

# AUCTIONS BY THE TRANSITIONAL COMMON AUCTION PLATFORM

The world's largest auctioning of emissions allowances

January 2015

## Auctions by the *Transitional Common Auction Platform*January to March 2015

Auction platform: European Energy Exchange (EEX)

#### Auction dates/reporting period:

General Allowances:

8, 12, 13, 15, 19, 20, 22, 26, 27, 28(PL)<sup>1</sup> and 29 January 2015;

2, 3, 5, 9, 10, 12, 16, 17, 19, 23, 24 and 26 February 2015;

2, 3, 5, 9, 10, 12, 16, 17, 19, 23, 24, 25(PL)<sup>1</sup>, 26, 30 and 31 March 2015.

**Aviation Allowances:** 

14 and 28 January 2015; 11 February 2015; 11 and 25(PL)<sup>1</sup> March 2015

Auctioning is the default method of allocating allowances within the EU emissions trading system (EU ETS). Since the start of the *Third trading period* in 2013 over 1.4 billions of allowances allocated under the EU ETS have been auctioned. Auctioning of emission allowances at that scale is unprecedented and delivers valuable experience for auction design in other carbon markets and for other environmental assets.

Auctioning is the most transparent and efficient method of allocating allowances and puts into practice the principle that the polluter should pay.

The auctions are conducted pursuant to the modalities stipulated in the *Auctioning Regulation*. Two auction platforms are in place. The European Energy Exchange (EEX) in Leipzig is the common platform for the large majority of countries participating in the EU ETS. EEX also acts as Germany's auction platform. The second auction platform is ICE Futures Europe (ICE) in London, which acts as the United Kingdom's platform. Poland may appoint an opt-out auction platform but is using for the time being the common auction platform.

The numbers of *General Allowances* to be auctioned by each State on behalf of which they are auctioned are determined on the basis of their historical share of emissions from installations covered by the EU ETS, taking into account the free allocation volumes. Up to 2020 ten per cent are allocated to the least wealthy EU Member States and the remaining two per cent is given as a 'Kyoto bonus' to nine EU Member States which by 2005 had reduced their greenhouse gas emissions by at least 20% of levels in their Kyoto Protocol base year or period.

At least half of auctioning revenues, or the equivalent in financial value, and all of the revenues from auctioning allowances to the aviation sector, should be used by the Member States to combat climate change in Europe or other countries.

For further information: <a href="http://ec.europa.eu/clima/policies/ets/cap/auctioning/index">http://ec.europa.eu/clima/policies/ets/cap/auctioning/index</a> en.htm

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<sup>&</sup>lt;sup>1</sup> Auctions conducted by EEX for Poland.

**Editor's note:** This report has been prepared by the Commission on behalf of the following Member States: Austria, Belgium, Bulgaria, Republic of Croatia, Cyprus, Czech Republic, Denmark, Estonia, Finland, France, Greece, Hungary, Ireland, Italy, Latvia, Lithuania, Luxembourg, Malta, the Netherlands, Poland, Portugal, Romania, Slovakia, Slovenia, Spain and Sweden. The report complies with the requirement laid down in the fourth paragraph of Article 10(4) of the *ETS Directive*.

**Methodology:** The report is based on the reports submitted by EEX, on the discussions in regular meetings between the Commission, its advisors and EEX and on any further relevant information available to the Commission. The authors of the report did not actively verify EEX's compliance with the specific rules and provisions applicable under European or national law. EEX has supplied the data used in this report and been consulted before its publication, whereas the *participating Member States* have been consulted on its template.

For reasons of confidentiality and proper enforcement of the applicable rules, the report refers to reporting on the auctions held based on information provided by EEX. Any data not directly related to the auctions is based only on public reports.

**Disclaimer:** The authors have made every effort to ensure that the information provided is complete, correct and precise for the reporting period. Nevertheless, the report is based on limited information available to the authors in a market context where much information has to remain confidential. The authors did not actively verify the information. Therefore, the authors and the Member States on whose behalf this report was drafted deny any responsibility or liability whatsoever for its contents, regardless of the nature of such contents. Any reliance by any person or entity on the information provided in this report is solely at that person's or entity's own risk. Monthly averages provided are weighted by each auction's auction volume, unless otherwise indicated.

