



# AUCTIONING

## German Auctioning of Emission Allowances Periodical Report: First Quarter 2013

## **IMPRINT**

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# GERMAN AUCTIONING OF EMISSION ALLOWANCES

The German auctions of the third trading period are held weekly on the European Energy Exchange (EEX) spot market. As the competent authority for German auctions, the German Emissions Trading Authority (DEHSt) at the Federal Environment Agency has commissioned the KfW banking group to act as auctioneer for allowances on behalf of the Federal Government. Further updated information on the third trading period auctions can be downloaded from the [EEX website](#). Reports on the second and third trading period auction results are available on the [DEHSt auction website](#). In December 2012, the [2013 auction calendar](#), created and coordinated with EEX and the European Commission, was published on the EEX website.

The following table summarises the key data of the German auctions on the EEX in 2013:

<b>Auction segment</b>	Third trading period auctions
<b>Auction product</b>	Third trading period EUA spot contracts
<b>Period</b>	11/01/2013 to 13/12/2013
<b>Auction frequency</b>	Weekly (Fridays, 09:00 to 11:00 am CET)
<b>Auction volume per auction</b>	4.02 million EUA (2.01 million EUA in August; 3.67 million EUA on 13/12/2013)
<b>Bid volume</b>	500 EUA
<b>Auction mode</b>	Single-round, uniform-price procedure with a closed order book

## 1 CURRENT DEVELOPMENTS

### Federal Environment Agency issued the contract to EEX for German auction platform

The European Energy Exchange AG (EEX) in Leipzig has been awarded the contract for the definitive German auction platform in February. The Federal Environment Agency (UBA) had launched an Europe-wide procurement process for this order. Thus the German emission allowances of the third trading period (2013-2020) will now be auctioned at the EEX for three more years. EEX had already been awarded the contract for the so-called transitional platform in early 2012. Regular allowances (EUA) of the third trading period and aviation allowances (EUAA) have been auctioned there on behalf of the Federal Republic of Germany since October 2012.

## 2 OVERVIEW

### 2.1 OVERVIEW FOR THE FIRST QUARTER OF 2013

Between January and March 2013, 44,220,000 emission allowances (EUA) of the third trading period (3rd TP) with a total value of €187,935,000 were auctioned at the EEX. This results in a volume-weighted average price per allowance of 4.25 euros. The deviations of the clearing prices from the current prices on the lead market fluctuated between -2.98 and +1.65 percent (see also Section 4.2).

Overall, valid bids totalling 109,138,000 allowances were entered in the trading system across the nine auction dates. Thus the average cover ratio in the reporting period was 2.47 (see also Section 3.2). With an average number of 17 bidders, participation was relatively high compared to the second trading period auctions. This also applies to the average number (13) of successful bidders (see also Section 3.1).

Auctions planned for 18 January and 22 February with auction volumes of 4.02 million EUA each had to be terminated without results because the auction clearing price would have been below the reserve price. The use of the reserve price necessarily follows from the EU Auctioning Regulation's requirements. The volume not auctioned was evenly distributed to the four subsequent German auctions in accordance with the European regulations (see also Section 5.3).

The following table gives an overview of the most important auction figures from the auctions performed during the reporting period.

