



Carbon Market Reserves Functioning & Governance

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Points from April session....

What are we trying to achieve?

- Objectives?
 - Ensure good market functioning
 - Ensure good price discovery – i.e. price to 2050
 - Ensure price stability
 - Provide for the lack of market flexibility on the supply side
 - Recognize changes in design parameters of the ETS
 - Allows to distinguish between “good” and “bad” changes in demand & market liquidity

Points from April session....

What are the symptoms and what is cause ?

Root cause is a market imperfection from the way this regulatory market was designed

Points from April session....

- Is the MSR independent of the rest of the EU ETS structural reform package ? Technically can it be set up outside the post 2020 carbon leakage provisions? Is this a “no regret” implementation?
- What are the political realities?
- How does the MSR interact with other policies and measures? CL provisions included.

Points from April session....

- Volumetric is good - as it is not price based. What volumes does it account for ?
 - Overlapping policies
 - Economic shocks
 - Mitigation efforts
- How does it account for market behavior e.g. industrial banking
- Is it reasonable to set up a machine now with parameters for 2022? What does it tell us about governance?
- What is the impact of waiting? Why wait ?
- What are the hedging needs ? What is the “right” liquidity? IS hedging changing as a result of liquidity providers withdrawing?

Approaches to market supply flexibility

- Type of Approach
 - Through a dedicated Reserve
 - Through other mechanism (e.g. cap adjustment)

- Type of governance
 - Rule based/automatic/computer driven
 - Human intervention
 - Hybrid

Systems under examination

- California
- Quebec
- RGGI
- Australia
- EU – proposed

Questions

- How does it work?
- What is the governance?

Australia Carbon Pricing Mechanism(CPM)

- Recognizes changes in the CPM environment that result in supply/demand variations
- 5 year rolling cap setting
- Every year the 5th year cap is set to reflect realities
- Injects flexibility in the Supply side of the market

Governance

- Mix:
 - Human intervention
 - Can default to automatic trigger

Australia Carbon Pricing Mechanism

Governance (continued)

- Australia Climate Change Authority (CCA)
 - Independent
 - Board appointed for 5 years by Minister of Environment
- Each year Australia Climate Authority issues the “Targets and Progress Review”. Two broad topics:
 - Australia’s progress towards its medium and long term emissions reduction targets; and
 - Australia’s emissions reduction goals.

Australia Carbon Pricing Mechanism

- CCA must
 - Consult
 - Review
 - Publish
 - There are no specific factors that need be taken into account in recommendation
 - Market evolution
 - Technology
 - Progress towards overall objective

Australia Carbon Pricing Mechanism

- Government reviews CCA recommendation
- Must issue reason for decision
- Must issue a regulation (cap) -- right now an issue
- Parliament CAN reject the regulation
- If rejected, reverses to a automatic trigger: last year emissions - %

Conclusion: mixed approach that relies on human intervention, but with default automatic trigger

California ETS

- Allowance Price Containment Reserve(APCR)
- Objective in the name - it's a “safety valve”
- Makes available on market incentive
- Percentage of allowances withheld and put in APCR
- Total for 2013-2020: 120 million tons
- 4 auctions per year and 4 Containment Reserve Sales
- Window for APCR open 6 weeks after regular auction
- 3 equal tier prices: 42.38/47.68/52.98 in 2014

California ETS

- Price increases at (5% + inflation) per year
- If Auction does not sell, goes into Holding account
- Possible: 10% of future auction to be put into ACPR – borrowing – and sold at highest tier price
- Parameters set by CARB in regulation?
- Governor can intervene to “adjust applicable deadlines” in “extraordinary circumstances”

California ETS

Governance

- CARB' regulation sets the parameters
- Trigger for Insertion: fixed availability + market reaction
- Trigger for Removal: fixed availability+ price floor + market reaction
- No direct human intervention/decision in insertion/removal
- Combination of parameters set + market reaction

California ETS

Governance

- Human intervention:
 - Borrowing
 - Governor intervention possible – not APCR specific

Quebec ETS

- Linked with California
- Quebec Allowance Price Containment Reserve
- Similar to California, but small differences in governance = up to 4 quarterly Containment Reserve Sales per year (called “sale my mutual agreement”)
 - If price rises close to the level of the Containment Reserve, then allowances will be made available each quarter, just like in California – not automatic in Québec
- Same percentages put in the Reserve = 20 millions allowances

Quebec ETS

- Minister may use Reserve to adjust free allowances available (as per the regulation)
- Sale by mutual agreement prices at 40/45/50 in 2013, increase by 5% plus inflation per year (same as California, but in Canadian dollars)
- Auction Reserve Price (just like California)
 - CAD\$10.00 in 2012, increasing by (5% plus inflation) per year
 - Unsold allowances are temporarily removed from the market and reintroduced “gradually” when 2 auctions closes above auction reserve price (i.e. minimum auction price)

Quebec ETS

Governance

- Similar to California but small differences
- Reserve is price driven (as per regulation)
- Trigger for Removal: if allowances are not sold at auction (as per regulation)
- Trigger for Insertion:
 - Human decision to open window (will be done when market prices comes close to the level of the Containment Reserve)
 - Human: Minister decision

Regional Greenhouse Gas Initiative (RGGI)

- Composed of nine individual, state-level cap-and-trade programs for the power sector;
- Each state is assigned a state-level share of allowances of the overall RGGI program emissions budget as defined in the *MOU* between states;
- *Model Rule* framework of RGGI regulates compliance standards in each state;
- State control over number of allowances issued - > total emissions in the region will not exceed the cap

Regional Greenhouse Gas Initiative (RGGI)

- Auction price: minimum \$2 in 2014, raising 2.5% annually
- **Cost Containment Reserve (CCR)**
 - To be used when auction prices exceed a certain level hence objective prevent prices from going too high;
 - Came into effect in 2014 with a limited number of allowances each year: 5 MT for 2014 and 10 MT each subsequent year
 - Price in reserve starts at 4\$/tonne in 2014 to 10\$/tonne in 2017; to increase by 2.5% from 2017.

Regional Greenhouse Gas Initiative (RGGI)

- **Cost Containment Reserve (CCR)**
 - Functioning: CCR allowances only sold at or above the CCR trigger price – set at 4\$/tonne in 2014;
 - If allowances are withdrawn from the CCR it is automatically replenished in the following year;
 - Allowances in CCR are fully fungible;

Regional Greenhouse Gas Initiative (RGGI)

Governance

- Automatically available at set trigger price
- Market choice to buy or not
- Replenished automatically with set amount each year
- Human intervention in setting parameters

EU ETS- EC proposal

- Removal
 - Automatic trigger on volume
 - No market reaction
- Insertion:
 - Automatic trigger on volume
 - Automatically made available
 - Market reaction: buy/no buy

Question

- How would Australia type approach be implemented in the EU
- Plusses and minuses of human intervention
- Plusses and minuses of automatic
- Does market intervention need to be part of the trigger and what does it bring?



Thank you for your attention

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