trade program

The cap-and-trade program in California is an integral constituent of Article Bill No. 32, which requires California to return to 1990 levels of greenhouse gas emissions by 2020. Passed in 2013, a statewide cap on elements responsible for 85% of California's GHG emissions (contributed by around 450 entities that emitted more than 25,000 Metric tons of carbon dioxide equivalent (MTCO₂e) annually) was established to reduce GHG emissions and promote long-term investment in energy-efficient technology². The program essentially has 3 important facets³.

1. Compliance instruments
 - a. **Allowance**: An allowance represents a transferable license to release one metric ton of greenhouse gases equivalent to carbon dioxide emissions.
 - b. **Offsets**: An offset credit corresponds to a reduction in GHG emissions or an improvement in GHG removal, equivalent to one MTCO₂e.
2. Auctions: Emitters purchase credits at California Air Reserve Board's (CARB) auctions that could be traded with other entities or saved for future use. Auction revenue benefits utility customers through the California Climate Credit and funds projects like the [California Climate Investments program](#) for GHG reduction.
3. Carbon Trading: Entities that are unable to fulfil their GHG emission limits through emissions reduction, buying allowances at the quarterly auction, or acquiring offsets have the option to engage in trading with other covered entities that possess surplus credits. This system intends to enhance flexibility, mitigate economic consequences, and encourage emission reduction in cost-effective ways.

The Cap-and-Trade program has had a positive impact on GHG emissions in California

California's greenhouse gas (GHG) emissions have decreased by 14% since the start of the cap-and-trade program⁴. Moreover, through the California Climate Investment programs, funded by the proceed from the Cap-and-Trade program, California has achieved significant feats in containing the effects of climate change. As per the 2023 Mid-Year Data Update, which reports the cumulative progress of the California Climate Investments⁵:

- GHG emissions have been reduced by 98.0 Million MTCO₂e
- 569,477 individual projects have been implemented
- 11,402 affordable housing units have been under contract
- 217,763 urban trees have been planted
- 1,079 transit agency projects have been funded to add or expand transit service
- 415,900+ rebates have been issued for zero-emission and plug-in hybrid vehicles
- 928,000+ acres of land under conservation or restoration

Thus, A Cap-and-Trade system, as implemented in California, should be introduced in Pennsylvania due to its proven effectiveness in reducing GHG emissions, market-driven flexibility, alignment with environmental protection goals, economic benefits, and adaptability to meet evolving climate targets. Such programs offer a model for innovation and can help states work collectively toward climate goals.

¹ Tony Dutzik, David Masur, and Ashleigh Deemer, "Pennsylvania's Dirty Dozen," PennEnvironment Research & Policy Center, May 9, 2023, <https://environmentamerica.org/pennsylvania/center/resources/pennsylvanias-dirty-dozen/>.

² "ARB Emissions Trading Program" (Air Resources Board, n.d.), https://ww2.arb.ca.gov/sites/default/files/cap-and-trade/guidance/cap_trade_overview.pdf.

³ "CALIFORNIA CLIMATE POLICY FACT SHEET: CAP-AND-TRADE" (Berkeley Law, n.d.), <https://www.law.berkeley.edu/wp-content/uploads/2019/12/Fact-Sheet-Cap-and-Trade.pdf>.

⁴ "California's Cap-and-Trade Program: Frequently Asked Questions," *Legislative Analyst's Office* (blog), October 24, 2023, <https://lao.ca.gov/Publications/Report/4811#:~:text=The%20cap%2Dand%2Dtrade%20program's,global%20leader%20on%20climate%20issues>.

⁵ "2023 MID-YEAR DATA UPDATE" (California Climate Investments), accessed November 7, 2023, https://ww2.arb.ca.gov/sites/default/files/auction-proceeds/ci_2023mydu_cumulative_statistics.pdf.