



Comments on Modified Price Containment Options for California

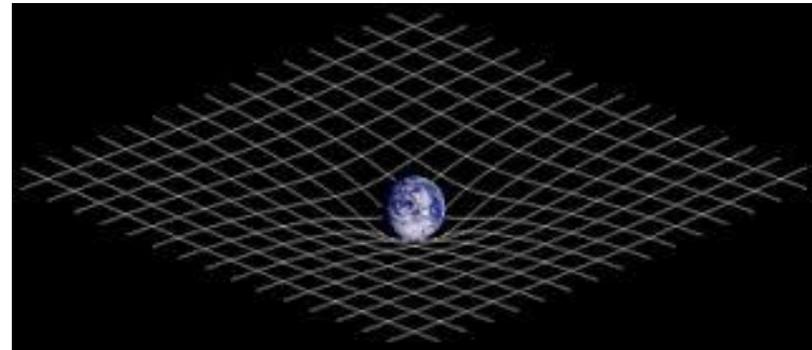
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Board Resolution 12-51: Price containment and “environmental integrity”

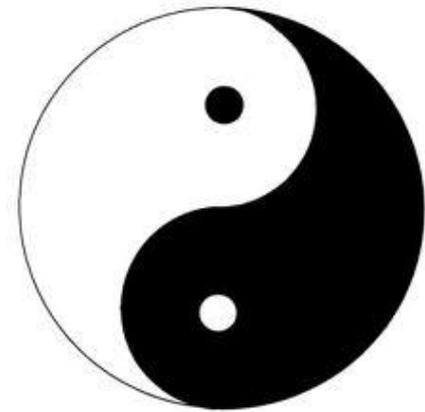
- Board Resolution 12-51 directs Staff to recommend action to
 - Ensure the price will not exceed the upper tier containment preserve price
 - Maintain the environmental objectives of program
- Environmental objectives = balanced emissions budget.
 - Total emissions budget
 - Time = when they occur
 - 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

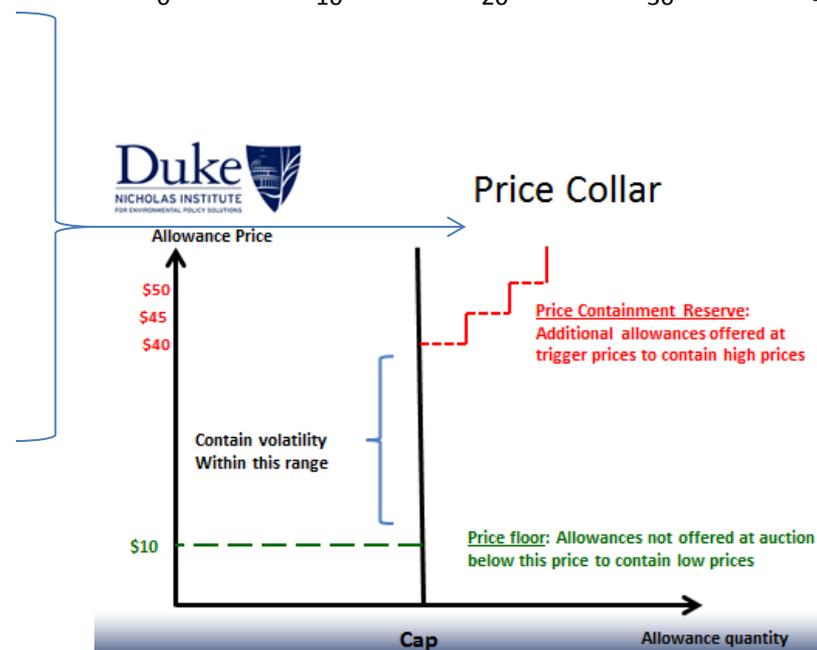
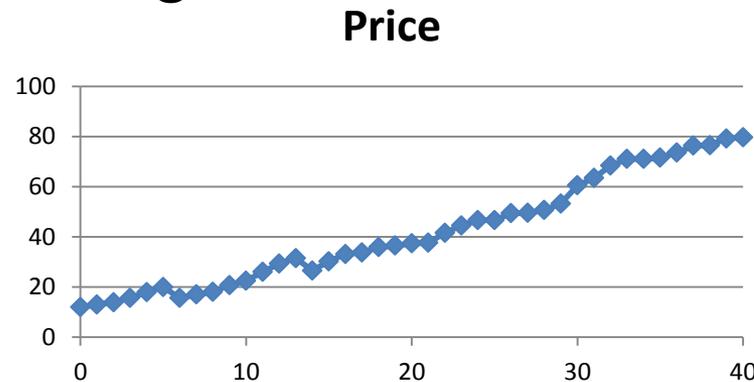
- Time
 - Multi-year compliance periods
 - Borrowing and banking within compliance periods
 - Banking across compliance periods
 - APCR is stripped from 2013-2020 budgets
- Space
 - Trading among sources
 - Within CA
 - Quebec
 - Offsets





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

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



Comments on Potential Sources of Compensating Emissions Reduction

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



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