Table 1: Overview of auction data for the first Quarter 2013

Date	Contract	Auction volume	Bid volume	Cover ratio	Bidders	Successful bidders	Price	Revenue
11/01/2013	Spot	4,020,000	13,156,000	3.27	13	10	€5.75	€23,115,000
18/01/2013	Spot							*
25/01/2013	Spot	5,025,000	10,806,000	2.15	17	14	€3.88	€19,497,000
<b>January</b>		<b>9,045,000</b>	<b>23,962,000</b>	<b>**2.71</b>	<b>***15</b>	<b>***12</b>	<b>**€4.71</b>	<b>€42,612,000</b>
01/02/2013	Spot	5,025,000	11,469,000	2.28	13	12	€3.15	€15,828,750
08/02/2013	Spot	5,025,000	15,455,000	3.08	18	8	€4.32	€21,708,000
15/02/2013	Spot	5,025,000	13,321,000	2.65	18	13	€4.96	€24,924,000
22/02/2013	Spot							*
<b>February</b>		<b>15,075,000</b>	<b>40,245,000</b>	<b>**2.67</b>	<b>***16</b>	<b>***11</b>	<b>**€4.14</b>	<b>€62,460,750</b>
01/03/2013	Spot	5,025,000	10,964,000	2.18	18	13	€4.64	€23,316,000
08/03/2013	Spot	5,025,000	16,589,000	3.30	21	13	€4.15	€20,853,750
15/03/2013	Spot	5,025,000	11,360,000	2.26	20	15	€3.47	€17,436,750
22/03/2013	Spot	5,025,000	6,018,000	1.20	17	16	€4.23	€21,255,750
<b>March</b>		<b>20,100,000</b>	<b>44,931,000</b>	<b>**2.24</b>	<b>***19</b>	<b>***14</b>	<b>**€4.12</b>	<b>€82,862,250</b>
<b>First Quarter</b>		<b>44,220,000</b>	<b>109,138,000</b>	<b>**2.47</b>	<b>***17</b>	<b>***13</b>	<b>**€4.25</b>	<b>€187,935,000</b>

Source: EEX, DEHSt

\* Auction terminated without result

\*\* Volume-weighted average

\*\*\* Average

## 2.2 OVERVIEW OF THE CURRENT YEAR 2013

In the first three months of this year a total of 44,220,000 allowances (EUA) of the third trading period with a total value of €187,935,000 were auctioned at the EEX. The amount of emission allowances of the third trading period to be auctioned by Germany in 2013 totals 182,560,500 EUA. This is merely a preliminary estimate by the European Commission, the final amount can only be calculated after the completion of the free allocation procedure and the publication of the corresponding quantities by the European Commission.

This means that around 24 percent of the auction budget for 2013 has been auctioned to date, taking into account the preliminary total annual amount. The following table summarises the auction results on a monthly basis.

Table 2: Overview of the current year 2013

Month	Auction volume	Bid volume	Cover ratio	Bidders	Successful bidders	Price	Revenue
January	9,045,000	23,962,000	*2.71	**15	**12	*€4.71	€42,612,000
February	15,075,000	40,245,000	*2.67	**16	**11	*€4.14	€62,460,750
March	20,100,000	44,931,000	*2.24	**19	**14	*€4.12	€82,862,250
<b>January to March</b>	<b>44,220,000</b>	<b>109,138,000</b>	<b>*2.47</b>	<b>**17</b>	<b>**13</b>	<b>*€4.25</b>	<b>€187,935,000</b>

