



Release of EU Allowances in Germany – Annual report 2009 –

Annual report 2009

Between 1 January 2009 and 13 November 2009 KfW sold a total of 40 million EU allowances with an overall value of EUR 528,487,784.40. The average price was EUR 13.21 per EUA for the entire sales volume.

In order to create the greatest possible transparency of the sale of these allowances for market participants, the Federal Environment Ministry (BMU) published the data on the sales for the individual months as promptly as possible on the Internet (<http://www.bmu.de/emissionshandel/downloads/doc/43056.php>). The volumes of EUAs sold, revenues and average prices in the individual months are summarised in the Annex.

Spot market / futures market

Of the 40 million EUAs, 30.3 million (76%) were sold for EUR 395.5 million under the December 2009 futures contract while 9.7 million (24%) were sold for EUR 133 million on the spot market.

Sales of futures contracts were carried out directly on the emissions trading exchanges in London (ECX) and Leipzig (EEX). London sales accounted for a share of 69% and Leipzig for a 31% share.

Sales on the spot market were also carried out on the emissions trading exchanges in London (ECX) and Leipzig (EEX). London sales accounted for a share of 87% and Leipzig for a 13% share.

Compared with the spot market, the sale of futures contracts on the emissions trading exchanges is more complex since the trading partners have to balance out price changes in the period between the time of sale and the time of supply and payment on a daily basis, in each case by providing security (so-called variation margin). This mechanism serves to secure against non-payment risk in the period between the conclusion of the futures contract and the performance of the deal. This security is recalculated for each trading day to reflect the changes in allowance prices. When prices are rising the seller (in this case KfW) must provide additional security, when prices are falling the seller receives such security. When prices were at their peak in September, KfW had to provide a variation margin of EUR 61.1 million, whereas in February it received a maximum of EUR 21 million.

Providing and receiving the security resulted in corresponding interest expense and interest earnings for KfW. Due to the price development over the course of the year, KfW incurred total net interest expense of EUR 0.085 million in 2009. By contrast, in the previous year KfW generated total net interest earnings of EUR 0.4 million.

Scale of individual transactions

In 2009, KfW sold a total of 40 million allowances in 4,845 individual transactions on 207 trading days. The volume of the individual transactions was between 500 and 30,000 allowances. Divided according to the different ticket sizes, the figures are as follows:

| Ticket size | Number of transactions | Share in total transactions | Share in total revenues |
|------------------|------------------------|-----------------------------|-------------------------|
| ≤ 1,000 | 1,299 | 27% | 3% |
| > 1,000 – 5,000 | 858 | 18% | 9% |
| > 5,000 – 10,000 | 1,489 | 30% | 35% |
| > 10,000 | 1,199 | 25% | 53% |

In view of the relatively large share of transactions with up to 5,000 allowances, it can be concluded that there is also demand for small volumes of allowances on the marketplaces. This demand results either from the needs of large emitters to cover daily peaks, from smaller emitters that have generally used intermediaries for purchases on the exchange, or from deals with traders working with the aid of specific computer trading programs.

On the other hand, there was also a rising number of transactions with high volumes (> 10,000 EUAs). The share of these high-volume transactions doubled from 12% to 25% on the previous year.

During the sales period the daily volume of allowances sold varied between 75,000 and 390,000 allowances per day in accordance with market liquidity.

Market-friendly sale

Of the volume of more than 2.6 billion allowances¹ traded under the futures contract (December 2009) on the EEX and ECX exchanges in 2009, the sales by KfW of 30.3 million allowances under forward contracts amounted to a total share of only 1.2%. Statutory provisions require these sales to be as market-friendly as possible. This is the case where sales by KfW run as close as possible to the overall market both in terms of daily sales volume and sales prices.

A good indicator of the development of the overall market is the ECX CFI Emissions Index, which illustrates the volume-weighted average price at the ECX London for each trading day. The comparison between the index price and the volume-weighted average price of the individual transactions conducted by KfW shows only a very minor difference of 0.11% or EUR 0.02/EUA over the entire sales period. KfW thus almost exactly met the average price of all futures contracts traded on the EXC (due date December 2009). The maximum monthly differences were between - 0.05% in October and + 0.22% in February. The daily differences were within a margin of just - 0.3% and + 0.3% on 173 of a total of 207 trading days. This shows that the sales were conducted in a market-friendly manner.