**Glossary:** terms and expressions written in *italics* are included in the glossary.

#### **Executive summary**

This report covers the auctioning of emission allowances in the period January to March 2015. In that period, EEX, in its capacity as the common auction platform, auctioned a total of 105 048 000 *general allowances* in 36 auctions and 5 976 000 *aviation* allowances in 4 auctions for the *third trading period* on behalf of those EU Member States (*participating Member States*) that participate in the *Transitional Common Auction Platform (TCAP)*. EEX also auctioned for Poland 5 708 000 *general allowances* in two auctions and 433 500 *aviation allowances* in one auction.

All auctions were held successfully and no irregularities or deviations from the requirements were observed. The table below contains a summary of the information concerning the conducted auctions.

#### The January, February and March 2015 auctions at a glance:

	Ge	eneral Allowand	ces	Aviation Allowances
	January	February	March	January to March
General				
Number of auctions	11	12	15	5
Total volume auctioned	32 034 000	35 016 000	43 706 000	6 409 500
Amount raised from the auctions (€)	220 605 860	253 340 760	295 627 000	43 171 080
Average Auction Clearing Price	6.89	7.24	6.76	6.74
(€/allowance)				
Total bid volume	118 905 000	140 319 500	155 841 500	21 010 500
Average Cover ratio	3.7	4.0	3.6	3.3
Participation				
Number of eligible bidders	65	67	66	65 to 67
Number of participating bidders <sup>(1)</sup>	29	27	29	14
Number of successful bidders <sup>(1)</sup>	25	26	29	13
Average number of bidders per auction	18.5	17.8	19.2	10.8
Average number of successful bidders	13.6	13.3	13.5	8.1
per auction				
Auction data				
Average total volume bid per bidder per auction	594 654	656 261	539 041	426 033
Average bid size (volume per bid)	147 380	184 555	138 843	137 651
Average volume won per bidder per	223 767	224 610	220 982	180 073
auction				
Average range of bids (€)	2.16	1.82	1.69	1.92

 <sup>(1):</sup> Number of unique individual bidders or unique successful bidders present in a whole month

#### Introduction

All the participating Member States were participating in the auctions as from January 2015.

In accordance with the second subparagraph of Article 30(7) of the *Auctioning Regulation*, pending the procurement, appointment and listing of its opt-out auction platform, Poland contracted EEX to auction its share of allowances to be auctioned. These auctions started on 16 September 2013. Due to the *Back-loading*, no auctions were held for Poland from April to December 2014, the auctions restarted in January 2015.

Accordingly, the present report includes data on the auctions performed by the common auction platform on behalf of the *participating Member States* and Poland.

The Member States of the European Free Trade Association (EFTA) that are Party to the European Economic Area (EEA)<sup>2</sup> have also stated their intention to make use of the *Transitional Common Auction Platform* by aggregating their volumes to those auctioned on behalf of the *participating Member States*. The preparations for this are on-going.

#### 1. Results of the auctions

The total revenues from auctions of *general allowances* accrued to the *participating Member States* and Poland from the start of the *Third trading period* auctions (November 2012) to March 2015 are EUR 5 458 740 290. The total revenues from auctions of *aviation allowances* accrued to the *participating Member States* and Poland from the start of the *Third trading period* auctions (November 2012) to March 2015 are EUR 82 625 590. The revenues per each *participating Member State* in the reporting period as well as cumulative data are provided in Annex 1.

Information on *general allowances*' auctions is provided in section 1.1, and on *aviation allowances* in section 1.2 hereafter. Detailed information on the auctions held in the reporting period January to March 2015, including results per auction, is provided in Annex 2.

Please note that in all parts of this report monthly averages provided are weighted by each auction's auction volume, unless otherwise indicated.

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<sup>&</sup>lt;sup>2</sup> Iceland, Liechtenstein and Norway.

#### 1.1. General allowances auctions

#### 1.1.1. Clearing prices and participation - general allowances

An overview of the auction results for the *participating Member States* and Poland from January 2014 to March 2015 is provided in Table 1.

