

All-out auctions?

New York's bold proposal to auction all allowances under its proposed carbon trading programme raises crucial questions, says **Roman Kramarchuk**

In December, New York state released a 'pre-proposal' rule for its participation in the Regional Greenhouse Gas Initiative (RGGI). The RGGI initiative looks to bring together 10 northeastern US states in a programme to cap emissions of carbon dioxide from power plants starting in 2009.

The rule proposes auctioning 100% of the allowances that make up New York state's cap. At 64 million short tons in 2009, it is the largest single budget in the RGGI programme, representing one-third of the total RGGI cap¹ with the allowances sold at auction no later than 1 October of the allocation year. Proceeds from the sales will go towards investments in energy efficiency, renewable or non-carbon-emitting technologies.

This bold initiative has become the latest chapter in the ongoing debate about the use of auctions in cap-and-trade emissions reductions programmes. While mostly praised by economists and policy-makers, it is unprecedented in terms of its scale and represents an experiment with unclear market consequences that will very much depend upon the auction design and timing.

For example, while the annual US Environmental Protection Agency (EPA) sulphur dioxide (SO₂) allowance auction provides a model, only about 1% of a current year's total allocation is sold, with the rest allocated for free. The 2005 auction of Virginia nitrogen oxides (NOx) set-aside allowances involved only 5% of the total state allocation for 2004 and 2005 vintages. In the EU Emissions Trading Scheme (ETS), only a few countries committed to auctioning small portions of their Phase I allocations, and Phase II auctions are likely to be small in scale. New York's proposal goes well beyond any of these efforts.

Why the push for auctions? Given the European power sector experience with the ETS, New York and RGGI are concerned about potential 'windfall profits' for generators, which benefit as carbon prices are passed through to the price of electricity (with lower and non-emitting generation benefiting most). Also attractive to any government is the revenue from auctions – which can be used for R&D, generation of additional reductions/offsets, or to reduce distortionary taxes.

Some aspects of the greater use of auctions will be positive for emissions markets. A well-designed auction, in theory, should see prices set by marginal costs of compliance, as with free allocations. In reality, 100% auctions

will necessitate a shift from company 'compliance thinking' (meet a limit) to an overall emissions strategy where the cost of every ton is considered. Additionally, auctioning will require all players to take part in the market, reducing the likelihood of high market prices due to non-participation of 'long' entities, as was seen in the EU ETS in 2005 and early 2006.

That said, relying solely on auctions for allocations makes issues of timing and design much more critical (and is less beneficial to the bottom lines of companies than free allocation). One objective of allowance markets is to establish a least-cost framework for reductions while providing for some greater compliance cost certainty. In the development of the NOx allocations for its Clean Air Interstate Rule (CAIR), the US EPA made sure to include text in the rule noting: "Allocating allowances less than three years in advance of the compliance year may reduce a CAIR unit's ability to plan for and implement compliance and, consequently, increase compliance costs. For example, a shorter lead time would reduce the period for buying or selling allowances and could prevent sources from participating in allowance futures markets, a mechanism for hedging risk and lowering costs."

Forward markets allow for the hedging of price risks. Energy producers, for example, might want to sell their output forward to ensure revenue certainty, while consumers may want to lock in their costs. Auctioning 100% of allowances without enough lead time to compliance removes the natural 'long' side of the forward allowance market.

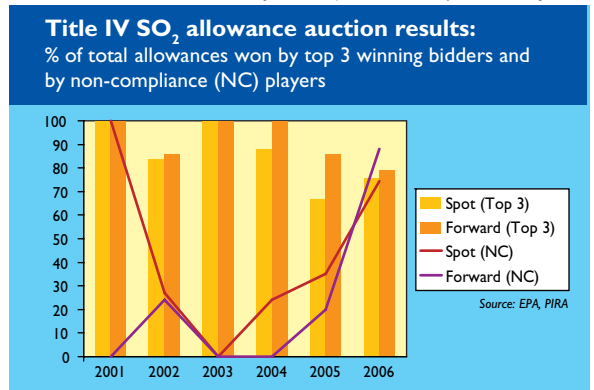
While compliance entities may have an idea of their needs, it is not clear who would emerge as sellers in the forward market. Trading may be held up while waiting for auctions to occur, and, with large numbers of allowances temporarily unavailable in auction accounts, it would be difficult for market participants (in what is already likely to be a thin market) to decipher signals related to market tightness.

Allocating all allowances via auction can bring up issues of market power. For the first Irish EU ETS auction, held in March, more than 150 bids were received, but only five bidders emerged as winners. The December auction saw only seven successful bidders.

As can be seen in the chart, SO₂ auctions have also been dominated by a handful of companies rather than providing market access to

a large number of players. The nature of the winning bidders may be as important as their number – and experience in the SO₂ auctions points to significant participation of non-compliance/speculative players. In 2001, for instance, a single bidder (Enron) secured all spot allowances with a higher-than-market bid. In 2006, non-compliance players took almost 75% of the spot allowances and 88% of the seven-year forward auction. Limiting some auctions to participation by particular entities may be a way to ensure a more equal distribution of allowances, and this has been proposed for coal-fired power plants in the Italian Phase II EU ETS allocation plan.

Some advocates of auctions suggest that governments should make regular decisions regarding quantities and minimum prices for auctions. However, if governments set aside allowances, and later decide how many and at what minimum price to auction them, they will effectively control the market by holding and pricing marginal allowances. This represents a form of 'ex-post adjustments' (banned by the



EU ETS), albeit for the market as a whole, rather than for individual players.

While New York is considering comments on its proposed rule, other RGGI states are looking to follow suit. If this bold step stands, it will necessitate very careful auction design and timing to keep from adding greater uncertainty for the new RGGI market.

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The Environmental Markets Association consists of more than 270 members from 190 companies worldwide. Its aim is to promote market-based trading solutions for environmental control

¹ Assuming Massachusetts, Rhode Island and Maryland are included in RGGI.