Source: EEX, DEHSt

\* Volume-weighted average

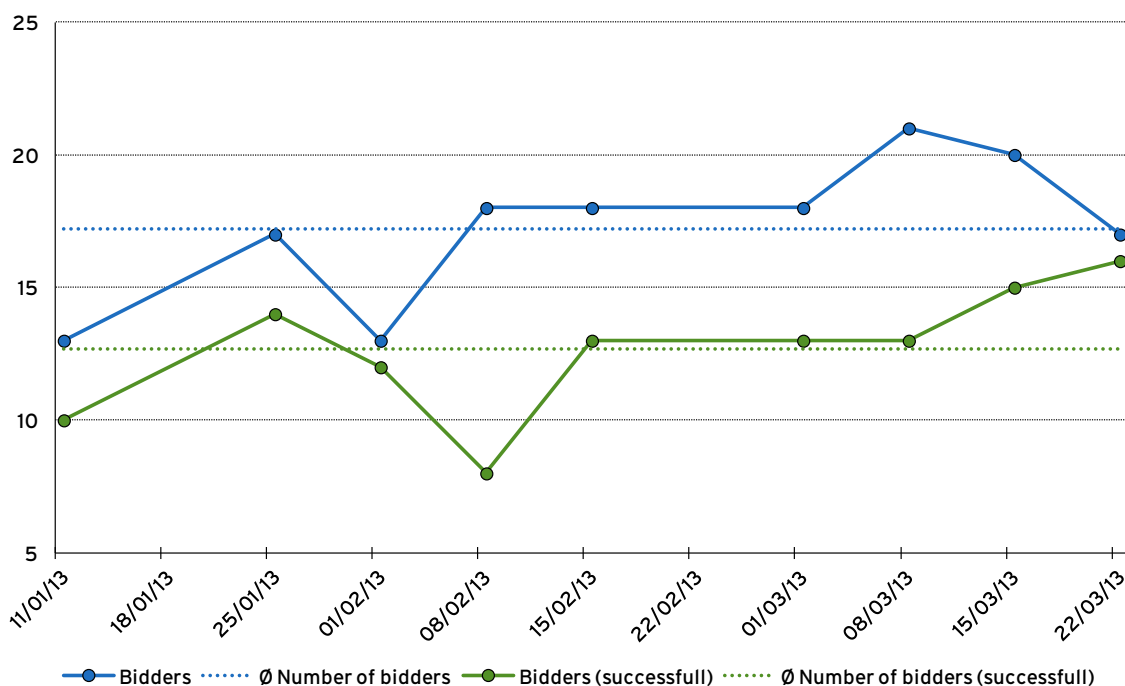
\*\* Average

### 3 BIDDER PARTICIPATION

#### 3.1 PARTICIPATION

The number of participants in the German auctions in the first quarter of 2013 averaged across all dates was 17 bidders, the number of successful bidders averaged 13. Bidder participation exceeded the level of the early auctions of the third trading period performed in the fourth quarter of 2012 (14 and 7) and was significantly higher than the corresponding level of the second trading period (6 and 3).

Participation in the auctions fluctuated between 13 and 21 bidders during the reporting period. In comparison, the number of successful participants varied somewhat more, ranging between 8 and 15 bidders. There was no such auction where all participating bidders were successful. The following figure illustrates auction participation over time.

