

# **Auctioning Emissions Allowances: Recommendations for Design and Transition**

CENTER FOR CLEAN AIR POLICY EUROPE

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## **1. Introduction**

Europe faces the task of deciding how to auction large numbers of allowances for commitment periods starting from 2013. One of the basic issues is whether there will be one centralized auctioning platform for the whole of Europe or several decentralized platforms commissioned by member states. The discussion among member states around this issue is still ongoing and at the moment there seems to be insufficient votes in the Climate Change Committee for either a centralized or a decentralized system.

## **2. Recommendations for the Design of the Large-Scale Auctions of Emissions Allowances**

- 1) The Center for Clean Air Policy Europe (CCAP Europe) recommends that Europe select a centralized auctioning system, as this type of system best guarantees non-discrimination, is most cost-efficient, best ensures a clear carbon price signal, gives the best conditions for access to small emitters and the small and medium enterprises (SMEs) that are covered by the European Union's Emissions Trading Scheme (EU-ETS), helps mitigate the risk of market abuse, and best respects the principles of simplicity and transparency. Member states' successful experiences with auctioning platforms are no proof that a partitioned auctioning system could cope with future tasks, which will be of a completely different magnitude.
- 2) However, existing decentralized auctioning platforms may be a means of providing compliance companies with necessary allowances in the near term until a centralized platform is up and running.
- 3) The need for early auctioning in 2011 and 2012 (if any) should be assessed through a transparent process to avoid surprising market participants with the final decision and creating unnecessary price volatility.

## **3. A Centralized Platform for the New Era of Auctioning**

Markets of larger size have better liquidity and reduced risks of price manipulation. Splitting the auctioning of allowances across different platforms will reduce the demand at each platform, reduce the size of each market, and therefore make each platform more vulnerable to market abuse. With numerous platforms, the cost to possible buyers of bidding on each platform will rise. Multiple platforms may also lead to dissimilar prices, increased volatility, and lack of transparency. This brings no benefit whatsoever to compliance companies and is detrimental to a clear carbon price signal and efficient abatement of greenhouse gas emissions. Therefore, CCAP Europe believes that Europe would be best off with a centralized auctioning system when the ETS enters into a new phase in 2013.

Although separate national auctioning platforms may have served their purpose well up to now, that is not a convincing argument against the need for a centralized auctioning process in the future. Auctioning after 2012 will have only slight similarities with the auctioning that we see today. Currently, only three to four percent of allowances are auctioned. Beginning in 2013, more than 50 percent will be auctioned. Between 2013 and 2020, the auctions will generate up to 300 or even 500 billion Euros, according to estimates of the energy industry. For the power sector, auctioning will become the predominant allocation method.

Until recently, auctioning had only little economic significance and any mis-steps in the auctions could have been easily eliminated by the large secondary market. After 2012, we will enter an era in which auctioning will have a considerably greater impact on the secondary market. The predominance of auctions in the EU-ETS implies that any defect in the auction design could damage the integrity of the ETS as a whole.

In light of these considerations, it will be critical to choose an auction design, operational mechanisms, and regulations that ensure transparency, predictability, efficiency, and prevention of market abuse. If the auction system has design faults or is mismanaged, it could be a cause of substantial volatility in allowance prices. This would weaken the price signal to investors and companies – a crucial component for making long-term decisions on investments in technology and infrastructure. In addition, the reality or suspicion of any market manipulation could undermine public support for the auctioning of allowances and emissions trading as a whole. Ensuring the most astute design, smooth functioning, and efficiency of the auctioning system will therefore be a critical step in the further development of European climate policy and environmental markets worldwide.

### ***3.1 Organizing the Transition to a Centralized Platform***

As discussed above, a unified and centralized platform is the most efficient instrument for the auctioning of allowances. As it is reasonable to assume that a tightening of the cap will lead to increasingly scarce allowances and higher allowance prices, the functioning of the EU-ETS and the auctioning system will become even more important in the years after 2013. So even if it is not possible to have a centralized auctioning system in place for the first auctions, this should be the final goal for the auctioning design. Therefore, CCAP Europe suggests that regulations focus on a centralized platform.

In the event that a certain volume of allowances needs to be auctioned before the centralized system is up and running, such early auctions could be carried out by one or more existing platforms on a transitional basis. This could help to overcome some member states' scepticism of a general decision for a centralized auctioning platform. More importantly, this would also serve as a safety measure in case delays occur while setting up the centralized auctioning platform. Experts predict that the central European auctioning system will not be in place before the end of 2011, and further delays cannot be ruled out. Thus, it would be valuable to maintain existing platforms and other potential national platforms as back-ups. The auctioning regulation must ensure that these auctions are transparent and, most importantly, non-discriminatory toward possible buyers. These auctions would be coordinated through one centrally determined auction calendar.

