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The Greenhouse Gas Reduction Fund: Current Status and Choices Ahead

PRESENTED TO: Assembly Budget Subcommittee No. 4 on Climate Crisis, Resources, Energy and Transportation
Hon. Steve Bennett, Chair

LEGISLATIVE ANALYST'S OFFICE

Cap-and-Trade Revenues Support GGRF

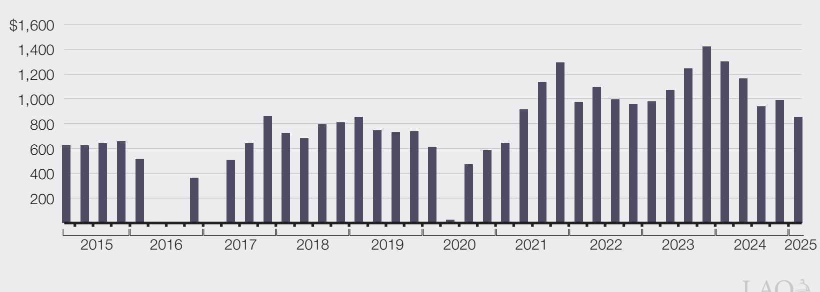
Greenhouse Gas Reduction Fund (GGRF) Is Supported by Revenue From Sale of Allowances. The California Air Resources Board (CARB) issues a set number of allowances to emit greenhouse gases (GHGs) each year equal to the annual cap. Under current regulations, CARB sells about half of these allowances at quarterly auctions and the revenues are deposited into GGRF. (The remaining half of allowances are given away for free to electric utilities, natural gas suppliers, and industrial facilities.)

Annual GGRF Revenues Vary. GGRF revenues fluctuate from auction to auction. In recent years, cap-and-trade auctions have raised between $2 billion and $5 billion per year.

- Multiple factors influence revenues—including interest in purchasing allowances from outside investors, confidence in the longevity of the program, the specific program design features, and the balance of supply versus demand for allowances.
- Auction revenues dropped notably in 2020 in response to economic slowdowns during the COVID-19 pandemic, as well as in 2016-17 prior to the last reauthorization of the program. During these periods, CARB failed to sell all the available allowances.

Quarterly Cap-and-Trade Auction Revenue Has Fluctuated Over Time

(In Millions)



Cap-and-Trade Revenues Support GGRF

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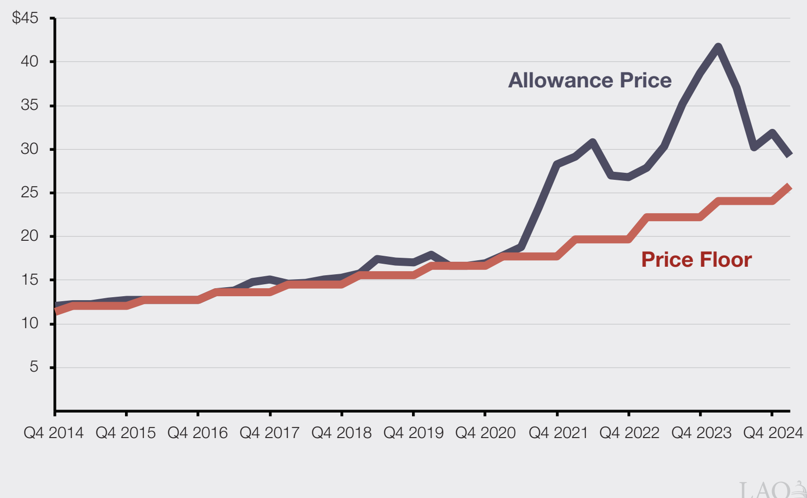
GGRF Revenues Would Be Higher if Allowances Prices Ever Get Close to the Price Ceiling. Allowance prices generally have been at or near the price floor. Should allowance prices increase, GGRF revenues would increase accordingly (as would the costs paid by emitters, and ultimately by households and businesses).

Allowance Prices Generally Have Been Close to the Price Floor



Role of GGRF Revenues in Program

Generating Revenue Not the Primary Purpose of Cap-and-Trade. From an economic perspective, auction revenues are considered a by-product of cap-and-trade programs rather than their primary aim—which is GHG reductions. However, revenue generation can be an important co-benefit by providing billions of dollars annually to help address the state's priorities.

