Auctioning modalities

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Basics

Criteria for good design

- Efficiency
- Fairness
- Transparency
- Simplicity
- Addresses market abuse
- Limits price volatility
- Low cost for governments and bidders

In 2008, US Treasury has auctioned approx $100 billion of T-Bills every week or two (plus other types of security)

Regulatory context

- The ETS Review has been characterised by an effort to increase:
  - Environmental effectiveness
  - Economic efficiency
  - Harmonisation
  - Simplicity
- The EC proposal that auctioning modalities should be governed by Regulation will achieve these objectives
- This presentation assumes the same auctioning rules across all Member States

Prices

Price discovery

- Robust price discovery is the heart of emissions trading – i.e. the price should reflect the cost of abatement under a given cap
- Auctions actually improve liquidity and therefore enhance price discovery
- A well designed and well executed auction will result in prices that track the spot price
- There is an abundance of possible auction designs, catering to different contexts and objectives, focused around two main variables:
  - How price is set
  - Number of rounds

Which system?

- In a <u>single price auction</u>, the clearing price is the value of the highest rejected bid
  - Everyone pays the same, overcoming any asymmetries
  - Used successfully by Ireland in 2006
- <u>Single round auctions</u> are simpler and more resistant to collusion than multiple round auctions – although some studies show marginally better price discovery in multiple round auctions
- In the event of supply exceeding demand in a given auction, allowances can be rolled over, held in contingency or retired

Timing and frequency

Timing

- Business needs forward visibility on value in order to plan
- Value varies over time
- Timing should be compatible with electricity and energy markets

Frequency

- Frequent auctions will improve liquidity
- Frequent auctions will also limit volatility
- But too-frequent auctions could disrupt the secondary market

Recommendations

- Auctions should be aimed at improving liquidity early in the phase
- Allowances should be auctioned in advance (e.g. 2-5 years in advance)
- While T-Bonds are auctioned weekly, RGGI will hold quarterly auctions – this seems about right
- Allowances from different years have different values and should be auctioned separately to avoid confusion

Avoiding market abuse

Fears

- Collusion
- Hoarding
  - A well designed auction in a liquid market should not provide any opportunities for market abuse that are not already available in the market at large

Design

- Auctions should be open to all creditworthy entities in order to limit opportunities for collusion
- Single round, sealed bid auctions are the most resistant to abuse
- Limiting the amount of allowances any one bidder can receive (T-Bond: 33% per auction)
- Early auctioning increase opportunity cost of hoarding
- A reserve price will limit the pay off from collusion

Oversight

- Given existing experience regarding auctions and commodities markets, the regulatory framework to address market abuse already exists
- However, monitoring specific to the ETS will be needed

Key messages

- Auctioning is a well studied area with an the abundance of academic literature available based on empirical evidence
  - Specialist reading: *Auction Design for Selling CO2 Emission Allowances under RGGI* (Burtraw et al, Oct 26, 2007)
- Most OECD governments are well practised at conducting auctions, particularly government debt management authorities (bonds)
  - This expertise should be brought to bear in the EU ETS
- Software to conduct auctions can be bought off-the-shelf (eg UK DMO uses Bloomberg system) so this is not like the CITL/ITL
- In a liquid market, well-designed auctions will not increase opportunities for market abuse
- Oversight will be needed but can rely on existing institutions

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