The centralized auctioning platform must respect the principles of openness and accessibility to SMEs covered by the EU-ETS and small emitters. For example, member states could be responsible for providing translations and assisting with local training where appropriate. Experts explain that this is crucial to encouraging wide participation. In addition, when selecting an exchange to hold the auctions, particular attention should be given to ensure full, fair, and equitable access to SMEs and small emitters directly and/or indirectly.

To promote participation by smaller enterprises, special simplified procedures could be used to qualify them as bidders, to secure their financial collateral, and to process their bids. For example, bidders below a certain size could be allowed to submit non-competitive tenders. In that type of procedure, small bidders would only indicate the amount of allowances they seek in an auction without bidding a price. They would automatically get all the allowances they seek at whatever turns out to be the auction-clearing price. Such special procedures would help ensure that a centralized auction platform meets the needs of smaller enterprises.

### ***3.2 Getting the Transition to Large-Scale Auctioning Right***

While establishing the best possible auctioning system is a demanding task, it would also be challenging to initiate large-scale auctioning much before 2013. Some compliance companies are calling for early auctioning because of concerns about a shortage of allowances in the coming years and the possibility of resulting increases in power prices. In particular, European power suppliers argue that electricity producers today can be confident that they have a large share of the allowances they will need up to two years ahead of time. In part, this is a result of advance knowledge of the free allocations of allowances. This certainty will vanish when free allocation to most power producers ends in 2013. Power producers can also hedge price risks by buying allowances in futures markets. However, the balance of demand and supply for futures contracts maturing after 2012 is a source of concern. With large new demand for such contracts from power firms, sufficient private counterparties may not be available to take the sell side of these contracts.

Reflecting such concerns, European power producers are calling for early auctioning of allowance futures starting in 2011 to allow them to continue hedging and to avoid price spikes. The auctioning of futures by governments would provide certainty about access to allowances while avoiding the need for significant upfront payments. Carrying large banks of allowances requires a substantial commitment of capital. In a futures contract, however, the buyer needs only to deposit "margin" that is a fraction of the total purchase price. It is unclear how much government auctions of futures for post-2012 maturities would remedy any deficiencies in the liquidity and price discovery properties of existing futures markets.

If member states sell futures, they will take the risk of getting a significantly lower price for allowances than if they wait to sell them in spot market auctions years later. The estimates of demand for futures from the association of the electricity industry in Europe, Eurelectric, have changed over time. At the end of October, Eurelectric argued that at least one billion allowances should be auctioned by the end of 2012, while the association's latest paper (November 30) mentioned 450 to 650 million under the "most optimistic scenario." If the demand for futures of the power producers turns out to be less than expected, early auctioning would risk a low allowance price in auctions and weaker incentives for investments in carbon-intensive technologies. If demand is strong and early auctions are not held, power prices may increase substantially. As a consequence, power producers argue, the step-up to large-scale auctioning and the whole ETS might be blamed for a surge in

power prices without recognition that this is only a temporary phenomenon. Large fluctuations in prices could also cause wrong investment decisions to be made.

Operational challenges could make it difficult to conduct early auctioning on a large scale. It may prove impossible to get a centralized auctioning mechanism in operation by the end of 2011. The central registry for European allowances will not be ready before 2012. If member states have to invest in knowhow and infrastructure to conduct early auctions on a decentralized basis, they will be less willing to end all activities and abandon all capacities once a central auctioning platform is in place. The desire for early auctions thus implies that every possible step should be taken to have a centralized platform up and running as quickly as possible.

One of the basic principles of the EU-ETS is that there should be regulatory stability and as little political intervention into the market as possible. In this particular case, there is no way around a political decision as to whether early auctioning is necessary and to what extent. This decision on early auctioning itself has the potential to surprise the market and affect allowance prices. Therefore, more effort needs to be put into the task of determining the need for early auctioning and the sensible scale of it. This decision should not be based only on data provided by Eurelectric but rather a neutral assessment. It might be helpful to set up a clear set of transparent criteria upon which this decision will be made. Markets could then make better estimates of what might arise in regards to early auctioning.

## **4. The Discussion: Central vs. Decentralized**

### ***4.1 One Centralized Platform for the Entire European Union***

According to their answers to the consultation process of the commission during summer 2009, a centralized approach is supported by France, Denmark, Austria, Finland, the Netherlands, and Sweden. Also, nearly all companies and business federations in the consultation have argued in favour of this concept.

