IETA
INTERNATIONAL EMISSIONS TRADING ASSOCIATION

Comments of IETA US Working Group on 100% Auctioning in Connecticut's RGGI Model Rule

EXECUTIVE SUMMARY

The creation of a price signal for carbon in the economy is the fundamental purpose of any greenhouse gas emissions trading system.

Large auctioning for an environmental market is an unprecedented experiment, both in size of auction and its use at the beginning of the market.

Firms receiving allowances under a grandfathering system derive no net asset benefit as they are obliged to surrender a greater number of allowances. Any financial benefit derives entirely from their ability to flow through the cost of carbon.

All environmental markets have shown an initial period of volatility at inception.

Auctioning a large quantity of allowances into a small market may eliminate the secondary market needed for an ongoing price signal.

A weak price signal compromises the basic purpose of an environmental market, which is to efficiently price an environmental constraint.

A strong secondary market is necessary in order to provide clear incentives for overcompliance, and initial large auctioning puts this at risk. This will place the emphasis for GHG reduction on the expenditure of auction revenues, not abatements produced by market forces.

The use of large auctioning as an allocation mechanism compounds the effect of any decisions made on RGGI leakage policy.

The use of auctioning as an allocation method for emissions trading should be carefully considered on the basis of both equity and efficiency. Auctioning has significant appeal as an allocation method for an emissions trading system, and may address some of the shortcomings that have been observed in emissions trading in other jurisdictions. There is reason to believe that the use of 100% auctioning to initiate an emissions trading system is not optimal on either count.

Many of the arguments deployed in support of extensive use of auctioning rest on a conflation of two issues: marginal cost pricing in electrical markets and the purposes of an allocation process for emissions trading. A gradual transition to more extensive use of auctioning would be more prudent public policy, realizing efficiency gains from a more effective market while striking a compromise on the inevitable issues of equity. The allocation process should not be called upon to achieve the policy objectives of the program, merely to initiate the process and allow the power of the market to drive abatement.

Any allocation of permits involves distributional consequences. Auctioning permits could be seen as transferring wealth equivalent to the new cost of carbon from liable parties and energy users to taxpayers. Free allocation of permits assigns rents to the recipients—at the expense of taxpayers and/or energy users, depending on the structure used, but not necessarily at any new incremental expense.

The Price Signal

A clear price signal for carbon into the economy is the fundamental policy objective of any emissions trading system.

To reduce GHG emissions with the lowest possible social cost, it is fundamentally important to set a price for greenhouse gases. A price signal is inherently more efficient than any command regulatory approach. Putting an appropriate price on carbon, explicitly through tax or trading, or implicitly through regulation, means that people are faced with the environmental cost of their consumption. This will lead individuals and businesses to switch away from high emissions goods and services, and to invest in low-carbon alternatives or offsets, often at comparatively low substitution costs.

Emissions trading has demonstrated the ability to deliver effective environmental policy outcomes at a far lower cost than command and control or tax-based approaches, simply by allowing a market to set the appropriate price. Environmental markets minimize government intervention, setting the constraints and allowing the market to help with asset allocation. In using a price signal, the overall societal costs of compliance are minimized, allowing for resources to be allocated to other priorities.

This price signal creates opportunities for deployment of low carbon technology by providing an incentive to invest. In the case of an electricity sector only trading system such as RGGI, this will have the effect of making alternative generation technologies more price competitive by building in a carbon premium.

However, the corollary is that the electricity generation sector lacks the diversity and size to provide an emissions trading system with a ready supply of low cost reductions driven by differential costs of abatement that a multisector system might provide. In the EU ETS, a significant amount of the low cost short-term reductions stimulated were produced by fuel switching from coal toward natural gas, an obvious substitution for which there is considerably less scope in the Northeastern electrical power sector. Given time, emissions trading will discover and exploit the necessary opportunities for abatement.

Large auctioning is uncharted territory

Large auctioning of emissions trading allowances is an unnecessarily risky experiment which is unprecedented in both scope and timing. Incremental introduction is more likely to result in long-term success of the RGGI framework.

No existing emissions trading system has utilized auctioning to any level that provides ready lessons for the minimum level contemplated by RGGI, let alone an initial auction of 100% of allowances. Auctioning in the US Federal SO2 program covers only 2.5%, 1.25% of two vintages. The use of auctioning was dropped from the Federal NOx program. Consideration of the auction of 5% of Virginia NOx allowances must be tempered by the fact that was not in any sense a use of auctioning as an initial allocation mechanism. Auctioning in the EU ETS provides no significant lessons, as the two jurisdictions that chose to utilize it auctioned a very small percentage of their own allowances, which in turn represented a miniscule percentage of the total within the EU ETS.

