

DISTRIBUTION OF ALLOWANCES UNDER THE CLEAN POWER PLAN



In August 2015, the U.S. Environmental Protection Agency (EPA) finalized the Clean Power Plan for existing power plants. Under the rule, states can implement a mass-based or rate-based compliance plan to reduce greenhouse gas emissions from the power sector. States choosing a mass-based approach must also decide how to allocate emission allowances. This fact sheet provides an overview of how allowances could be distributed under a mass-based approach and the policy objectives achieved by their distribution.

WHAT'S AN ALLOWANCE AND HOW IS IT USED FOR COMPLIANCE?

An emissions allowance is the legal right to emit one ton of carbon dioxide. Under a mass-based compliance approach for the Clean Power Plan, states must limit their total power sector emissions to a target level (e.g., expressed in tons of carbon dioxide) established by the U.S. Environmental Protection Agency (EPA). To comply with the target, regulated sources must obtain emissions allowances (typically, tradable permits) equal to the amount of their carbon dioxide emissions for each specified period. Note that in the Clean Power Plan, state emission targets decrease over time (starting in 2022 and thereafter), which guarantees that emission reductions actually occur. By limiting and reducing the number of allowances over time, the forces of supply and demand result in a market for tradable allowances, which in turn produces an allowance price.

WHAT'S THE DIFFERENCE BETWEEN FREE ALLOCATIONS AND AUCTIONING ALLOWANCES?

States choosing a mass-based approach must also decide how to allocate emission allowances. Because total emissions are capped, the allocation method of allowances does not affect the environmental integrity of the program. The available distribution methods are: (1)

distribute allowances for free, (2) auction the allowances, or (3) a combination of free allocation and auction.

Emission allowances may be distributed for free, but policymakers need to decide who would receive these allowances for what purposes (e.g., regulated sources to mitigate consumer impacts, other clean energy generators, or particular classes of electricity consumers) and on what basis (e.g., past emissions or output in a base year, environmental performance standard, or an updating approach based on more recent emissions or output).

Allowances could also be auctioned, with sales revenue accruing to the state. In this case, policymakers must determine the type of auction to be conducted (e.g., ascending-bid or sealed-bid auction), how often (e.g., quarterly or yearly), and how to use the funds generated from the auction (e.g., renewable energy and energy efficiency projects, assistance to low-income consumers, general state treasury, etc.).

If a combined approach is taken—with allowances distributed for free and auctioned—then policymakers will face all of these decisions.

HOW COULD A STATE ALLOCATE FREE ALLOWANCES?

States can determine their preferred method for allowance allocation. However, the method of allowance distribution will affect who bears the cost of the program.

A state may distribute allowances free of charge directly to regulated sources, and the result would be similar in practice to traditional command-and-control regulations that allow sources to emit up to a permitted level for free. However, tradable allowances have a market price, so regulated sources face an opportunity cost for using allowances for compliance rather than reducing emissions by other means. Utility sector regulations will determine, in part, how costs may be passed on to end-use consumers. In traditional Cost-of-Service states, the allocation to covered sources will flow through to consumers and buffer any price increase otherwise created by the program. Therefore, regulators should monitor entities to ensure that affected sources are choosing the lowest cost options and maximizing benefits for the end-users.

Alternatively, a state could address electricity rate concerns in deregulated electricity markets by giving a share of the allowances at no cost to local distribution companies (i.e., entities that deliver electric power to end users and wholesale customers) on behalf of electricity consumers. At the bottom of the energy value chain, end-use consumers cannot pass on energy costs. As such, a state may want to take an allocation approach that distributes allowances to mitigate the end user's cost burden.

States may also choose to provide allowances to others in the electricity sector, such as those who have taken early action to reduce their emissions, emissions-free electric generators (e.g. renewable, nuclear, or hydro-electric generators), or energy efficiency operators.¹ This policy step would provide resources for other objectives by allowing them to sell emissions on the market.

HOW DOES THE PROPOSED FEDERAL PLAN ALLOCATE ALLOWANCES?

EPA would implement a federal plan in any state that does not have an approvable plan. Under EPA's proposed mass-based federal plan, allowances would be distributed for free to affected electric generating units based on historical generation (i.e., average annual net generation from 2010 to 2012, and for units after 2012, EPA-estimat-

ed 2012 net generation based on net summer capacity). About 90 percent of total allowances would be allocated to affected electricity generating units. The remaining allowances would be pooled into three set-asides for: early action on renewable energy and energy efficiency projects, output-based allocation for existing natural gas combined cycle units, and renewable energy projects. The set-asides for early action and output-based allocations vary state by state while the set-aside for renewable energy is set at 5 percent for each state.

HOW COULD A STATE USE REVENUE FROM ALLOWANCE AUCTIONS?

If states choose to auction allowances, they must determine how to use auction revenues. Some states may need additional legal authority to establish an auction and to specify how the resulting revenues are used. Auction revenues may be used to meet specific policy goals, such as protecting consumers and industries from the impacts of higher electricity rates, spurring deployment of renewable energy and energy efficiency projects, or even reducing other taxes.

Ten states already have cap-and-trade (i.e. mass-based) programs for greenhouse gas emissions and these states have taken different approaches in how to use auction revenues. The states in the Regional Greenhouse Gas Initiative direct at least 25 percent of all auction revenue to consumer benefit, renewable energy, or energy efficiency programs. California uses a framework to determine how the state will invest auction revenues in local projects.

ENDNOTES

1 Such allocations would not create additional emissions reductions, but would provide additional financial support to these sources beyond what they can expect from rising wholesale prices caused by the Clean Power Plan. While this may raise the overall cost of the program by decreasing economic efficiency, it may also satisfy local preferences for particular investments.



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