The advantages of this approach are:

- A unified clearing price for all participants in the European Union would be beneficial.
- All buyers would only have to learn how to handle one system.
- Unified rules for access would ensure that there would be no hidden advantages or disadvantages for buyers, unlike with multiple platforms.
- The single auctioning platform would have the highest number of allowances to be sold and all possible participants in the auctions would meet on this platform, thereby creating a strong price signal for environmental markets.
- National governments would not have the chance to give their national companies preferred access to the allowances.
- Having a centralized platform would also mean that a single institution is in charge of oversight of all auctions, which will be useful for monitoring the Europe-wide carbon market and linking to other ETS.

On the other hand, a centralized auctioning system in Europe might have certain disadvantages. For example:

- Any problem with the central system would delay or disturb the selling of allowances all over Europe. To limit this risk, robust information technology infrastructure must be required and auctions should take place with high frequency.
- Upon initial consideration, a centralized system could cause fears that less sophisticated operators would be subjected to an anonymous, centralized bureaucratic process with seemingly high hurdles for participation such as collateral, proof of solvency, and so on. However, as discussed below, a centralized platform could have advantages for such operators, given its simplicity and transparency, and it would be very difficult for SMEs to get acquainted with several platforms. In any case, the regulation would have to make sure that all auctions are accessible to SMEs, whether there is a centralized or a decentralized system. In addition, as mentioned above, special procedures could simplify action participation for small bidders.

## ***4.2 Multiple Auctions Using Parallel and Decentralized Platforms***

The United Kingdom, Spain, Poland, and Germany expressed in their responses to the EU consultation process that they insist on having their own auctioning platform. These four member states together are responsible for over 50% of the allowances to be auctioned. Having an autonomous auctioning platform seems to be compelling to some member states – especially many large states. The most common argument in favour of this approach is that having more than one platform would foster competition among them and ensure efficiency. Another argument in its favour is the concern that moving toward one centralized platform as an immediate next step instead of using an incremental approach of multiple auctions could lead to risks if this central platform is not in place early enough or has technical problems.

There may also be other reasons – that are not communicated as openly – as to why some member states are more inclined to have their own separate auctioning platform. In off-the-record discussions, two points are frequently mentioned: (a) the auctioning will be a major source of money for the national budgets, and (b) finance ministers want to keep the whole process under their control. Some countries seem to fear that centralized auctioning would be a first step toward making these revenues part of the Community budget, although matters of Community budget are resolved by unanimity at much higher levels. “These are our allowances”, say representatives of member states. “My finance minister will not allow me to give the European Union control of these assets.”

Another unofficial reason is the fear that companies of a specific member state could have disadvantages in a Europe-wide unified auctioning system and could end up without the necessary allowances. A small national auctioning system at first glance seems to be a more reliable way to provide the companies in a particular member state with the allowances they need for running their installations. Some member states might even think that with a national auctioning system they may have the possibility of providing allowances to important national companies on preferential conditions or especially low prices. At the very least, some member states are convinced that a national auctioning system could ensure that small companies are not deterred by a centralized bureaucratic European process with high hurdles (registration, solvency, collateral, fees, and language) to participation.

## 5. The Economics behind the Decision

Participants in auctions incur costs in order to register with a platform, to prove solvency, to be accepted as a possible buyer, to maintain validity of this status, to have collateral in place, and to monitor the developments at this platform. Aggregate costs of maintaining the ability to bid on multiple platforms would be much higher than on one platform. The costs would increase to the extent to which the single platforms differ from each other in terms of registration process, solvency requirements, regulation, and technical implementation. If the different platforms differ substantially from one another, only large buyers would be able to afford to maintain the readiness to bid on all platforms. Smaller buyers would be compelled to make a choice about which platform would likely be the most attractive to them and concentrate their efforts on this single platform. In this case, there would be a risk of being unable to take part in another auction that might be more attractive at a particular moment. It is not easy to estimate ex-ante which of the platforms will be the most attractive for a particular buyer.

While the supply of allowances in a diversified auctioning system with several platforms can be easily identified for every single platform, this cannot be said of the demand across platforms. Demand will depend on how attractive possible buyers judge a particular platform. Intuitively, those platforms with the highest number of allowances, the smallest fees, the easiest registration process, the lowest collateral, and the fewest bureaucratic hurdles will attract the highest number of buyers. Platforms with small amounts of allowances and high hurdles should attract very few buyers.