Program Design Choices Affect GGRF Revenues. Various program design features—such as the number of allowances issued, the level of the price floor and ceiling, and the distribution of allowances to GGRF versus other purposes—affect not only the GHG reductions and economic impacts from the program, but also the amount of GGRF revenues.

Spending Revenues in "Capped" Sectors Generally Does Not Reduce GHGs. Spending auction revenue to reduce GHGs from sources of emissions covered by the program's requirements—such as electricity generators and oil refineries—likely has no net effect on overall emissions. As long as the cap is limiting statewide emissions, subsidizing GHG reductions from one capped source will simply free-up allowances for other emitters to use. The end result is a change in the *sources* of emissions, but no change in the overall *level* of emissions.

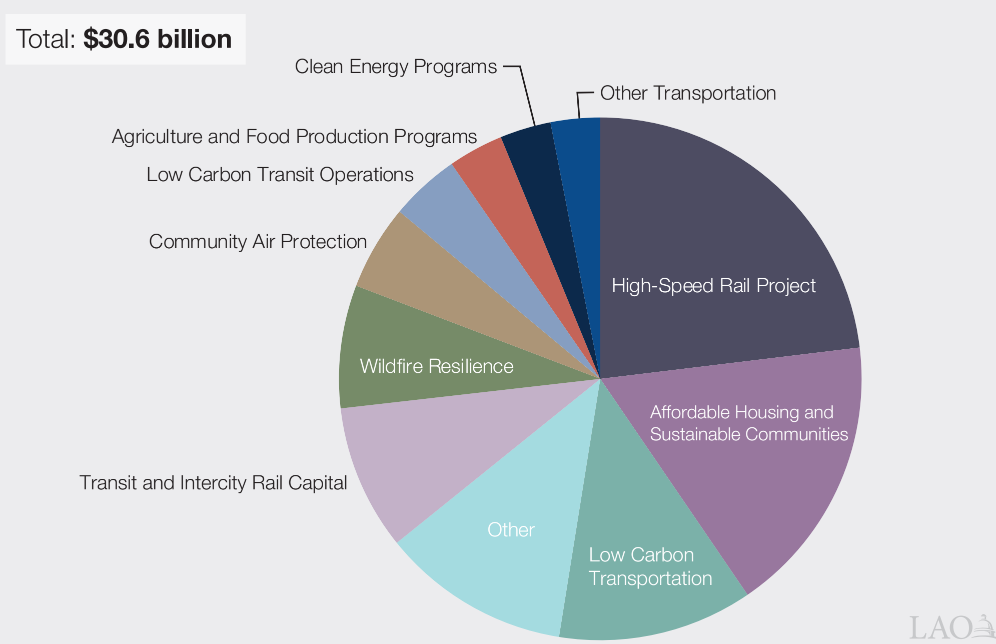
- In contrast, spending on reductions from uncapped sources—that is, entities and sectors that are not subject to the cap-and-trade program, such as agriculture and landfills—is likely to reduce overall emissions.

GGRF Supports Various Programs

In General, State Has Used Cap-and-Trade Auction Revenues to Support Activities That Further Its Climate Goals. Since its inception, GGRF has supported a wide range of programs, many of which are aimed at reducing GHG emissions. However, from a legal perspective, the funds are considered akin to tax revenues, so they can be used for any purpose.

Cumulative Cap-and-Trade Spending by Area

2013-14 Through 2023-24



GGRF Supports Various Programs

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Most GGRF Spending Directed by Statute. By statute, roughly two-thirds of auction revenues are dedicated for certain purposes. Most of these statutory GGRF spending commitments are continuously appropriated, meaning they are not subject to appropriation by the Legislature through the annual budget act. The remaining revenues are available for appropriation by the Legislature for other spending programs determined on an annual basis.