**Table 1:** General allowances - main statistics on the results of the auctions per month

Month	Total auction volume	Total bid volume	Total revenue (€)	Average Cover ratio <sup>3</sup>	Average number of bidders	Average number of successful bidders	Average auction clearing price (€)
March 2015	43 706 000	155 841 500	295 627 000	3.6	19.2	13.5	6.76
February 2015	35 016 000	140 319 500	253 340 760	4.0	17.8	13.3	7.24
January 2015	32 034 000	118 905 000	220 605 860	3.7	18.5	13.6	6.89
Dec. 2014	14 838 500	68 610 000	100 283 525	4.6	15.4	11.5	6.76
Nov. 2014	22 476 000	91 484 000	152 218 710	4.1	15.4	11.3	6.77
Oct. 2014	24 349 000	124 425 000	147 030 500	5.1	15.5	11.2	6.04
Sept. 2014	26 222 000	157 822 500	157 556 760	6.0	15.4	11.2	6.01
Aug. 2014	11 208 000	90 982 500	69 928 580	8.1	12.6	8.0	6.24
July 2014	26 222 000	140 375 000	154 934 560	5.4	14.8	10.9	5.91
June 2014	22 476 000	136 372 000	124 329 740	6.1	17.6	10.8	5.53
May 2014	20 766 500	133 689 500	104 208 535	6.4	17.4	11.7	5.02
April 2014	23 130 000	177 597 500	119 948 325	7.7	17.7	10.8	5.19
March 2014	42 048 500	280 163 000	269 929 405	6.7	17.4	11.8	6.42
Feb. 2014	52 667 000	216 991 500	336 162 075	4.1	19.7	14.3	6.38
Jan. 2014	48 648 500	178 198 500	241 181 405	3.7	21.9	13.2	4.96
2014 total	335 052 000	1 796 711 000	1 977 712 120	5.4	17.6	11.9	5.90
2013 total	530 488 000	1 761 639 500	2 349 853 340	3.3	18.4	13.2	4.43

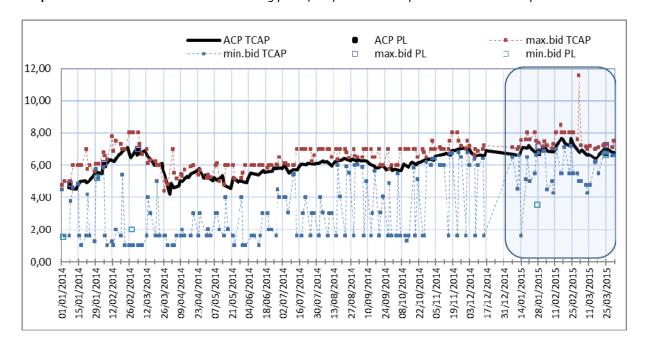
During January 2015, the difference between the Auction Clearing Prices and the mean of the *best-ask* and *best-bid* prices on the EEX *spot secondary market* for *general allowances* at the closure of the auction *bidding window* was on average EUR -0.02, and this difference had a standard deviation of EUR 0.02. In February 2015 this difference was EUR -0.01 on average with EUR 0.03 standard deviation, whereas in March 2015 the difference was on average EUR 0.00 with standard deviation of EUR 0.04.

Auctions by the transitional common auction platform January to March 2015

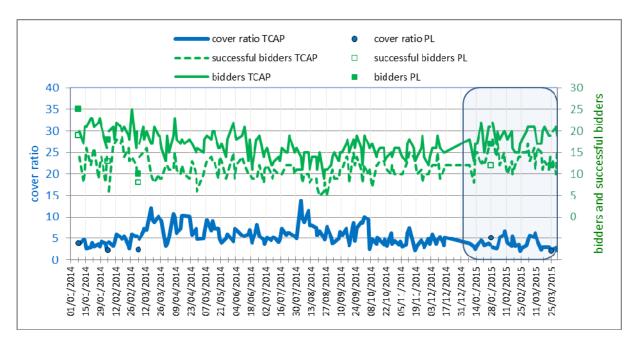
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<sup>&</sup>lt;sup>3</sup> Cover ratio is the ratio between the total bid volume and the auction volume.