However, it is possible that this effect would make small platforms with high fees and hurdles quite attractive: a low number of possible buyers may result in a very low clearing price, which would suddenly make these platforms rather appealing. If buyers are attracted to these seemingly unattractive platforms, that would itself increase demand and the clearing price. The demand at a single platform will not be the result of the overall demand of the entire market or of the demand in a particular member state but a result of the degree to which market participants hope they can get a good deal in this particular platform. Ultimately, one would expect that the differences between clearing prices (expressed as a discount to the prevailing secondary market price) will reflect the degree of inefficiencies. This is a cost to society at large and will be felt in the first place by the member states using inefficient platforms, as their revenues will be relatively low.

From the buyer's perspective, multiple platforms will require more sophistication for strategizing and financial capacity to be able to switch platforms or register in additional ones if need be. Perhaps only large companies and market participants will be able to maintain the readiness to participate in most of the auctions and to have all options.

The principles of openness and non-discrimination laid down in the revised EU-ETS Directive imply that auctions must be accessible to all European operators of installations under the ETS and to other companies established in the EU and acting as intermediaries. This access must be without any discrimination on grounds of nationality so that member states are unable to show preference for national companies in their particular auctioning platform. By running small platforms, these governments will face the risk of higher price volatility and lower revenues without having any advantages for their national companies.

A system of multiple platforms with differing regulations is likely to create more price fluctuation than a centralized system. At the same time, one could argue that the secondary market today gives a very strong indicative price signal with which clearing prices in auctions will align. The secondary market today is also most likely to keep price differences between different auctioning platforms relatively small. But after 2012, auctioning will change from a minor role to a central role. Whether the secondary market will be able to fulfill these functions to the same extent cannot be guaranteed as yet.

Another imminent problem of multiple smaller auctions is the likelihood of increased price volatility through pure coincidence, attempted manipulation, or abuse of market power. The price of allowances plays an important role in the determination of the price of electricity. Some players might have an interest in high electricity prices. Small auctions with small quantities of allowances and few participants are easier to manipulate than a single large auction with a vast supply of allowances. For example, if there were a separate auction of a small member state's allowances, market players could influence the price in this particular small platform relatively easily via coordinated bidding. The same buying power would be of much less significance in a Europe-wide market where the same bid would influence a much smaller share of the total supply. The advantages of scale in preventing market abuse were a decisive argument when ten US states formed the Regional Greenhouse Gas Initiative (RGGI). This initiative included its own trading scheme in the Northeast United States and from the outset had a centralized auctioning system with one platform and one central clearing price.

## 6. Guiding Principles for Regulation

The necessary regulation will depend on the auctioning design Europe eventually chooses, but some of the common principles on which regulations should be based are:

- **Clarity and Predictability**

Clarity and predictability in terms of eligibility criteria, bidding procedures, auction interface, and platforms are essential to creating a stable and rational market. One of the biggest concerns with multiple auctions is the lack of these qualities.

- **Non-Discrimination**

If there are a multitude of platforms after 2012, an important issue will be enabling particular – especially small – market players to participate in several auctioning platforms at the same time without high transaction costs. Ideally, this goal could be reached by homogenous registration and solvency requirements; comparable fees; and, in the best case, the same technical interface and handling instructions in each auctioning platform. Huge differences in regulation and technical implementation would favour large market participants who can afford high transactions costs.

To ensure fair competition, every European compliance buyer – and perhaps every company – should be allowed to take part in every auction all over Europe. Member states should not be allowed to restrict participation in auctions to a particular set of (national) buyers. Regulation must also prevent foreign buyers from being alienated by complicated registration and implementation requirements. The auctioning process should not leave room for undermining the price signal to operators. This would be a hidden subsidy to some emitters, would distort competition, and would slow down the growth of climate-friendly investments in Europe.

- **Easy Access**

The procedures for registration and acceptance of bidders at the different platforms should not resemble barriers to entry and should be kept to a minimum. Operators of emitting facilities need allowances in order to maintain their businesses and thus the auctioning process should not subject them to unreasonably difficult and complex qualification processes. Solvency requirements should be kept at levels that do not negatively affect day-to-day business operations. Bureaucratic processes should likewise be kept as low as possible.

- **Transparency**

There should also be timely, accurate, and independent reporting of transactions ex-post in order to ensure information symmetry and a stable secondary market. There should be minimum delay in the creation of appropriate titles on successful bidding in auctions.

- **Liquidity**

To ensure liquidity, there should be minimum supply requirements for each auction/platform.

- **Reliability and Timeliness**

Several responses from the business community in the stakeholder consultation called for a high frequency of auctions – perhaps every week. In a system with a multitude of platforms, this would mean that the number of auctions for each individual platform would become quite small. Therefore, the auctioning calendar should be optimized to maintain a decent minimum size of single auctions. It should also be ensured that two auctions do not take place on the same day.

