Auction Allocation

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As described in the chapter on Allowance Allocation, under California’s cap and trade program, allowances are allocated to regulated entities in one of three ways:

1. Emissions intensive and trade exposed (EITE) entities are allocated permits for free on the basis of past output. This allocation, an implicit production subsidy, is designed to mitigate the risk of emissions ‘leakage’;
2. Investor-Owned Utilities (IOUs) also receive free allowances. Utilities are required to sell these allowances at auction and proceeds must be used to benefit ratepayers. Electricity Publicly Owned Utilities (POUs) also receive free allowances, but they are not required to consign allowances to the auction. Electricity distribution companies receive 45% of the freely allocated allowances in total. Natural gas utilities receive another 20% of the freely allowances and they are expected to increasingly consign allowances to the auction going forward;
3. GHG permits that are not allocated to EITE entities or IOUs are sold at auction. Revenue from the sale of these permits is deposited in the Greenhouse Gas Reduction Fund (GGRF) and allocated to various state programs.

In the event that the supply of permits sold at auction exceeds demand, permits allocated to IOUs are sold first. Any unsold utility allowances are automatically reoffered at the next quarterly auction. Unsold state allowances are put in a holding account and reoffered after two consecutive auctions clear the floor price. If permits are unsold after a period of 24 months, these allowances are transferred to the price containment reserve.

In 2016/2017, approximately 38 million allowances went unsold. Looking ahead, given the substantial bank of unused allowances, it seems possible that excess supply conditions could occur again in future auctions, particularly during periods of economic downturn. In this oversupply situation, the price stability afforded by a binding price floor comes at a cost of increased auction revenue volatility. This raises two related issues. The first concerns the choice of which programs to protect when revenues fall short. The second relates to the larger discussion of allowance supply adjustments.
Revenue Volatility

The global pandemic has produced significant turmoil in state budgets across the country, and California has not been spared (although state revenues have proven to be far more resilient to the stay-at-home orders than initially predicted). The economic downturn has significantly affected GHG auction revenues as the economic recession has led to reduced GHG emissions and therefore reduced demand for GHG permits. The first auction during the pandemic in May of 2020, for example, failed to sell out, though the August and November auctions rebounded.

Because IOU permits are auctioned first, those programs funded by the sale of IOU permits are relatively less exposed to auction revenue volatility compared with programs funded through GGRF revenue. The primary IOU-funded program is the California Climate Credit, which provides a rebate on utility bills to California electricity ratepayers. As the Allowance Allocation chapter discusses, the state may wish to reconsider whether all ratepayers should receive a rebate regardless of income. A related question pertains to whether ratepayer climate credits (and other programs supported by IOU revenues) should be prioritized over other programs funded under the GGRF when GGRF funds decline because allowance supply exceeds demand.

When auction revenues fall short of expectations, planned GGRF expenditures must be scaled back. As the Legislative Analyst has described, approximately 65 percent of GGRF auction revenues are used to fund continuous appropriations such as highspeed rail, affordable housing, and safe drinking water programs. The remaining revenue is allocated to discretionary programs. In the event of a revenue shortfall, these discretionary programs get hit hardest because their funding is contingent upon available GGRF revenue. Discretionary programs include AB 617, low carbon transportation funding, including for low-income communities, healthy forests, and others.

It is unclear whether the Legislature intends to prioritize funding cuts to discretionary programs over continuously appropriated programs or whether these programs should fare worse during times of revenue volatility. Given limited GGRF funds and prevailing uncertainty about future revenues, the Legislature should consider re-evaluating the current protocols for allocating scarce revenues and clarifying spending priorities.

Allowance Supply

In the event that the Air Resources Board adopts a mechanism to restrict allowance supply, it will need to consider how to implement the restriction across the three categories of allowance allocation (auctioned allowances, IOU and POU allowances, and free to industry). One obvious approach would be to implement an across the board, proportionate reduction. But a proportionate reduction may not be the best method to achieve the state’s objectives. If the state wants to maintain or increase support for GGRF-funded programs, for example, it may wish to reduce the quantity of permits allocated to EITE entities and IOUs by a greater amount.
than those sold at auction. Conversely, if the state wants to protect residential ratepayers for GHG-related costs via the climate credit program, it may wish to impose disproportionately fewer restrictions on IOU allowance supply. Our point is not to make a substantive recommendation about how to distribute restrictions in allowance supply across the three categories but instead to recommend that CARB evaluate the efficiency and equity implications of alternative approaches to reducing permit supply.

Our three recommendations, in sum, are:

1) That CARB evaluate whether IOU allowances should continue to be prioritized at auction given the effects on programmatic funding in the event that there is excess supply in the GHG permit auction;

2) That the Legislature prioritize programs funded through GGRF revenue to ensure that, in the event of revenue shortfalls, the highest priority programs are affected the least;

3) That CARB, if it adopts a mechanism to adjust allowance supply, consider how to implement reductions in allowances across the three categories of allowance supply to regulated entities in accordance with state priorities.