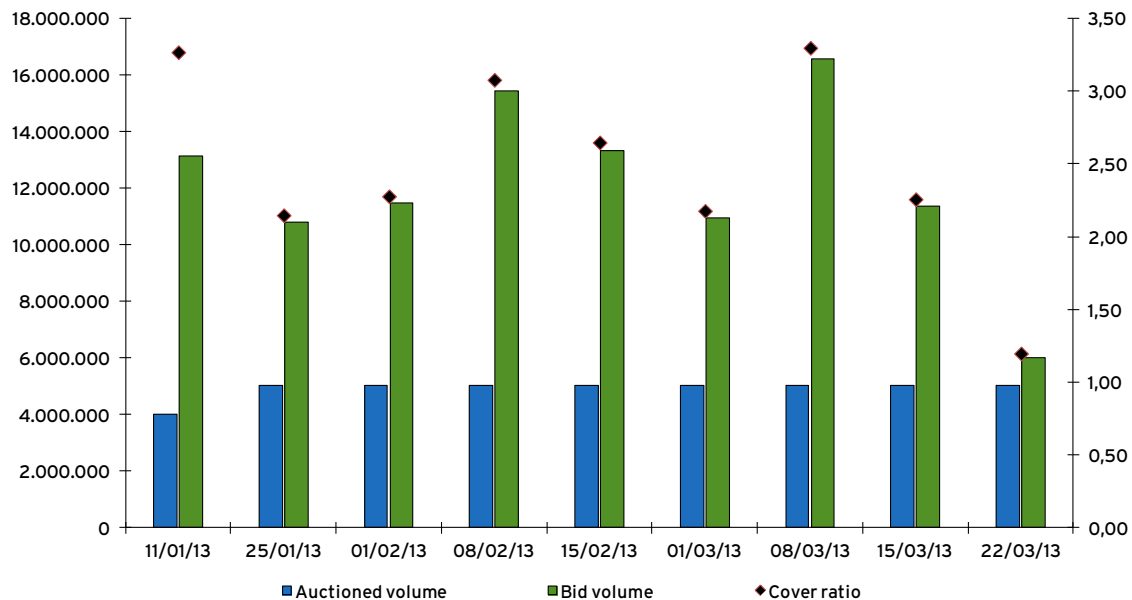


Source: EEX, DEHSt

Figure 1: Number of participating and successful bidders per auction date

## 3.2 VOLUME DEMAND

During the reporting period, the aggregated bid volumes per auction date fluctuated quite markedly from 6.018 to 16.589 million allowances. Not counting the 11th of January auction (4.02 million), 5.025 million allowances had been auctioned per date. The resulting cover ratios ranged between 1.20 and 3.30. The figure below summarises the results of each auction date.



Source: EEX, DEHSt

Figure 2: Auctioned and bid volume and cover ratio for each auction date

Thus, the average bid volume per auction participant in the first quarter was 704,116 allowances averaged over all nine dates. The average volume awarded was 387,895 allowances to each successful bidder. Awarding allowances at the auctions is based on the EU-wide applicable uniform price procedure with one prescribed round of bidding (also see Info box below).

### Info Box: Uniform Price Auction at the EEX

The auctions at the EEX follow the uniform price procedure which is common practice throughout the European Union. It involves one round of bidding and a closed order book. This simple and robust procedure protects against market manipulation and was used already for German auctions during the second trading period. The uniform price procedure means that all successful bidders pay the same price. The auction clearing price is determined by ranking all eligible bids, beginning with the highest bid, according to the bidding price.

In the event of equal bids, the bids are sorted by a random process. The bid volumes are aggregated starting with the highest bid until the volume of emission allowances on offer (e.g. 4.02 million EUAs) is reached. The bid price at which the aggregate volume of bids reaches or exceeds the offered volume of auctioned allowances determines the auction clearing price.

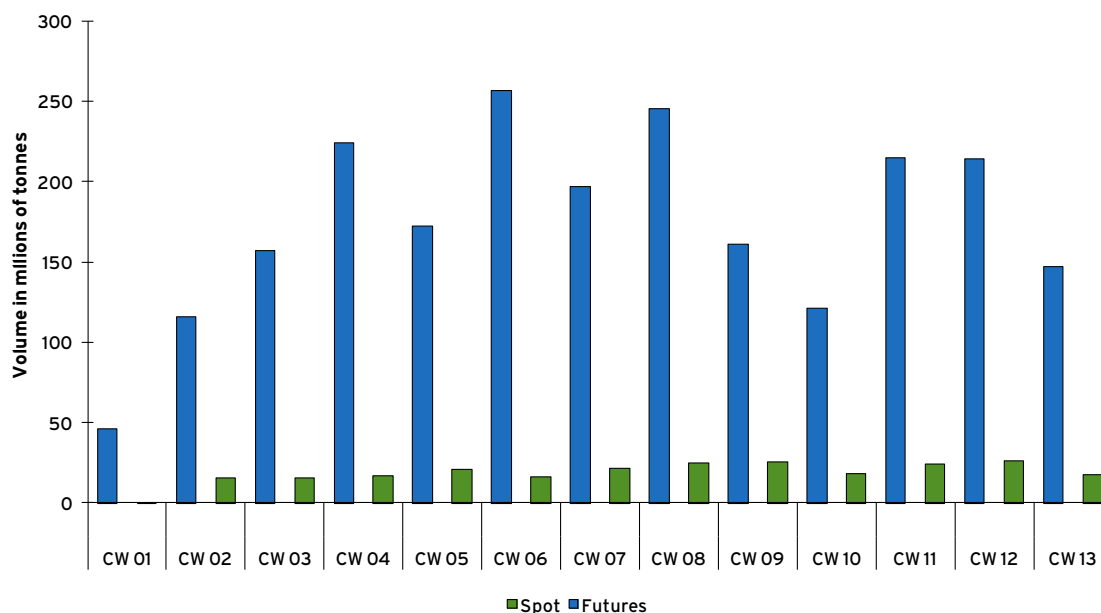
Bidders will thus be awarded their bid volume if their bidding price at least matches the auction clearing price. If a bid matches the clearing price exactly, the bidder may be awarded the remaining allowances which may be below the volume requested, depending on the bidding situation. If the bid from several participants matches the auction clearing price exactly, the above-mentioned random process applies.