The power industry in particular called for an early start of the auctioning of allowances to be able to maintain its usual forward selling of electricity. If decision makers were to follow this suggestion, the auctioning system(s) would have to be set up rather quickly. In a system with several platforms, the early auctioning should be harmonized in a Europe-wide calendar, as it should correspond with the ordinary auctions after 2012. To have several platforms in place in time for early auctioning might require a binding timetable for the preparation of the platforms. However, as indicated above, the appropriate quantities for early auctions need to be verified.

- **Integrity**

The ultimate goal of emissions trading is to limit global warming by establishing a price on carbon that would be applied globally in the best case scenario. Other important industrialized countries like the US, Australia, and Japan may also soon implement cap-and-trade systems. It would be politically, economically, and ecologically a huge step forward to link the European system to the coming systems on other continents. Any decision that encourages European member states to implement very specific national systems would not bode well for the development of a political instrument that eventually aims at a global solution. Hence, while deciding on the design of auctions as the centrepiece in the EU-ETS, the integrity and *raison d'être* of global environmental markets should be considered, and any action that is regressive or damaging to their development should be avoided.

## 7. Member States' Views on the Number of Auction Processes

<b><i>Countries in favour of a limited number of coordinated auction processes</i></b>
UK, Poland, Spain, and Germany
<b><i>Countries in favour of a centralized auction process</i></b>
France, Denmark, Austria, Finland, the Netherlands, Sweden, Italy, and Malta

### Quotes and Positions from the Auctioning Consultation and Stakeholder Meetings

**UK:** “The most important part of the UK’s position for Phase III auctioning is to retain our ability to hold our own auctions...” The UK would like to propose a ‘fifth approach’ – this is for the regulation to provide for a central auction platform developed and run by the Commission that member states can opt to use, whilst also allowing member states to continue to hold their own auctions (member states could access both the centralized auction as well as auction their allowances through other member state platforms)”. The UK also stressed the need of “fiscal sovereignty.”

**Poland:** “The establishment of several auction systems independently managed by larger issuers (Denmark, Poland, UK, and Spain) and groups of smaller ones seems to be the most rational approach.” Poland defended its position by pointing at cultural and psychological specificities.

**France:** “The establishment of a single emission allowances platform at European scale is the optimal solution from an economic point of view and for companies subject to the quota system.”

**Germany:** “For reasons of subsidiarity, Germany does not support a single, Europe-wide auctioning body. We believe that it is for each member state to decide on the body which is to be charged with running the auction and how the costs of the auction are covered. Auctioning should be based on EU-wide harmonized principles in order to avoid market distortion among member states and avoid unnecessary costs. Existing carbon exchanges are well-suited to staging auctions. Different member states should be allowed to share an auctioning body.” Germany argued that the coordinated approach with a limited number of platforms would not have significant negative impacts, but would induce competition and innovation.

**Italy:** “A fully centralized system or a hybrid system would seem the most efficient, avoiding differences among member states and guaranteeing the same price for a homogenous good.”

**Denmark:** “Denmark can support one centralized platform in principle. If more than one platform emerges, these must be as harmonized as much as possible.”

**Austria:** Austria has a “strong preference for a centralized approach.” “If a hybrid approach is envisaged, it should be different from the hybrid approach presented in the consultation paper. Rather, all the steps before the auctioning should be harmonized – for example the calendar, quantity to be auctioned, template, registration, etc. – not necessarily the operation of the auction itself.”

**Finland:** “The full centralisation based on a single EU-wide auction process could be the simplest solution if it is optional and up to the member state to decide.”

**The Netherlands:** “An EU-wide auction process is the best option to achieve maximum harmonisation.” The Netherlands raised the point that, in order to maintain competition, appointing a platform for the duration of five years could be a concern.

**Sweden:** “Sweden opts for a fully centralized system” ... “We would like to see the hybrid approach sketched out by the consultation paper elaborated on. This might be an opening for a more decentralized system. At the same time, we do not really see the added value, especially for smaller member states. It seems likely that major market players on aggregate will use one or a few auctioning platforms, leaving the other ones with very little business.”

**Spain:** “As indicated in general comments, having in mind that there is limited experience with regards to auctioning, some flexibility is required in the early stages of implementation. In addition, the subsidiarity principle must also be applied here. At the same time, it is necessary to set up a model with a significant degree of harmonisation. For all these reasons, a limited number of well coordinated auction processes instead of full centralisation based on a single EU-wide auction process are needed.” Spain mentioned their support for a national platform under the coordinated approach was in order to ensure access to SMEs and small emitters, which according to Spain, were not well represented in the stakeholder meetings.