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## THE AUCTIONING OF EMISSION ALLOWANCES IN GERMANY

Periodical Report July 2010

Imprint

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# 1 REPORT: JULY 2010

With effect from January 2010 the Federal Republic of Germany offers an annual total of 40 million emission allowances (EUAs) for auction. The auctions are conducted weekly in 2010 and 2011 on the spot and futures markets of the European Energy Exchange (EEX) in Leipzig. The German Emissions Trading Authority (DEHSt) at the Federal Environment Agency has commissioned the state-owned KfW Banking Group (KfW) to act as vendor of emission allowances on behalf of the Federal Government. Further updated information on the conditions of participation is available on the EEX Website.<sup>1</sup> Earlier periodic reports are available on the DEHSt Website.<sup>2</sup>

## 1.1 Market surveillance report

In order to guarantee above-board market activities free of manipulation on the EEX, continuous surveillance is conducted by an independent Market Surveillance Office (Handelsüberwachungsstelle, HÜSt) as required under German law. HÜSt reports to the DEHSt in regular internal reports on the results of its surveillance activities. HÜSt reported as follows on auctions in July 2010:

"The auctions of emission allowances at the EEX on behalf of the German Federal Ministry for the Environment, Nature Conservation and Nuclear Safety in July 2010 took place following the defined procedure and without any disturbances. For this period, the Market Surveillance of the EEX could not detect any irregularities, and especially no behaviour of bidders that aims at manipulating the auction price."

<sup>&</sup>lt;sup>1</sup> http://www.eex.com/en/EEX/Products%20%26%20Fees/EUA%20Primary%20Market%20Auction

<sup>&</sup>lt;sup>2</sup>http://www.dehst.de/cln\_153/nn\_484552/EN/EmissionsTrading/Auctioning/Auctioning\_node.html?\_\_nnn=true

#### Participation, Auction Calendar and Procedure

Weekly auctions of futures and spot contracts on the EEX are a part of regular stock exchange trading. Participation is possible either directly as EEX Member or indirectly via a broker or as a client of an EEX Member. This ensures that small and medium-sized enterprises, which do not have their own trading department, are also able to participate in auctions. Exchange members already admitted to emissions trading on the EEX can participate in the weekly auctions at no additional cost and without separate fixed costs.

In the years 2010 and 2011, in separate auctions between January and October, 300,000 allowances will be auctioned for immediate delivery ("spot contract") on Tuesdays, and 570,000 for delivery in December of the current year ("futures contract") on Wednesdays. From November of each year, 870,000 allowances of the remaining volume will be auctioned weekly on the spot market. The dates of auction are published in the EEX Auction Calendar: http://www.eex.com/de/document/70561/2009\_12\_15\_BMU%20Auction%20Calendar001.pdf

The auction procedure is broadly laid down in the Ordinance on the Auctioning of Emission Allowances (*Emissionshandels-Versteigerungsverordnung, EHVV 2012*). A single-round, uniformprice procedure is applied at auctions. All successful bidders pay the same price. Auctions are

## 1.2 Overview

In July 2010, a total of 3,480,000 emission allowances (EUAs) to a total value of €48,944,100 were auctioned. This is equivalent to average volume-weighted revenue per allowance of €14.06. With four auctions on each market, the legally-prescribed total of eight auctions was again realized in July.

Of the total auction volume, 2,280,000 allowances to a value of €31,937,100 (average price €14.01) were auctioned as futures contracts (MidDec2010), and 1,200,000 emission allowances to a value of €17,007,000 (average price €14.17) were sold at spot market auctions.

Contract	Auctions	Number of bidders	Total bid volume	Auction volume	Times covered	Clearing price	Revenue
Spot	4	17	5,631,000	1,200,000	4.69*	14.17 €*	17,007,000 €
Future	4	22	10,552,000	2,280,000	4.63*	14.01 €*	31,937,100 €
Total	8	39	16,183,000	3,480,000	4.65**	14.06 €**	48,944,100 €

### Table 1: Overview of July 2010

\* Period Average

\*\* Volume-weighted average value

During the eight auctions, valid bids totalling 16,183,000 emission allowances were entered into the trading system. Aggregated bidder demand in the period under review thus exceeded corresponding auction volume by a ratio of 4.65 ("times covered", see Table 1). The total volume of 3.48 million emission allowances auctioned was spread among 26 successful bidders. In all, 39 bidders actively participated in auctions in July.

Since exchange members can enter bids at several auctions, the number of participating bidders and successful bidders does not necessarily correspond to the number of different exchange members that have participated in auctions in the period under review. It has also to be considered that indirect participation of bidders via intermediaries, such as banks and brokers, is not reflected in the numbers of participants mentioned. These merely take into account exchange members that participate directly in auctions as intermediaries, but not third-parties as indirect bidders.