## 4 AUCTIONS AND THE SECONDARY MARKET

### 4.1 TRADING VOLUME

In the first quarter of 2013, a total of 44.22 million EUA of the third trading period were auctioned at the EEX for Germany. During the reporting period, the cumulative trading volume in the relevant total market was over 2.5 billion EUA.<sup>1</sup> This market volume divided into approximately 240 million EUA which were completed as contracts for immediate delivery (spot) and 2.3 billion EUA for delivery in the future (futures). Thus, more than 90 percent of the traded volume was handled on the dominant futures market. The figure below illustrates the trading volumes separately for spot and futures segments based on calendar weeks (CW).

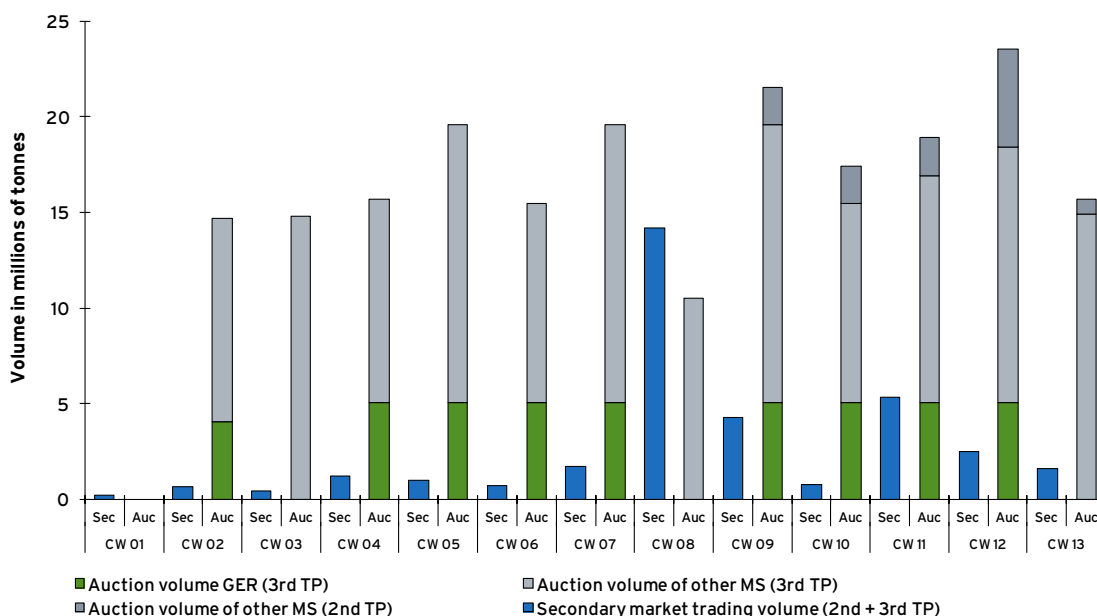


Source: EEX, Thomson Reuters, DEHSt

Figure 3: Trading volumes differentiated by spot and futures in the period from January to March 2013

The vast majority of the trading volume on the spot market is due to the auctions. In the so-called primary market a total of 207 million allowances were auctioned by Member States. In other ongoing trades (the so-called „secondary market“) about 33 million EUAs were traded. Figure 4 shows the trading volume in the spot secondary market and the auction volumes on the primary market per calendar week (CW). In addition to the German auctions, aggregated auction volumes of other EU Member States are also included in the figure. In addition to the regular auctions of allowances of the third trading period, allowances of the second trading period from the national new entrant reserves were also auctioned by certain Member States.