The Irish EU ETS auctions placed 500,000 allowances into the market in two auctions of 250,000 each, approximately 0.75% of the total number of Irish allowances within the EU ETS. More importantly, as these allowances are perfectly fungible across the EU ETS, this number represents 0.025% of the over 2 billions EUAs trading in the European emissions trading system. Hungary placed 1.2 million EUA allowances using auctions, or about 0.06% of the market total. In both instances, over 50% of the auctioned allowances left the auctioning jurisdiction.

By contrast, as proposed Connecticut alone would auction 53% of the initial 121 million RGGI allowances. On this basis, it is difficult to derive any lessons from auctions in existing emissions trading systems. Public goods auctions of this scope have hitherto

been confined to commodities where an iterated market is not seen as a viable option, such as in the case of spectrum auctions.

Extensive use of auctioning at the inception of a market is in itself an experiment. The Irish auction of allowances for the EU ETS occurred after extensive trading had occurred and a robust market had developed. The first auction occurred after over 13 months of trading, the second after nearly 24 months. The Hungarian auction similarly took place after nearly two years of market experience. In both cases, participants simply utilized current market pricing plus a discount to inform their bidding strategies. This option will not be available under the Connecticut RGGI proposal.

Although auctioning does allow for price discovery, this has generally been seen as an alternative where it is not otherwise possible to use the efficiency of an iterated market to discover a price. This is clearly not the case for emissions trading.

As proposed, auctioning of 100% of RGGI allowances must occur as the first step of the market, and will force parties to acquire their compliance portfolio in the initial stages of the program. Drawing on the lessons of every other emissions trading system, this will force the entire information discovery process to occur into the initial price spike period.

As such, the use of initial large auctions runs the real risk of significantly increasing compliance costs with no additional environmental benefit. Regardless of the allocation method chosen, the cap remains the same.

Reclaiming Excess Revenue

Allocation creates a difficult problem in the inception of a price for carbon. The use of direct allocation or 'grandfathering' in other emissions trading systems has been argued to transfer wealth to recipients, particularly in the case of the electrical sector through the use of marginal cost pricing. A critical element is the ability of generators to pass on costs in deregulated markets, which in a genuinely competitive environment will be imperfect at best. It is notable that the introduction of SO2/NOx markets did not produce any discernible flowthrough of costs. This would suggest that a careful portfolio approach to allocation is a more robust solution.

It is important to bear in mind that in the creation of an emissions trading system, no new wealth is created. The created property rights clearly have value, but should properly be viewed as simultaneously adding fungibility and scarcity, which is not identical to wealth creation. Firms with a compliance obligation will be no better off in net assets, and any benefit received will be a function of their ability to flow through costs.

To the extent that a carbon premium will exist, this is not a failure of policy. Price signals promote efficiency in consumption, production, and investment. A pass-through of costs by the marginal generating unit will benefit efficient generation and reward low

emissions or non-emitting generation technologies. Particularly in the long-term, this premium will itself be subject to competitive pressure downward.

In the case of competitive electrical markets, particularly where natural gas sets the margin, the ability to pass on carbon costs will be limited. Writ large, this is a desirable policy outcome, as it provides the necessary long term incentive. However, the corollary is that much of the increased revenue due to the carbon premium will accrue to clean generation. If the policy intent of 100% auctioning is to reclaim any windfall process, this strongly suggests that auctions will not be an effective mechanism to do so, simply because the premium will not rest with the generators compelled to acquire allowances in an auction. The recent Maryland study concluding that there would be no price impact given a 25% auction must call into question the size of any flowthrough of costs.

It is in all likelihood impossible to perfectly balance the considerations of equity and efficiency in setting priorities for allocation. Free allocation of any percentage of allowances will embed a carbon premium in electricity prices, accruing to generators according to their ability to pass on the marginal cost of allowances and their emissions profile. Auctioning will conversely transfer wealth from generators. The essential task is to align the allocation process with the objectives of the emissions trading system.

Large initial distributive effects will compromise the ability of firms to make the investments required to achieve the environmental objective. Over time, there will be winners and losers as the price for carbon engages. In the long term, competitive electrical markets will force re-investment of any profits in low carbon generation. However, it is misleading to consider allocation of allowances other than auctioning as inherently a public grant of some form. Any asset value is offset by the obligation to surrender a greater number of these allowances in order to maintain value of existing assets.