Continuous Appropriations and Other Statutorily Required GGRF Appropriations

Program	Department	Appropriation Amount
High-speed rail project	HSRA	25 percent of annual revenues
Affordable Housing and Sustainable Communities Program	SGC	20 percent of annual revenues
TIRCP	CalSTA	10 percent of annual revenues
Low Carbon Transit Operations Program	Caltrans	5 percent of annual revenues
Healthy and resilient forest activities	CalFire	$200 million
Safe and Affordable Drinking Water Program	SWRCB	5 percent of annual revenues (up to $130 million)
Manufacturing tax credit	N/A	Roughly $100-$140 million
State Responsibility Area fee backfill	CalFire	Roughly $70-$90 million

GGRF = Greenhouse Gas Reduction Fund; HSRA = High-Speed Rail Authority; SGC = Strategic Growth Council; TIRCP = Transit and Intercity Rail Capital Program; CalSTA = California State Transportation Agency; Caltrans = California Department of Transportation; CalFire = California Department of Forestry and Fire Prevention; SWRCB = State Water Resources and Control Board; and N/A = not applicable.

State Uses Remainder of Annual GGRF for Various Programs and Activities. Spending priorities outside of the statutory appropriations change each year but have typically focused on areas such as low carbon transportation and community air protection. Over the past two budgets, this discretionary spending has been directed mostly to helping to "backfill" or sustain prior spending plans and commitments in the context of the state's budget problems.

- Some of the largest categories of planned out-year backfills include activities related to zero-emission vehicles and clean energy.

Legislature Faces Important Choices Around GGRF

Reauthorization Presents Important Opportunity for Legislature to Weigh In. Chapter 135 of 2017 (AB 398, Garcia) extended the cap-and-trade program through 2030. As the Legislature considers reauthorization past 2030, it could consider making changes to GGRF spending priorities, as well as to the program's design. Some of these key choices include:

- ***Whether to Change Allocation of Allowances.*** The Legislature could change the share of allowances that are provided for free versus sold to benefit GGRF. (Currently, this allocation is specified in regulation rather than statute.) Selling a greater share at auction would generate additional GGRF revenue and allow for more state-level spending on various activities, but would come at the expense of free allowances that mitigate ratepayer impacts and protect against industry leakage.
- ***Whether to Modify Historical GGRF Funding Priorities.*** The Legislature could change the activities that are funded by GGRF to align with updated priorities. For example, the Legislature could:
  - ***Eliminate Some Statutory Allocations.*** If programs no longer reflect the Legislature's highest priorities for multiyear funding, it could cease funding them on an "autopilot" continuous basis. This would free up additional funding for addressing emerging and evolving priorities.
  - ***Reduce Some Statutory Funding Levels.*** Even if existing funded programs still are among the Legislature's highest priorities, it could consider adjusting their current funding levels. For example, the Legislature could establish fixed annual GGRF appropriation amounts for certain statutorily funded programs rather than providing them with set percentages of auction revenues. In years when auction revenues are comparatively high, this would make more of that additional funding available for other priorities.

Key Considerations Around GGRF Choices

Various Key Factors to Consider Related to GGRF Decisions. Some of the key factors the Legislature could consider when making its choices about GGRF include:

- ***Highest Legislative Policy Priorities.*** The Legislature will want to consider what its highest priorities are for this highly flexible funding source and whether they have changed since many of the statutory allocations were put into place roughly a decade ago.
- ***Role of GGRF in Addressing Affordability.*** Historically, GGRF has not been used to help mitigate the program's impacts on consumer costs. Instead, the free allowances provided to utilities generally have served this purpose. However, in light of recent concerns around affordability, the Legislature could consider directing some GGRF revenues to this purpose as well. Such an approach could be particularly compelling given that reauthorization could put upward pressure on allowance prices, thereby increasing the costs paid by emitters (and ultimately consumers).
- ***Role of GGRF in Funding GHG-Reductions.*** Historically, a main focus of GGRF has been funding programs that reduce GHGs. However, funding such activities in capped sectors generally should not be necessary, as the cap already ensures GHG reductions take place regardless of how GGRF spending is directed. Accordingly, if the Legislature would like to use GGRF to reduce GHGs, it generally makes more sense to do outside of the capped sectors.
  - Some other factors to consider when using GGRF to achieve GHG reductions include (1) available information on the cost-effectiveness of this spending, (2) how the spending interacts with other programs besides cap-and-trade, and (3) any co-benefits beyond GHG reductions that might be achieved through the proposed spending.
- ***Trade-Offs Between Flexibility and Funding Certainty.*** Providing a smaller share of GGRF as continuous appropriations or other statutory allocations would free up additional funding for discretionary purposes. This would allow the Legislature to better respond to its evolving policy priorities and increase legislative oversight. However, it would provide less funding certainty to the affected programs.