<sup>1</sup> All emission allowances (EUA/EUAA) of the second and third trading periods traded on the spot and futures markets on the ICE/ECX, CME/NYMEX, EEX and Nasdaq OMX exchanges are considered. Transactions completed directly on the stock exchange (screen traded) or those bilateral transactions that at least used the stock exchange clearing mechanism are included. Option contracts are not involved. The 2013 first quarter spot contracts auctioned are also considered.



Source: EEX, Thomson Reuters, DEHSt

\*Auc = Auctions, Sec = Secondary market, GER = Germany, MS = EU Member State

Figure 4: Trading volume on the secondary market (spot) and volume of auctions conducted in the period from January to March 2013

## 4.2 CLEARING PRICES AND PRICE DEVELOPMENT ON THE SECONDARY MARKET

Reference prices from the most liquid trading venues served as appropriate benchmarks for evaluating the auction clearing prices achieved on the EUA spot auctions. The reference contract for the auctions is the daily futures traded on the London ICE/ECX, whose product specifications are comparable with the spot-product of the auctions. The last best bid immediately before the end of the bidding period was used as a reference price (see also Info box below).

### Info Box: Reference Prices

In regular exchange trading (secondary trading), participants enter their buying and selling requests (bids and asks) into an order book which is constantly updated. As in auctions, such buying bids in secondary trading include quantity and price limits. The price limit is the highest price a buyer is prepared to pay for the purchase of an allowance. Sellers can also put a price limit on their bid, i.e. a minimum price per allowance sold.

The order book is open to inspection by any participant. It shows the current highest purchase offer (best bid) and the lowest sales offer (best ask) with the relevant quantities. Trading occurs where best bid and best ask overlap. Trading price records finally show the price limits where supply equals demand.

Table 3 shows the relative deviations of the clearing price of the London lead market. The deviation from the best bid made on each auction date just before the end of the bidding period (11 a.m. CET) varied over the reporting period between € -0.13 (-2.98%) and €+0.07 (+1.65%).

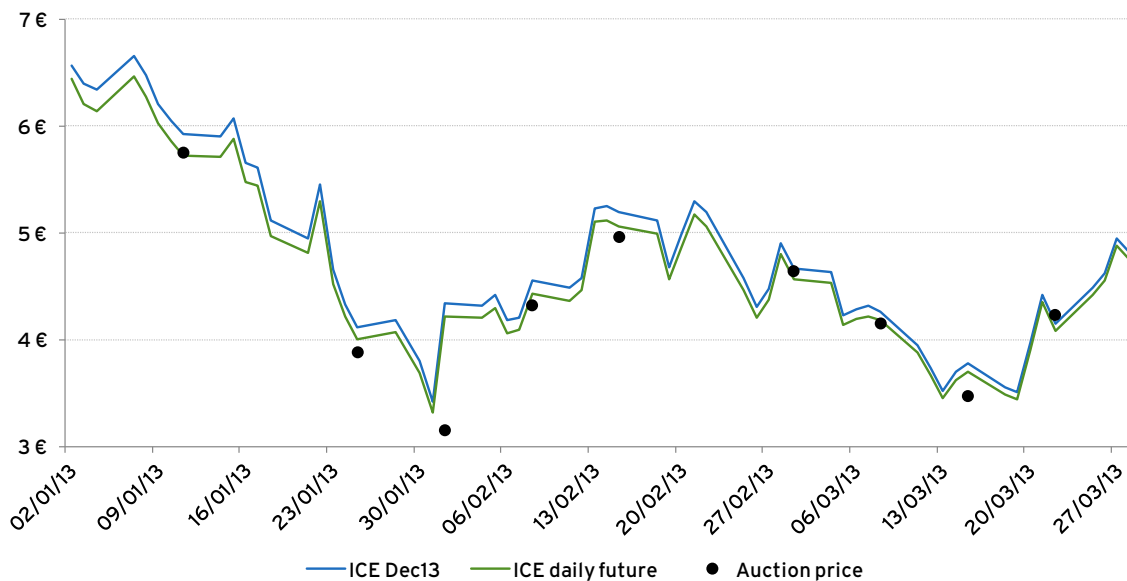
For a mean value analysis, the arithmetic mean of the absolute values of individual deviations over the reporting period is calculated. The average deviation from the last best bid was 1.16 percent or €0.05 averaged over all nine dates.

