Auctioning Allowances

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Background

- Directive 2003/87/EC requires that MS allocate 95% of allowances free of charge for the 2005-2007 trading period.
- The Irish Government Directed the EPA to auction up to 1% of allowances to defray the costs of administering the emissions trading scheme.
- Ireland’s National Allocation Plan contained a provision to auction 502,201 allowances (~0.75%).
- The Government also Directed that unused allowances arising as a result of closures are also to be auctioned with the proceeds going to the exchequer.
- A number of other MS NAPs also made specific provision for auction or sale of allowances in the first trading period (Denmark, Hungary and Lithuania) while others may auction left over amounts in set-asides or arising from closures etc.

Developing an Auction Procedure

- Useful documents were
  - UK Consultation paper on “Proposed auction or sale methods for use in the EU Emissions Trading Scheme” (April 2005)
  - Commission “Non-paper on the use of auctioning for allocating Emissions Trading Allowances in the second trading period 2008-2012 and further on” (September 2005)
- Consultation with Ireland’s “National Treasury Management Agency”
- Legal and Taxation advice
- Internal EPA discussions

Objectives

- Fund the Administration of the EU ETS scheme
- Minimise legal resistance
- Minimise the costs associated with the Auction (both the costs incurred by participants and those incurred by the EPA)
- Minimise the threat of strategic behaviour and collusion
- Maximise the prospect of participation in the auction
- Create a format suitable for repeat use

Key Decisions – Number of Allowances

- In order to reduce the risk of auctioning during a “low” in market prices it was decided to spread the risk by running two auctions for around 250,000 allowances each time.

- The first such auction to be held in January/February 2006.

- A second auction to be held later in 2006

Key Decisions - Auction Format

Of the differing approaches to auction the two types considered most relevant for EU ETS allowances were:

- Sealed-Bid - a single round auction whereby bidders simultaneously submit demand schedules (unit price and quantity demanded). The allowances (lots) are awarded based on the highest bids (with some variation depending on pricing method) for the quantity available.
- Ascending Bid (Ascending Clock) – a multiple round auction whereby the auctioneer sets a price and bidders submit quantity demanded. As the price increases over subsequent rounds the quantity demanded falls until it equals supply.

Although an ascending clock auction is generally considered to be more transparent, its implementation is more expensive and complex. This is largely due to the fact that an ascending clock auction requires software for recording and tracking the bidding rounds whereas a sealed auction can be processed by hand. In order to ensure broad participation and in order to minimise the costs associated with the auction it was decided that a sealed-bid option be implemented.

Key Decisions - Pricing Method

There are two pricing methods commonly associated with sealed-bid auctions:

- Pay-Your-Bid Pricing – Each successful bidder pays the unit price as bid
- Uniform-Price Auction – Each successful bidder pays the clearing price for the auction. All successful bidders pay the same price.

Uniform pricing is the most common approach used for auctions with homogenous divisible goods such as EUAs. If the auction is sufficiently open such that none of the participants have market power this pricing mechanism is efficient. From an equality perspective uniform pricing has the added benefit that everyone pays the same unit price for an allowance.

While it may seem that pay-your-bid pricing results in higher revenues, evidence suggests that bidders tend to submit lower bids in this type of auction thereby offsetting the revenue gains. Further, pay-your-bid pricing may expose small bidders to risks, as it tends to reinforce market power.

Key Decisions - Reserve Price

- Setting a minimum price or reserve reduces the risk for the auctioneer of selling allowances substantially below the market price.
- Considering the large amount of buyers in the EU ETS market, a minimum price may not generally be considered necessary.
- However if we allow for the fact that the Irish auction was to be the first auction in the EU ETS scheme, there was a risk that insufficient public information or practicable knowledge of the system might have led to a lack of demand and in turn a low auction clearing price.
- In order to diffuse the risks it was decided that a “non-disclosed” reserve price be set for the auction.