The sales on the spot market were conducted in the same market-friendly manner. Sales were made only at market prices that also prevailed at the time of the sale on the most liquid exchange for spot transactions, which is Bluenext in Paris. Since this exchange does not

¹ Of which 1.2 billion were traded directly on the exchanges ("screen traded"). The other futures contracts were bilateral deals but used the exchange's clearing mechanism.

publish a volume-weighted average daily price as an index, it is not possible to compare it with a liquid index.

Sales of allowances to cover the compliance costs of emissions trading

According to section 5 (3) of the Allocation Act 2012 (Zuteilungsgesetz 2012), the costs incurred by the Federal Government in carrying out the tasks assigned in the framework of emissions trading are covered in the allocation period 2008-2012 by the sale of allowances from the reserve. These costs include in particular the administrative fees levied to refinance the costs of the German DNA (Deutsche Emissionshandelsstelle; "DEHSt") at the Federal Environment Agency.

In this context, in the period from 16 to 23 November 2009 KfW sold a total of 1,125,000 allowances with an overall value of EUR 15.1 million at an average price of EUR 13.38 per allowance. Of this sum, 310,000 allowances were sold for EUR 4.2 million on the spot market and 815,000 allowances were sold for EUR 10.9 million on the futures market.

The sales were conducted on the most liquid exchange, London. Under the futures contracts the price achieved nearly matched the volume-weighted price at the London exchange. There was a difference of merely -0.03% or EUR -0.004 per emission allowance to the EXC CFI.

Conclusion

The experience gained with the sale of emission allowances on exchanges can be consistently rated positive.

The use of existing market structures made the sale of allowances

- market-friendly,
- transparent and
- cost-effective.

Feedback from market participants confirms the benefits of the chosen release process, as does the positive public response.

The continuous sale on emissions trading exchanges distributed over the trading day takes account of their liquidity and thus minimises the risk of market interference. This can be seen in particular in the only very minor difference to the ECX CFI Emissions Index over the course of the year.

Furthermore, this process offers a high level of price transparency and enables all participants in the EU emissions trading scheme to purchase the allowances either directly on the exchanges or indirectly via an intermediary of their choice.

Outlook for 2010

The Federal Government has put KfW in charge of the placement and sale of the 40 million allowances in 2010 as well. In accordance with legal stipulations, the allowances will no longer be sold on the market but under an auctioning procedure on an existing exchange. For this purpose the Federal Environment Ministry issued an invitation to tender and awarded the contract to the Leipzig European Energy Exchange (EEX) as the designated platform in October 2009.

Annex

Table 1:
Volume of EUAs sold, revenues and average prices of the EUAs sold in 2009

| Month | Contract | EUAs sold | Average price achieved | Difference to ECX CFI | Earnings |
|-----------------------------|----------------|------------------------|------------------------|-----------------------|--|
| January | Future Spot | 3,647,000 0 | EUR 13.14 | 0.11% | EUR 47,936,650.00 |
| February | Future Spot | 3,692,000 0 | EUR 9.72 | 0.22% | EUR 35,895,360.00 |
| March | Future Spot | 3,781,000 241,000 | EUR 11.50 EUR 10.93 | 0.12% | EUR 43,468,220.00 EUR 2,633,874.40 |
| April | Future Spot | 2,284,000 1,278,000 | EUR 13.29 EUR 12.69 | 0.13% | EUR 30,363,030.00 EUR 16,221,320.00 |
| May | Future Spot | 2,489,000 709,500 | EUR 14.98 EUR 14.52 | 0.08% | EUR 37,289,790.00 EUR 10,304,480.00 |
| June | Future Spot | 2,459,000 995,000 | EUR 13.45 EUR 13.06 | 0.15% | EUR 33,072,700.00 EUR 12,995,300.00 |
| July | Future Spot | 3,022,000 1,195,000 | EUR 13.87 EUR 13.82 | 0.07% | EUR 41,907,060.00 EUR 16,519,950.00 |
| August | Future Spot | 469,000 1,080,154 | EUR 14.39 EUR 14.78 | 0.06% | EUR 6,748,680.00 EUR 15,962,090.80 |
| September | Future Spot | 2,495,000 1,911,846 | EUR 13.73 EUR 14.25 | 0.16% | EUR 34,246,070.00 EUR 27,234,519.20 |
| October | Future Spot | 3,782,000 1,401,000 | EUR 14.04 EUR 13.95 | -0.05% | EUR 53,100,370.00 EUR 19,548,950.00 |
| November | Future Spot | 2,227,000 841,500 | EUR 14.12 EUR 13.78 | 0.14% | EUR 31,447,500.00 EUR 11,591,870.00 |
| Total | | 40,000,000 | EUR 13.21 | 0.11% | EUR 528,487,784.40 |
| Residual volume 2009 | | 0 | | | |