Table 3: Auctions and deviations from secondary market prices over the reporting period

Date	Contract	Clearing price	Deviation from Lead Market	
			Best Bid ICE Daily Future	
			Absolute	%
11/01/2013	EUA Spot 3rd TP	€5.75	€-0.01	-0.17%
25/01/2013	EUA Spot 3rd TP	€3.88	€-0.02	-0.51%
01/02/2013	EUA Spot 3rd TP	€3.15	€-0.05	-1.56%
08/02/2013	EUA Spot 3rd TP	€4.32	€+0.07	+1.65%
15/02/2013	EUA Spot 3rd TP	€4.96	€-0.02	-0.40%
01/03/2013	EUA Spot 3rd TP	€3.15	€-0.01	-0.22%
08/03/2013	EUA Spot 3rd TP	€4.64	€+0.03	+0.73%
15/03/2013	EUA Spot 3rd TP	€4.15	€-0.08	-2.25%
22/03/2013	EUA Spot 3rd TP	€3.47	€-0.13	-2.98%
<b>Mean absolute deviation</b>			€0.05	1.16%

Source: Thomson Reuters, DEHSt

The following figure shows an overview of the price development for emission allowances of the third trading period on the London lead market. In addition to the daily futures, the development of futures for December delivery of the current year is also shown (so-called „front-year future“)<sup>2</sup>. This makes it clear that the auction clearing prices ran almost synchronously with the development of secondary trading in the relatively volatile market. The daily London closing prices fluctuated in the three-month reporting period sometimes considerably in an interval of about 3 to 7 euros.



Source: EEX, Thomson Reuters, DEHSt

Figure 5: ICE secondary market prices and EEX auction clearing prices

<sup>2</sup> The presentation is based on daily closing prices (so-called „settlement prices“), as these are available for the same time and thus a price comparability can be ensured.

## 5 IMPLEMENTATION OF VALID REGULATIONS

### 5.1 SURVEILLANCE REPORT BY HÜST

In order to guarantee above-board market activities are 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 on the results of its surveillance activities through regular internal reports. HÜSt reported on auctions in the first quarter of 2013 as follows (excerpt):

*“Within their surveillance for the auctioning of emission allowances on behalf of the Federal Environment Agency at the EEX in the period from January to March, the Market Surveillance Office of the EEX could not detect any irregularities and especially no behaviour of bidders that was targeted at manipulating the auction price.”*

### 5.2 FAIR AND OPEN ACCESS

The implementation of the provisions of the EU Auctioning Regulation guarantees a fair and open access for all auction participants at EEX. Current access options can be found at [EEX Website \(Access\)](#).

More information about the auction process is also available on the EEX auction hotline. EEX can be reached by phone from Mondays to Fridays from 8:00 a.m. to 6:00 p.m. CET at +49 341 2156-331 or by email at [auctions@eex.com](mailto:auctions@eex.com).

