Comments on Modified Price Containment Options for California

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Board Resolution 12-51: Price containment and “environmental integrity”

- Board Resolution 12-51 directs Staff to recommend action to
  - Ensure the price will not exceed the upper tier containment preserve price
  - Maintain the environmental objectives of program
- Environmental objectives = balanced emissions budget.
  - Total emissions budget
  - Time = when they occur
    - 2013-2020
    - Beyond
  - Space = where emissions occur
    - Inside California
    - Outside
- From GHG perspective
  - Time matters, but not that much within a decade, e.g.,
  - Space doesn’t matter
Current program allows flexibility in time and space

• Time
  – Multi-year compliance periods
    • Borrowing and banking within compliance periods
  – Banking across compliance periods
  – APCR is stripped from 2013-2020 budgets

• Space
  – Trading among sources
    • Within CA
    • Quebec
  – Offsets
Issue: What if current flexibility is not enough to guarantee a price ceiling?

- Concede?
  - Price will exceed target
  - Emissions will exceed target
  - Runs counter to Resolution 12-51

- Try more flexibility
  - Increase APCR
    - From current 2013-20 allowance budget
    - From future budget
    - From new sources of reserve allowances
ARB four basic options:
Comments on environmental objectives

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<thead>
<tr>
<th>Option</th>
<th>Implications for Environmental Objectives</th>
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<tr>
<td>1. Increase availability of allowances at highest reserve price</td>
<td>Satisfies objectives if countered by real reductions either now or in future.</td>
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<td>2. Allow compliance obligations to be met by per ton fee = highest tier price</td>
<td>Depends on whether the fee is used to procure additional reductions</td>
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<td>3. Delay compliance obligations</td>
<td>Consistent with time flexibility of program – a form of borrowing between periods. Satisfies obj’s so long as emissions balance is resolved over time</td>
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<td>4. Cancel compliance obligations</td>
<td>Not consistent with environmental objectives</td>
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## Comments on Potential Sources of Compensating Emissions Reduction

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<thead>
<tr>
<th>ARB options/Potential sources</th>
<th>Comments</th>
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<td>Redistribute allowances within 2013-2020</td>
<td>May be too little room or power unless allowances go unsold at the price floor</td>
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<td>Commit to additional emission reductions from post-2020</td>
<td>Works if credible, this will push up prices in pre-2020 period as well, if allowances are bankable between periods.</td>
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<td>Mandate additional reductions from CA sources</td>
<td>Raises efficiency questions (induce more expensive reductions). Uncertain outcome and timing.</td>
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<td>Obtain additional reductions outside CA</td>
<td>Fairly efficient if reductions are credibly certified and available at a price at or below price ceiling. E.g., CDM, World Bank carbon fund, ...</td>
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<td>Could impose a trading ratio of more than 1 ton of credit needed to create an allowance</td>
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<td>Issues on who gets rents from any price differences, and whether other programs will cooperate</td>
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Other Thoughts

• Price ceiling breach not likely a near term (2013-14) issue
  – Market and ARB have time to adjust
  – Post 2020 plans will start to weigh more heavily as the time approaches
    • Market price incorporates future stringency and price expectations
    • Key is whether/how pre-2020 and post-2020 market will be linked

• The allowance reserve approach is intended to fix short to intermediate run problems and should be populated to do so.
  – It cannot, by itself, fix a long-run imbalance between supply and demand
    • If this occurs, need to reexamine price and emissions goals as reserve will ultimately run out