In the design paper set out by the National Emissions Trading Task Force, a coalition of the States of Australia, the use of a transition to auctioning is explicitly used as means to address equity considerations. It is recognized if all permits were auctioned some generators would be disadvantaged by the scheme, because their costs would rise for every unit of production. It is equally anticipated that their revenues are also likely to rise as wholesale prices increase. However, for some generators, the rise in revenues is likely to be insufficient to offset the increase in their costs (or to offset the reduction in revenue due to a reduction in output).

This structure provides partial compensation for the creation of a new constraint, while also providing the correct policy signals. As long as the allocation of permits is an ex ante decision that is not tied to subsequent emissions levels, generators' incentives to minimise their emissions remain intact and the 'polluter pays' principle holds true.

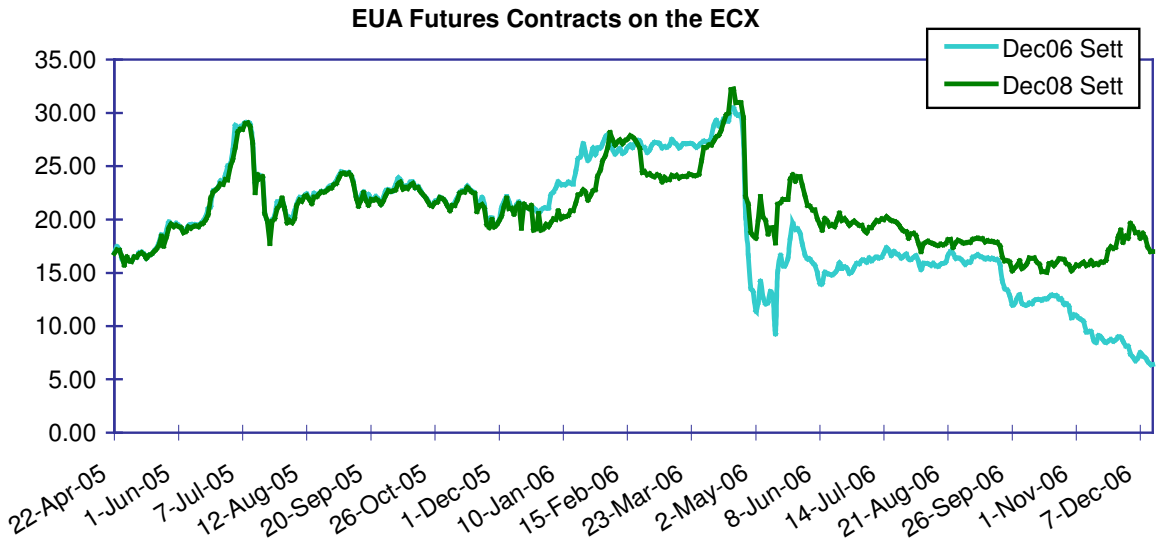
IETA
INTERNATIONAL EMISSIONS TRADING ASSOCIATION

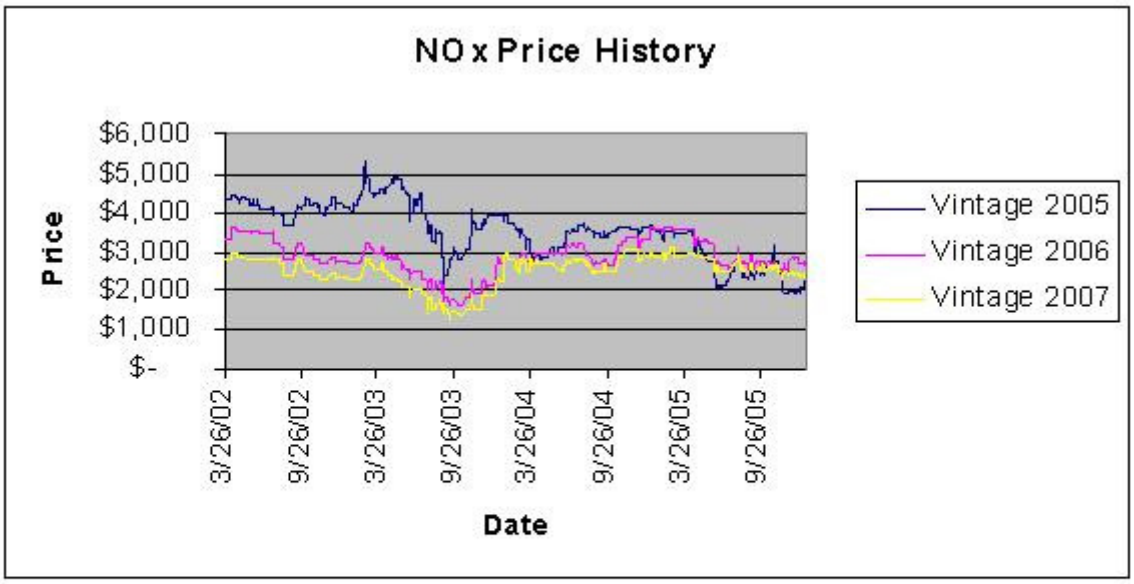
A New Market Needs Time

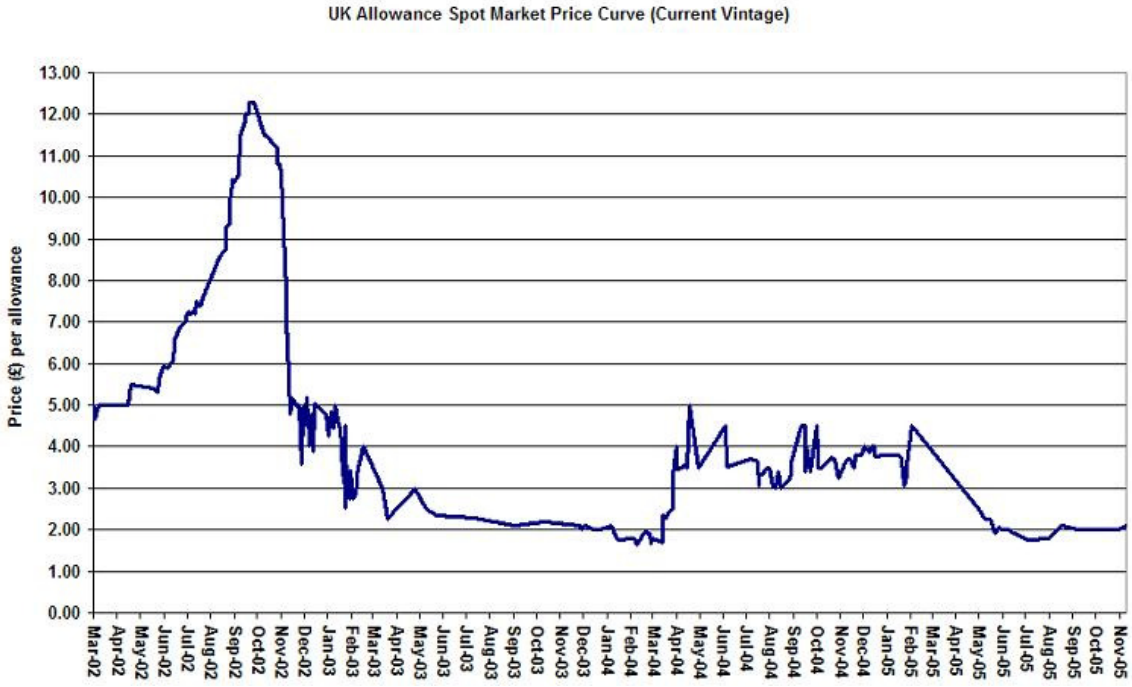
Emissions markets have started with a price spike due to a discovery period, forcing almost all compliance asset acquisition into this initial phase will increase compliance costs and risks.

Every emissions trading system at inception places actors within the market at the beginning of an information development process. This process forces a dramatic assessment of the cost and demand tradeoffs for the new constraint. This assessment is fundamental to the environmental success of an emissions trading system, as the discovery of lowest-cost abatements is the fundamental purpose. However, this process must inevitably take place over time.

As a consequence, every successful environmental market has seen a basic pattern: prices have an initial upward spike as the immediate effect of the constraint is translated into economic activity, and then a downward pressure as the new price signal drives actors to discover, target, and implement abatements that are below that first stage price. The initial period of price growth may place significant political pressures on regulatory authorities, but must be seen as inevitable in the implementation of a new environmental constraint. As reductions are triggered that shift the demand curve, price is pulled downward. Given time, the market discovers its fundamentals.







The market is discovering fundamentals such as opportunities and time frames for investment in alternatives, or efficiencies through optimisation stimulated by the new carbon price.

IETA
INTERNATIONAL EMISSIONS TRADING ASSOCIATION

Disrupting the Price Signal

Auctioning in a limited market can be highly disruptive, even in comparatively small amounts. The experience of the Federal SO2 market shows dramatic falls in volume and a price that is easy to manipulate during the period of anomaly around the auction.