Table 2:
Average price achieved and cumulative earnings January - November 2009

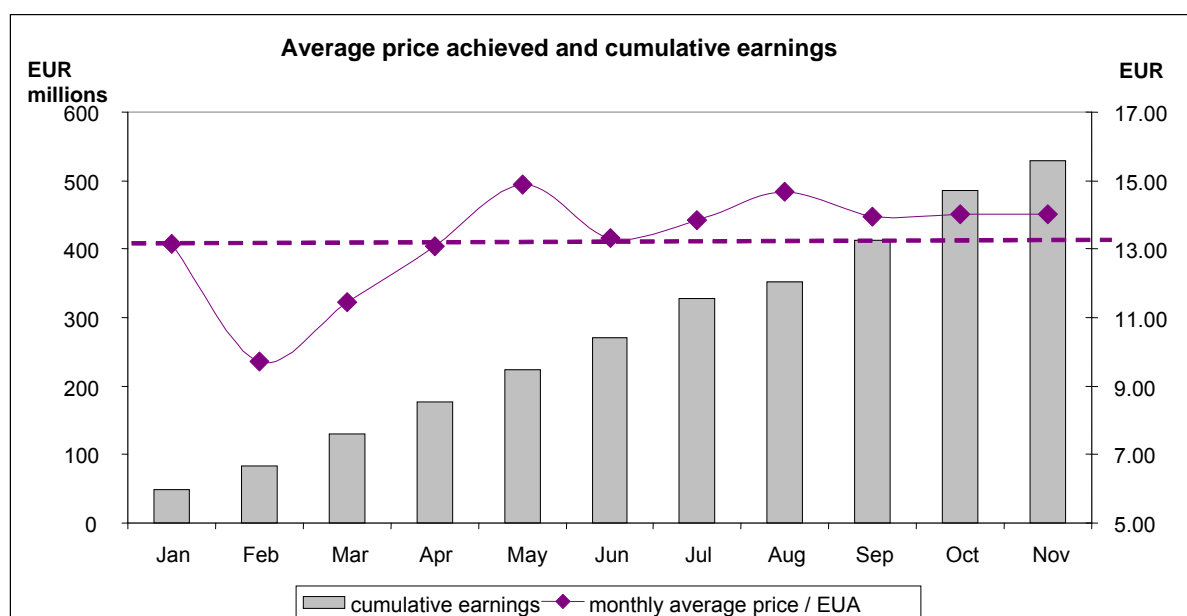


Table 3:
Difference to ECX CFI Index

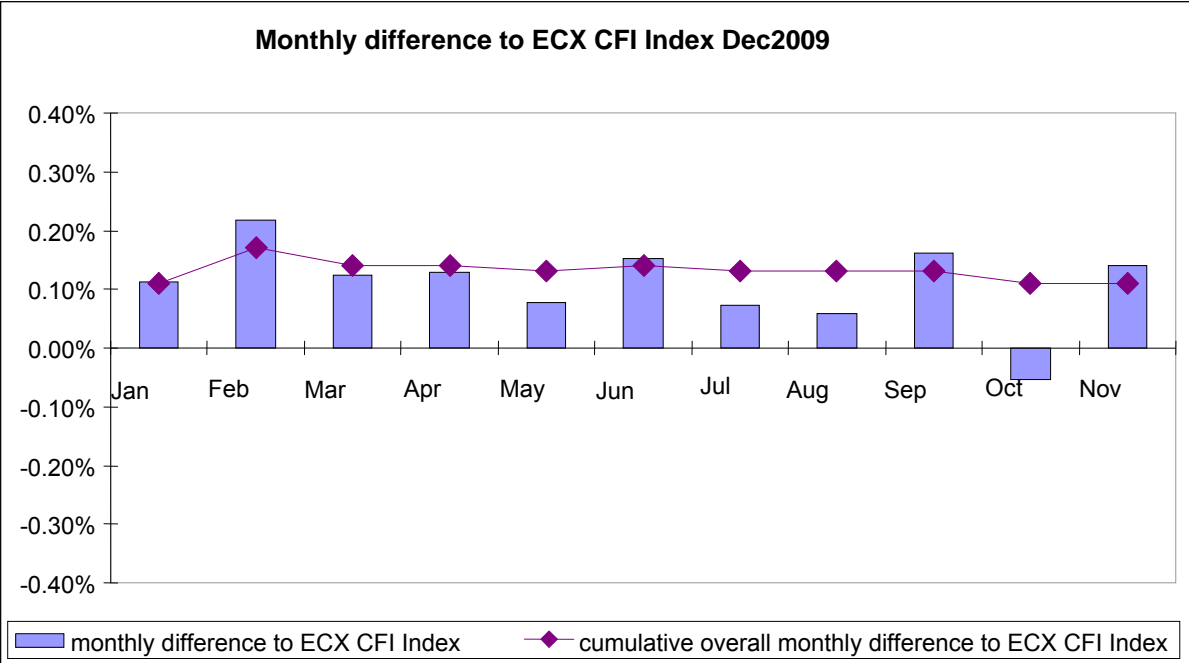