Auction dates	Contract	Number of bidders	Total bid volume	Auction volume	Times covered	Clearing price	Revenue
06.07.2010	Spot	5	1,561,000	300,000	5.20	15.20 €	4,560,000 €
07.07.2010	Future	6	2,645,000	570,000	4.64	14.84 €	8,458,800 €
13.07.2010	Spot	3	1,100,000	300,000	3.67	13.85 €	4,155,000 €
14.07.2010	Future	5	2,545,000	570,000	4.46	13.64 €	7,774,800 €
20.07.2010	Spot	5	1,659,000	300,000	5.53	14.30 €	4,290,000 €
21.07.2010	Future	5	1,356,000	570,000	2.38	13.94 €	7,945,800 €
27.07.2010	Spot	4	1,311,000	300,000	4.37	13.34 €	4,002,000 €
28.07.2010	Future	6	4,006,000	570,000	7.03	13.61 €	7,757,700 €
Jul	ly	39	16,183,000	3,480,000	4.65*	14.06 €*	48,944,100 €
January	to July	421	148,365,000	26,100,000	5.68*	14.02 €*	365,938,200 €

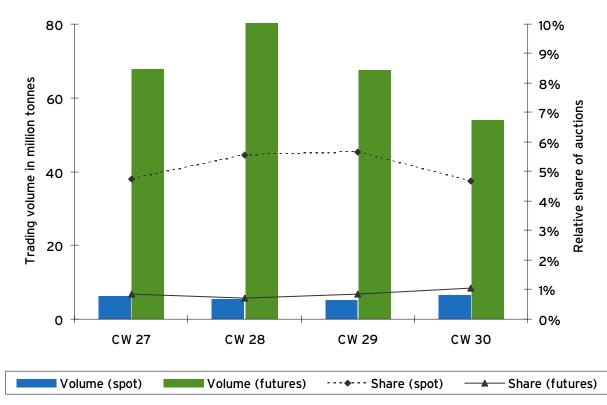
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\* Volume-weighted average value

## 1.3 Auctions and the secondary market

The total of 3.48 million emission allowances that were auctioned by the KfW in July 2010 stood in contrast to a cumulative trading volume of about 290 million allowances on the secondary market in the period under review.<sup>3</sup> The average share of German auctions in the relevant total market therefore was at 1.19 per cent. The weekly share of auctions on the futures market fluctuated between 0.71 and 1.05 per cent (an average of 0.85 per cent).

<sup>&</sup>lt;sup>3</sup> This perspective is limited to transaction for immediate delivery (spot) and futures contracts with maturity in December 2010 that are traded on the ECX, BlueNext, EEX, Climex and NordPool exchanges. This covers transactions that were screen traded at the respective exchange, or bilateral transactions that at least made use of the clearing mechanism of the exchange. Options in general as well as futures contracts with different maturities are not considered.



In the spot market, the correspondent average proportion was at 5.12 per cent.

Figure 1: Trading volume on the secondary market and relative share of spot and futures auctions in July 2010

Reference prices of the respective most liquid market places serve as appropriate benchmarks for assessment of clearing prices achieved at auctions in July. The reference contract for the auction of the futures MidDec10 is the Dec10 future traded on the ECX in London. The BlueNext EUA spot market provides the benchmark for spot market auctions.

Table 3 shows the relative deviation of clearing prices at auctions on the spot and futures markets from the respective lead market immediately before the end of bidding windows. Both the last trade and the last best bid are used as references prices.<sup>4</sup> In comparisons of individual trades or bids on the secondary market with auction results, it has in principle to be considered that in auctions comparably large volumes are involved in a single offer. The indicators "last best bid" and "last trade" normally relate to lower volumes than in auctions.

<sup>&</sup>lt;sup>4</sup> The bid with the current highest bid price in the order book is termed the best bid.

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The average deviation of clearing prices for futures contracts from the lead market reference price in London (best bid) was -0.162 per cent. In spot market auctions, the average deviation from the reference price in Paris was -0.144 per cent. The deviation spread fluctuated over both markets between -0.429 and 0.000 per cent. The volume-weighted average for July was as low as -0.156 per cent. On three out of eight dates, the auction clearing price was identical with the best bid of the reference market.

Comparison of clearing prices with settlement prices of the respective last transaction resulted in an average deviation of -0.234 per cent on the futures market and -0.398 per cent on the spot market. This is equivalent to an average volume-weighted deviation of -0.268 per cent.

Tab. 3: Clearing prices and reference prices immediately before the end of the bidding window in
July 2010

Auction dates	Contract	Clearing price	Deviation from lead market			
Auction dates			Last best bid	Last trade		
06.07.2010	Spot	15.20 €	0.000%	**		
07.07.2010	Future	14.84 €	-0.288%	-0.067%		
13.07.2010	Spot	13.85 €	0.000%	**		
14.07.2010	Future	13.64 €	-0.219%	-0.365%		
20.07.2010	Spot	14.30 €	-0.140%	-0.348%		
21.07.2010	Future	13.94 €	-0.429%	-0.429%		
27.07.2010	Spot	13.34 €	-0.150%	-0.448%		
28.07.2010	Future	13.61 €	0.000%	-0.073%		
July		14.06 €*	-0.156%*	-0.268%*		
Januar	y to July	14.02 €*	-0.095%*	-0.195%*		

\* Volume-weighted average value

\*\* No transactions during the last ten minutes of the bidding window