Key Decisions - Lot Size

- If the auction methodology did not set a specific lot size the implementation and administration of the auction would become unmanageable.
- On the other hand, the lots must be sufficiently sized to accommodate smaller bidders. This is especially relevant considering that small bidders have expressed concern regarding currently available market lot sizes of 5,000 – 10,000 allowances.
- Therefore, it was decided that the lot size be set at 500 allowances. In this case, the total number of lots available in the initial auction would be 500.

Key Decisions - Eligibility

- In order to transfer allowances to successful auction participants, bidders must have a valid account within the EU ETS system of registries.
- Opening the auction to the broadest market seemed desirable to ensure sufficient demand to fund the administrative costs of the scheme.
- Restricted participation rules increase the threat of strategic behavior and/or collusion whereby a few large buyers can exert market power.
- The possibility of conducting a country specific auction whereby only bidders with an account in the Irish registry would be eligible to participate was rejected due to the threat of insufficient demand, strategic behaviour and/or increased administrative pressures on the Irish registry.
- We also reviewed the possibility of restricting participation to Operators (bidders with operator holding accounts) in the EU ETS scheme. As this option would eliminate prospective bids from brokerage houses, NGOs and individuals and thereby constrain demand it was rejected.
- To maximise demand, it was decided that the auction be open to all bidders with a valid account in the EU ETS registry system.

Key Decisions - Validation

- While opening the auction to the broadest possible market maximises potential demand it also exposes the auction to the risk of speculative bidding and creates difficulties in bid validation.
- To reduce these risks, it was decided that potential bidders be subject to a pre-qualification process.
- Along with any relevant verification information it was also decided that a deposit of €3,000 be collected in the pre-qualification stage to dissuade bogus bidding.
- The deposit was deducted from the amount owed by auction winners and refunded to auction losers.
- Any winners not honouring their bids would forfeit their deposits.

Key Decisions – Pre-Qualification

- Pre-qualification codes (PQ-Code) could be obtained by email request.
- PQ-Codes could be requested from the time the auction was announced until two days before the deadline for receipt of bids.
- Requests for PQ-Codes had to include a valid registry account number.
- Only 1 PQ-Code was issued per Registry Account.
- PQ-Codes were only emailed to PAR (Primary Authorised Representative) and/or SAR (Secondary Authorised Representative) addresses as given, when checked by EPA, on the *Community Transaction Log*.

Summary of Procedure

- Initial auction of 250,000 allowances.
- Sealed Bid Auction Format.
- A schedule with up to five mutually exclusive bids possible on each auction form.
- Uniform Pricing Method.
- Undisclosed Reserve Price.
- Lot Size = 500 Allowances.
- A successful bid must include a valid EU ETS registry account number.
- Prospective bidders are subject to a pre-validation process and a deposit of €3,000.

How well did t work?

- Very well indeed!
- Over 150 valid bids were received.
- 5 successful bidders
- Uniform Settlement Price of €26.30
- Undisclosed Reserve was not reached
- All accounts cleared within the five day period
- All 250,000 allowances transferred to the accounts of the successful bidders
- Very low overhead cost incurred

Lessons learned

- Pre-qualification to PAR / SAR E-mail accounts was straightforward – each interested account holder was given a unique 8 digit number
- Electronic transfer of deposits and matching to account holders was not as straightforward as we had been led to believe – the full data string did not appear on our on-screen bank account.
- Time-lines for electronic funds transfer are generally very fast – two days would appear to be sufficient. Hence settlement time-lines could have been shorter than the five days we allowed.
- Refunds to unsuccessful bidders was straightforward for those in the eurozone, but slower for those outside the eurozone as we needed to ascertain if the return account was a euro account or a national currency account.
- Vulnerability of auction if market dipped during settlement period. The deposit of €3,000 was insufficient to ensure payment of accounts.

Environmental Protection Agency

An Ghníomhaireacht um Chaomhnú Comhshaoil

Office of Environmental Enforcement