Allocation of Allowances in a Potential Greenhouse Gas Cap-and-Trade Program

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Technical Stakeholder Working Group Meetings—Program Design

February 6	Overview and analytic approach
February 29	Scope and Point of Regulation
March 17	Allocation
April 4	Offsets
April 25	Cost containment
May 5	Enforcement
June 16	To be decided

April 17 Scenarios Workshop

Outline

- Background
- Definitions
- Allocation vs. auction
- Uses of allowance value
- New entrants and firms that cease operations in California
- Allocation changes over time

Send questions to ccplan@arb.ca.gov

Background: Market Mechanisms

- Program design stakeholder meetings working on how to design an effective cap-and-trade system for consideration in the Scoping Plan.
- Prior to inclusion of market-based approaches, ARB must:
  – Consider potential for cumulative and localized impacts.
  – Prevent increase in criteria or toxic emissions
  – Maximize additional environmental and economic benefits.

Role of Allowances

- Allowances:
  - In a cap-and-trade program, the State would limit emissions to a capped amount and issue as many allowances as there are tons in the cap.
  - Reductions in emissions accomplished as number of allowances issued declines through time.
  - Allowances can be traded. At the end of a compliance period, an entity has to surrender to the State allowances equal to its emissions.

Definitions

- Allowance value:
  - Each allowance issued will have some value determined by the supply of allowances and the demand to emit.
- Allocation:
  - How the allowances issued by the state are distributed to the entities that need them to comply with the program.

Options for Allowance Distribution

- Free allocation:
  - Allowances given away for free. The allowance value is transferred to the recipient of the allowance.
- Auction:
  - If allowances are to be sold, auction is usually considered to be the fairest and most transparent way.
  - Allowance transferred to winning bidder, allowance value retained by State for public benefit use.
  - Wide variety of ways to design an auction for varying purposes.
- Mix of auction and allocation.

Free Allocation vs. Auction

- Free allocation and auction do not necessarily imply particular purposes for use of allowance value.
- Entities have the same incentive to make reductions whether allowances are freely allocated or auctioned.
- Environmental benefit not diminished by either.
- Market price would not be dependent on choice of free allocation or auction.

Free Allocation vs. Auction

- Stakeholders have expressed concerns about market liquidity and manipulation with both free allocation and auction.
  - Market liquidity can be enhanced and potential for market manipulation can be reduced by design choices in a cap-and-trade program.
  - If CARB develops a cap-and-trade program as part of AB 32 implementation it will carefully evaluate choices in light of these concerns.

Free Allocation vs. Auction

- Auction may provide price discovery
  - A clear signal on the value of an allowance.
  - May be especially important prior to the beginning of trading.
- Auction provides implicit recognition of early action through avoiding allowance costs.
- Free allocation can be used to recognize early action explicitly.

Free Allocation vs. Auction

- From the point of view of a regulated entity, free allocation and auction look different.
  - Every allowance has value.
  - Cash flow and cost of capital.

Uses of Allowance Value

- Reducing overall costs.
  - E.g., investments in research, development, and deployment of low-carbon technologies
- Investing in co-reductions of criteria and toxic air pollution.
- Adaptation to the effects of climate change.
- Assisting workers' transition to a green economy.
- Administrative costs.
- Obtaining further reductions.
- Compensating businesses and consumers for compliance costs.

Compensating Businesses and Consumers

- Costs of compliance will be unevenly spread.
- Some costs will be borne by businesses, some passed on to consumers.
- Where costs are passed on, consumers bear costs of regulation; free allocation to businesses can lead to windfall profits.

Compensating Businesses

- Potential to compensate regulated entities for the costs of regulation, including anticipated losses of profits and asset values.
- Potential to address “leakage,” in which regulation leads to a reduction in California production and increases in emissions elsewhere. The result of leakage would be less economic activity in California for no net environmental benefit.

Compensating Businesses

- Multiple ways to distribute allowance value
  - “Grandfathering” or basis in historical emissions.
  - “Benchmarking” or awarding allowances based on input or output.
  - Economic burden calculation.
  - Different methods can be used for different sectors.

Compensating Consumers

- Per-capita rebates
- Tax reductions
- Utility rate relief

New Entrants and Exiting Companies

- How should new entities have access to allowances?
  - Set-asides
  - Auctions
  - Liquid market
- Entities that cease California operations:
  - Auctions
  - Revocation of freely allocated allowances

Allocation Change with Time

- Pre-determined shift in allocation and auction percentages.
- At some time, entities may be fully compensated.
- Administrative changes to allocation or auction with experience and more data.
- Updates of benchmarks.

Questions for Discussion

If a cap and trade program is implemented:

- What method should we use to distribute the allowances?
- How should allowance value be used? And, if the allowance value should be used to ease the costs of regulation for entities, who should receive them and how many allowances should each entity receive?
- How should allowances be distributed to new entities and how should entities that cease operating in California be treated?
- How should the methods of distributing allowances in a cap-and-trade program change in future years?