Table 4:
Allocation of sold EUAs by marketplace in 2009

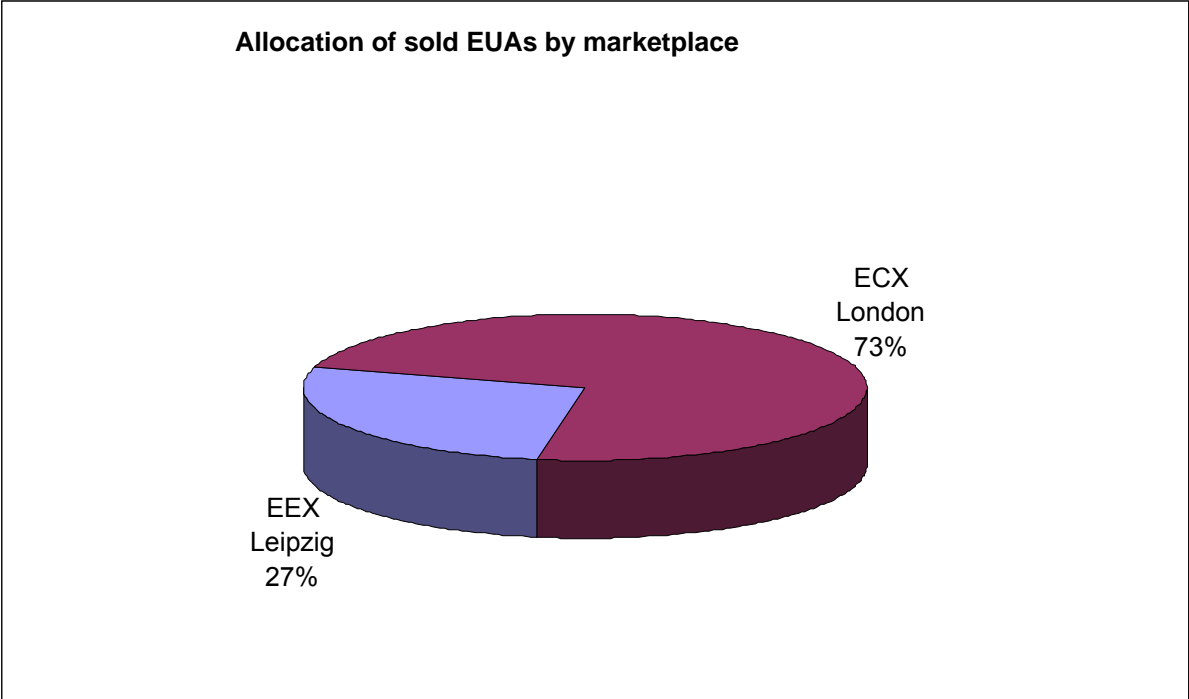


Table 5:
Segmentation of the 4,845 individual transactions into ticket sizes

