Carbon Market Reserves
Functioning & Governance

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Andrei Marcu
Senior Advisor CEPS
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 it 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

Andrei.marcu@ceps.eu