In the case of 100% auctioning, it is possible that the only price signal will be the clearing price of the last auction. The remaining volumes in the market may be insufficient to allow capital investment to use the market price as the imputed cost of carbon, and preclude the estimation of forward price curves with any reasonable confidence interval. Climate change cannot be addressed without a significant realignment of capital spending, and a critical element of that is long-term carbon pricing. That in turn requires the most robust possible price signal.

An unclear price signal for carbon works against the basic purpose of emissions trading

Elimination of a viable secondary market eliminates any incentive for early or overcompliance.

The importance of overcompliance in delivering environmental results from emissions trading cannot be overstated. Overcompliance is the real success story of the SO2 programs, as has been thoroughly documented. In Connecticut the NOX acid deposition reduction program for the non-ozone season set a clear policy signal and early allocations produced early reductions. The trading season budget is 39,908 tons and early reductions totalled over 5,000 tons. As a result the scope of trading has subsequently been limited, but the program itself must be interpreted as a success because the program produced reductions sooner than the program projected.

More recently, the EU ETS has provided a clear example of this. Many critics have suggested the EU ETS pilot Phase 1 suffered from an excess of allowances in the market, leading to insufficient scarcity in the market and the consequent radical price decline when actual 2005 emissions data entered the market. Regardless of any merit of these criticisms, a MIT/FEE study has concluded that the EU ETS Phase 1 nonetheless produced substantial abatements.

In the counterfactual case of initial full auctioning for the EU ETS Phase 1, it is possible that the entire price history from January 2005 to May 2006 would have been compressed into the time frame immediately surrounding the auction. Market participants would then have no further incentive to produce abatements over the course of the remainder of the

two year pilot phase. This outcome would have been disastrous for the long term success of the EU ETS.

The danger in this scenario is that the primary compliance mechanism will be through transferring capital to the State, not investing in clean technologies, substitutions, or direct abatements

There are also very real concerns that the size and limited liquidity of the potential market makes an auction vulnerable to speculative disruption, particularly in the absence of price information from a functional market. This vulnerability increases with the scale of the auctioning versus the secondary market.

Nonetheless, the financial sector has to be permitted to engage constructively to allow a market to operate. IETA is not in favour of any restrictions on participants in the market, including in any auction. The participation of outside entities is essential to ensure sufficient liquidity and efficiency in the market.

Emphasis shifts to revenue collection

The danger of the initial use of full auctioning is that the success of the RGGI program will rest entirely on the ability of the State to find more efficient abatement opportunities for capital than the private sector, not the effect of a price signal in stimulating the private sector to locate and utilize those opportunities.

The potential scale of revenues may well be more than can be effectively spent on energy efficiency, while draining regional utilities of capital needed to invest in low carbon technology and exposing them to considerable financial harm, conceivably resulting in a significant transfer of assets without meaningful environmental impact.

Revenues generated by the auction of allowances should be treated strictly as a form of trust fund for the greenhouse gas reduction objectives of the RGGI process, not as a contribution to the general revenue of the individual States. Even this would seem contrary to the intent of the RGGI program, which limits the use of offsets in order to ensure reductions at source. While energy efficiency is a laudable objective, there are no projections that suggest a reduction in total quantity of electrical generation, and as such there is a disconnect between the emissions trading and revenue use elements of RGGI.

The purpose of an emissions trading system is not to serve as a carbon tax generating revenue, but to place a marginal cost on the use of the carrying capacity of the environment. As such, any structure that provides the State with a source of funds provides an incentive to undercut the purpose of the program.

IETA opposes in principle the diversion of revenues derived from the allocation of allowances with a GHG trading system to policy objectives other than the reduction of GHG emissions.

What about leakage?

Given the fact that a significant percentage of the targeted excess revenue produced by a carbon premium will exit the RGGI States, the policy response for leakage from RGGI is an essential part of this question. The economic impact of the RGGI program, and auctioning in particular, is directly related to the actual ability of producers to flow through carbon costs to consumers, and that question simply cannot be separated from the issue of leakage.

While the outward flow of a carbon premium to non-RGGI producers of clean energy may be viewed as acceptable, the possibility of a carbon premium accruing to external high GHG generation is more problematic. The competitive impact of a Europe-only carbon constraint has been one of the most controversial issues in the EU ETS, and auctioning does not resolve this tension in any meaningful way.

The developmental state of RGGI's policy on leakage again suggests the utility of a compromise transitional portfolio approach to allocation.