### 5.3 ADJUSTMENT OF THE AUCTION CALENDAR

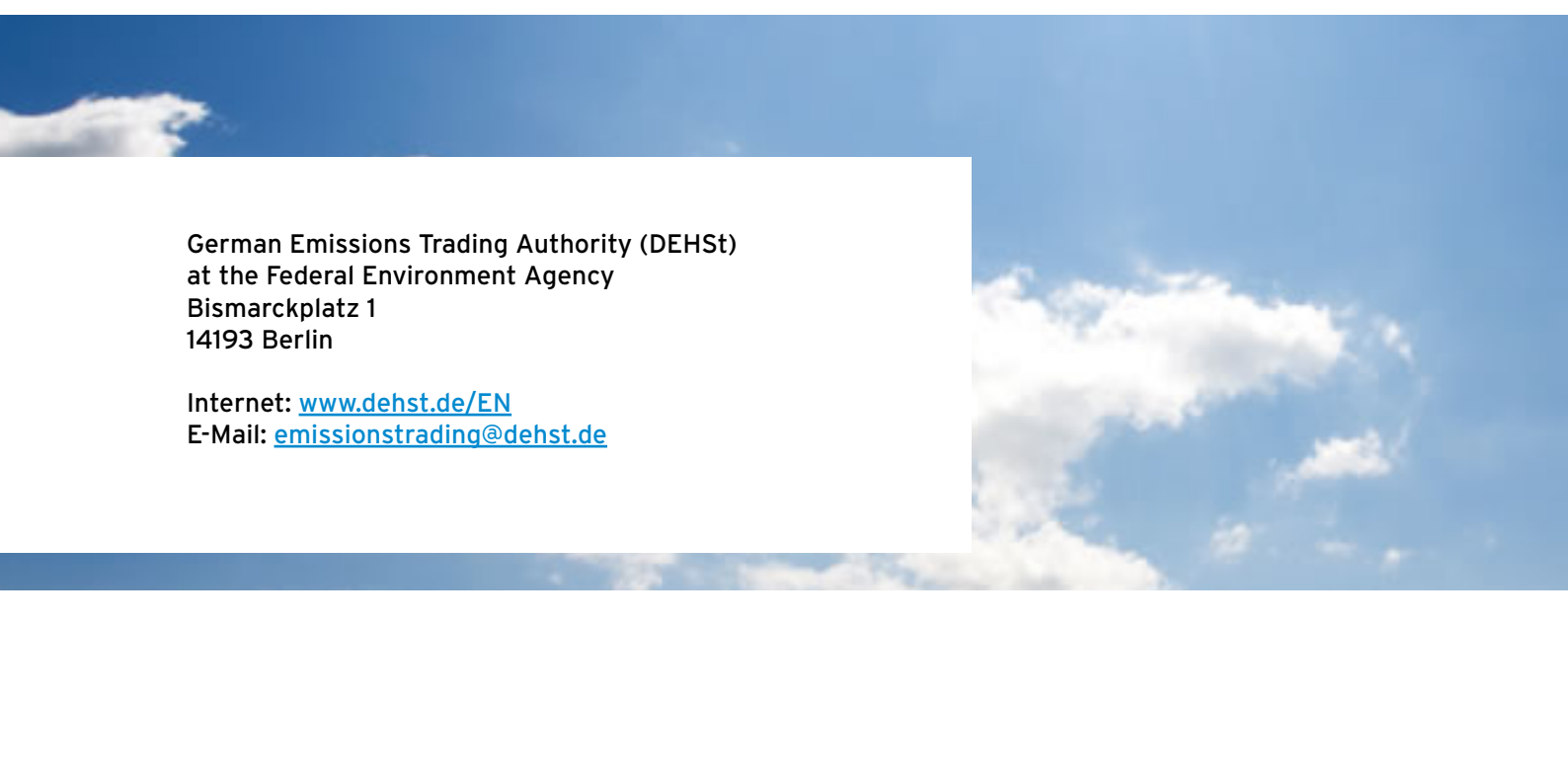
In December 2012, the [2013 auction calendar](#), created and coordinated with EEX and the European Commission, was published on the EEX website. In accordance with the provisions of Article 7(6) of the EU Auctioning Regulation, auctions planned for 18 January and 22 February with auction volumes of 4.02 million EUA each were terminated without results because the auction clearing price would have been below the reserve price. The volume not auctioned was evenly distributed to the four subsequent German auctions in accordance with Article 9 of the EU Auctioning Regulation. Therefore, the auction volume in the auctions between 25 January and 22 March was effectively raised to 5,025,000 allowances.

### 5.4 AUCTION RESULT PUBLICATION

All auction results and accompanying data were made publicly available during the reporting period within a 15-minute time window directly linked to the respective auction at [EEX Website \(2013 auction results\)](#).

### 5.5 OTHER EVENTS

There are no other matters relating to the implementation of the existing rules to be reported during the reporting period. The current regulations can be downloaded from [EEX Website \(Regulations\)](#).



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