• Questions during the workshop can be sent to: ccworkshops@arb.ca.gov

• Written comments are requested by July 13th; please submit comments to: (http://www.arb.ca.gov/cc/capandtrade/comments.htm)
Cost Containment Options in a California Cap-and-Trade Program

Raymond Olsson
**Cost Containment Objectives**

1. Cost containment mechanisms must reduce the risk that unacceptably high costs are incurred.
2. Mechanisms should be transparent and should not create market uncertainty.
3. Mechanisms must not compromise the environmental integrity of the program.
4. Mechanisms should preserve the ability to link with other rigorous cap-and-trade programs.
Staff are focusing on the following principles when considering cost containment options:

1. Any attempt at price mitigation limits price discovery and adjustment, which are two main benefits of cap-and-trade

2. Mechanisms must ensure the environmental integrity of the cap by not including a “safety valve”
• ARB is considering options based on target prices that have the effect of “Price Collars”
  – “Hard” collars are price controls
  – “Soft” collars mitigate price movements by changing the supply of instruments in the market
  – ARB staff believe “soft” collars would distort the market less than “hard” collars
Soft Price Floor

• ARB plans to set a minimum auction price (“Reservation Price”) below which allowances would not be sold at auction
  – Reservation prices are common features in auction design to prevent collusion

• Unsold allowances would be held in a Reserve Holding Account

• Stakeholders have suggested setting reserve price high enough to incent direct reductions and offset projects
Options for Soft Price Ceilings

Three Categories of Mechanisms to Increase the Supply of Instruments

- Relax quantitative use limit for offsets
- Allow limited use of future vintage allowances from next compliance period
- Release allowances from a Reserve
Temporarily Relax Quantitative use Limit for Offsets

• PDR included a quantitative use limit for offsets at 4% of the compliance obligation.
• Relaxation may reduce direct reductions in California.
• Mechanism:
  – Increase the offset limit up to 8% based on a trigger price.
  – Return to 4% when high prices abate.
• Problems with relaxing the offset limit:
  – Additional offset supply may not be available.
  – Projects may need assured future access to the market to be viable.
Use Future Vintage Allowances Already in Circulation

• ARB anticipates auctioning of future vintage allowances along with current allowances
• Mechanism: Allow use for compliance of future vintage allowances already purchased when price triggers exceeded
• Problems:
  – Borrowing indicates direct reductions lag cap decline
  – Results in fewer allowances available in next period
  – Could create a need for continuous borrowing
Use of an Allowance Reserve

• There are many proposals for reserves, but they involve four common steps:
  – Create a reserve pool of allowances
  – Define the conditions under which allowances will be released
  – Release allowances using specific mechanisms when the conditions occur
  – Replenish the reserve
Step 1  Create and Fill a Reserve With:

- Allowances unsold when an auction resolves at the Reserve Price
- Allowances directly allocated from annual budget
- Future vintage allowances allocated from future annual budgets
Use of an Allowance Reserve

Step 2  Define conditions for releasing:

• Define price trigger or triggers.
• Define the portion of the reserve that would be released at each trigger.
• Monitor market prices to determine if the trigger prices are reached (required for some release mechanisms)
• Release parts of reserve when the price triggers are reached
Use of an Allowance Reserve

Step 3   Choose a Release Mechanism

• Release parts of reserve to auction when a series of price triggers are reached
• Make reserve available for direct purchase by covered entities at a “window”
  – Window approach requires allocation method when demand for reserve allowances exceeds reserve supply
• Directly allocate reserve to covered entities
• Options may include rules on allowable use (e.g., to prevent resale)
Use of an Allowance Reserve

Step 4  Reasons to Replenish the Reserve

• Ability of reserve to mitigate prices depends on size of reserve
• A reserve provides only limited cost containment as it does not add to the market supply of instruments.
• Cascading borrowing problem exists for future vintage reserve unless backfill method exists to increase supply of instruments from outside the system.
• Creating reserve may itself create high prices by reducing supply of compliance instruments to market
Use of an Allowance Reserve

Step 4  Options to Replenish the Reserve

• Increase direct allocation of current or future vintage allowances to the reserve
  – To match number of allowances released from reserve, or
  – As a permanent fixed annual replenishment

• Increase the supply of offsets to prevent replenishment from increasing market prices:
  – Allow additional offsets above use limit equal to number of allowances allocated to reserve
  – Annual cap is maintained based on allowances not in reserve plus additional offsets.
Mechanisms No Longer Under ARB Consideration

• ARB supplements reserves by:
  – Purchasing offsets on the market using auction or reserve sale proceeds
  – Contracting with offset developers to produce new offset projects
Next Steps

• ARB welcomes your input on:
  – Choice of mechanisms (more than one can be included in the system)
  – Preference for use of a trigger price mechanism versus a “window” sales approach
  – How much to expand the supply of instruments in each mechanism
  – The tradeoffs between each cost containment mechanism and the goals of AB 32