





MANAGING THE CARBON PRICE

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Background Reading



ICAP/PMR Handbook Emissions Trading in Practice 2nd ed. (2021) Chapter 6.4: "Tools to address price vari

Chapter 6.4: "Tools to address price variability" (pp. 138-147)



Available at: https://icapcarbonaction.com/system/file s/document/ets-handbook-2020_finalweb.pdf



Should the carbon price be managed?

- Do you think it is more desirable to have a high carbon price or a low one?
 - 1. The carbon price must be high enough to create an incentive for lowcarbon investment and planning – and to make fossil assets unprofitable
 - 2. If the target is reached, the carbon price should be as low as possible that is the whole point of an ETS
 - 3. The carbon price should not be too high, so that distributional impacts remain limited
 - 4. The carbon price should not be too high, as otherwise political acceptance may suffer
 - 5. The level of the carbon price is irrelevant, it is about reaching the environmental target. The price should just do what it has to do.

So should the carbon price be managed?

- Yes, because...
 - Investors need long-time certainty

 but how far does the carbon market look into the future?
 - Price spikes can create social and economic hardships – and political opposition

- No, because...
 - An ETS is not a tax it guarantees a certain emissions level, not a certain price
 - It is impossible to reliably determine the "right" carbon price
 - The carbon price level should be kept out of politics

Price volatility and variability (2008-2020)



Price volatility and variability (2017-2022)



Genuine price floor

- In ETS auctions, allowances are not sold if the clearing price is below the price floor. Unsold allowances are retired – i.e. cap is reduced
- Allowances can trade lower on the secondary market but not for long
- Only works if there is substantial auctioning
- Alternative: regulator buys back allowances if the market price falls below a given level
- Similar but different concepts:
 - Auction reserve price (to avoid collusion & fraud)
 - Top-up fee/surrender charge (partial floor price)

Genuine price ceiling

- Regulator commits to sell an infinite number of allowances at a given price. Logically, the market price cannot exceed this price level
- When the price ceiling is reached, the cap no longer constrains emissions effectively – regulator prints as many allowances as needed to meet the demand
- Alternative: fixed price that can be paid in lieu of surrendering allowances (e.g. New Zealand NZ\$ 25 price ceiling)
- Price floor and price ceiling can be combined to form a price corridor (or price collar)

Price corridor (Californian approach)

- Fixed and rising floor price implemented as auction reserve price: unsold allowances go into the auction holding account, and are auctioned later
- Allowance Price Containment Reserve: certain share of allowances (< 10%) is placed in a cost containment reserve and can be bought at a fixed price (two tiers at 41 and 53 US\$). Until now, prices have not reached this level
- Allowances in the reserve are part of the cap reserve is capneutral. Reserve will cushion price spikes, but will not set a hard ceiling

Price corridor (German approach)

- Germany established a separate national ETS only for emissions from transport and buildings
- Started 1 January 2021 with a fixed price of 25 Euro per ton, rising to 55 Euro in 2025
- As of 2026, carbon price should fluctuate within a range of 55 to 65 Euro per ton
- Works like a tax but it is an ETS (of sorts)

Carbon price management authority

- In the same way that Central Banks control inflation (and balance other economic objectives) – could a carbon central bank identify the "right" carbon price and adjust allowances in circulation accordingly?
- Discretionary interventions: carbon central bank is mandated to control auction amounts in order to lower or increase the supply of allowances, or to buy back allowances from the market
- So far mostly a theoretical idea: elements of this idea have been taken up in the Korean Allocation Committee, but with a relatively limited mandate

Options to manage the carbon price

- We may not be able to afford a prolonged period without a strong enough carbon price – but at the same time, record-high carbon prices e.g. on top of record-high fuel prices are a potentially toxic combination
- Carbon markets do not appear to anticipate long-run scarcity, but are more driven by supply and demand factors in the short- and medium term. Price management can fix this, and is therefore nowadays included in most ETS
- When it comes to linking carbon markets, price management can become a barrier (as it is highly 'contagious')



THANKYOU!













