

# Clean Power Plan Fact Sheet

## Distributing Allowances in a Mass-based Plan

EPA has provided both a mass-based and a rate-based goal for each state covered by the Clean Power Plan (CPP). This Fact Sheet describes how allowances may be distributed in mass-based states.

- In mass-based CPP approaches, an “allowance” is a permit that allows electric generating units (EGUs) to emit one short ton of CO<sub>2</sub>. (States may forego allowances and trading by prescribing EGU-specific mass caps, but this approach would reduce flexibility and may raise costs.)
- If allowances are used, EGUs must acquire and then surrender allowances in numbers sufficient to account for actual emissions that have been tracked directly through Continuous Emissions Monitoring Systems (CEMS). Most EGUs covered by the CPP already have CEMS in place.
- Under state plans, state governments issue the allowances. The number issued by a particular state is equal to the state’s mass-based target for a given year/compliance period.
- If a state opts for a State Measures approach, it may choose to regulate CO<sub>2</sub> emissions from the electric power sector and other sectors under a common umbrella, with allowances trading across sectors. For CPP compliance, however, the EGUs must independently achieve at least the CPP-mandated emissions reductions.
- There is no prescribed method for distributing allowances, though two procedures (alone or in combination) are most likely to be employed: direct allocation or auction.
  - **Direct Allocation:** distribution for free to existing emitters, distribution utilities, or other entities that a state designates to receive the economic value of allowances.
  - **Auction:** provides revenue to the state in exchange for allowances, which can then be used for various purposes, for instance to incentivize non-emitting technologies or offset ratepayer impacts.
- Regardless of whether allowances are distributed by direct allocation or by auction, **states may choose to reserve (“set-aside”) quantities for particular recipients/buyers**, such as third-party energy efficiency suppliers.
- **Auctions are not part of the proposed federal plan.** EPA contends that a federal auction of allowances would require proceeds to be deposited with the U.S. Treasury, hindering their reallocation for clean energy incentive purposes. EPA is seeking comment on this matter by January 21, 2016.
- With direct allocation, states must establish a distribution methodology. **In the proposed federal plan, allowances are distributed on the basis of historical generation** (not historical emissions), ramping downward with increasingly stringent CPP targets. Various set-asides, described below, are also used.
- Direct allocation to existing emitters transfers economic value to the owners of affected EGUs, providing compensation for compliance costs. **In vertically-integrated states, EGUs may be required to pass along the value of directly allocated allowances to electricity consumers.**
- **In an economically efficient system, allowances are distributed according to the amount of CO<sub>2</sub> abated.** For renewable generation or energy efficiency projects that do not emit CO<sub>2</sub> (or for low carbon generation technologies such as CHP), a reference rate reflecting the emissions intensity of avoided fossil-fired generation could be used, for example through a regional emissions tracking system such as [PJM GATS](#).
- **In direct allocation systems, economically efficient electricity producers may be encouraged to continue operations to receive historically based allowance allocations.** In the proposed mass-based federal plan, EPA foresees awarding allowances by compliance period to affected EGUs included in a baseline performance period (2010-2012), unless a unit has failed to operate for two full calendar years prior to a date of record. This date of record

will occur in June before the next compliance period begins. Depending on the timing of retirement, a unit could receive allowances for an entire subsequent compliance period in which it does not operate, in addition to allocations it received for, but did not need during, the period in which it retired. EPA believes the ability to benefit from allowances for a limited time after retirement will reduce the incentive to retain economically inefficient production. **Inherently, an auction system does not incent retention of economically inefficient production.**

- **Under the CPP, mass-based plans must address “leakage”**—the potential shift of generation from affected EGUs to new, non-affected fossil-fired EGUs. For more on leakage, see the [Structural Overview fact sheet](#).
- **Set-aside for increased NGCC generation under the proposed mass-based federal plan:** EPA aims to address leakage by allocating allowances to incent increased generation by existing NGCC units. Under a system of “updating output-based allocations,” existing NGCC units will be rewarded for generation above their 50 percent (net summer) capacity factor over the entirety of the preceding compliance period, with the set-aside capped to reflect a statewide increase to a 60 percent NGCC capacity factor. Megawatt-hours generated at or in excess of a plant’s 50 percent capacity factor in the prior period will be multiplied by the EPA emission standard for new NGCC units (1,030 lbs. of CO<sub>2</sub> per MWh) and then converted to short tons to identify the number of allowances due an existing NGCC facility. The allowances will be set aside from the state’s full pool of allowances. The set-aside will remain constant in size throughout the CPP, representing an increasing fraction of each state’s allowance pool as the CPP targets become more stringent. If the cap is binding in a period, allowances will be distributed pro rata. If the cap is not reached, unclaimed allowances will remain in the state’s full pool. This set-aside relies on a trailing assessment of actual output; as such, it will not be available in the first compliance period (2022-24).
- **Renewable energy set-aside under the proposed federal plan:** as a further counter to leakage, up to 5 percent of a state’s total pool of allowances will be set aside for renewable energy projects, improving their ability to compete with new NGCC units. Allowances will be distributed annually based on generation forecasts for particular projects. If the cap is binding, allowances will be allocated to projects pro rata. After ex post verification of actual generation, any excess allocation of allowances will be clawed back from the allocation for the subsequent year[s]. Over-projections in excess of 10 percent will require explanation, and continued over-projection will disqualify a project. If the cap is not reached, allowances will not be set aside from the state’s full pool. A state’s renewable allowances may only go to in-state projects. Projects receiving allowances may not generate ERCs as a result of meeting load in a rate-based state (even if contractually demonstrated, e.g., through a PPA), as this would constitute double counting. This set-aside will be available in all CPP compliance periods. EPA is requesting comment on the size of this set-aside.
- **Clean Energy Incentive Program (CEIP) set-aside under the proposed federal plan:** “early-action” allowances will be carved out of the total allowances available to a state during the first compliance period. This set-aside does not affect subsequent compliance periods. Allowances in the set-aside will be matched by EPA up to 300 million short tons of CO<sub>2</sub>. Unlike the allowances taken from the state’s total, the matching allowances provided by EPA will be incremental to the CPP targets. For more on the CEIP, see the [CEIP fact sheet](#).
- After the three set-asides in the proposed federal plan are accounted for, EPA will allocate a state’s remaining allowances to EGUs based on their share of total state generation during a baseline period (2010-2012). Only years with non-zero generation are included in the average. Units under construction during the baseline years are assigned a value using EPA capacity factors specific to EGU type.
- **EPA has not included a set-aside for demand-side energy efficiency** in the proposed federal plan **but has requested comment** on how such a mechanism could be used to prevent leakage.
- **Even if operating under a federal plan, states have the option to develop their own allocation methods.** Changes to the allocation method must be completed prior to the recording of allowances for the subsequent compliance period.