**Graph 1:** General allowances - auction clearing price (ACP) & maximum prices bid & minimum prices bid<sup>4</sup>



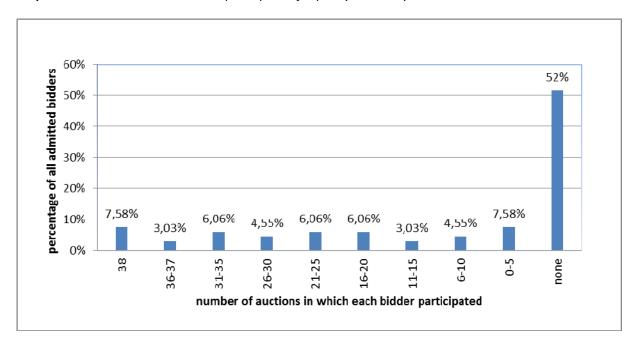
**Graph 2:** General allowances - cover ratio (left axis), number of bidders and successful bidders (right axis) per auction



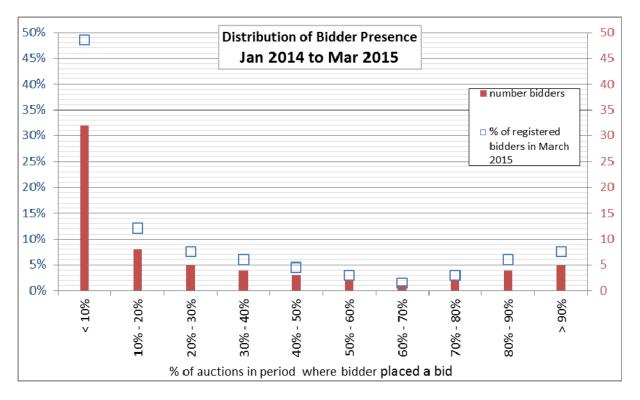
There were 65 eligible bidders in January 2015, 67 in February 2015 and 66 in March 2015. Out of these, 29 different bidders participated in the auctions in January and March 2015, and 27 in February 2015. Graph 3A indicates the participation frequency in January to March 2015, and Graph 3B provides data since January 2014.

<sup>&</sup>lt;sup>4</sup> Auctions on behalf of Poland were held on the following days: 8/1/2014, 5/2/2014, 5/3/2014, 28/1/2015 and 25/3/2015.

**Graph 3A:** General allowances -bidder participation frequency in January to March 2015



Graph 3B: General allowances -bidder participation frequency since January 2014



#### 1.1.2. Bidding behaviour - general allowances

Table 2 provides monthly data on the bids submitted from January 2014 to March 2015. See also Graph 4.

Table 2: General Allowances - monthly statistics on the submitted bids

Month	Nr of auctions	Nr of bidders <sup>(1)</sup>	Total volume of bids	Average total volume bid per bidder per auction <sup>5</sup>	per bidder per auction	standard deviation of total volume bid per bidder per auction over the month <sup>7</sup>	Total monthly nr of bids	Average nr. of bids per bidder per auction <sup>8</sup>	Average bid size <sup>9</sup>
March 2015	15	29	155 841 500	539 041	541 116	997 195	1108	3.9**	138 843
Feb 2015	12	27	140 319 500	656 261	655 699	1 209 247	756	3.5**	184 555
Jan 2015	11	29	118 905 000	594 654	585 739	850 655 809		4.1**	147 380
Dec 2014	8	26	68 610 000	565 380	557 805	880 324	541	4.5**	138 240
Nov 2014	12	27	91 484 000	487 754	494 508	823 645	702	3.8**	132 316
Oct 2014	13	27	124 425 000	607 052	615 965	1 099 893	1 079	5.3**	113 863
Sept 2014	14	27	157 822 500	742 000	734 058	1 118 338	1162	5.4 <sup>++</sup>	135 602
Aug 2014	12	24	90 982 500	602 194	602 533	692 190	973	6.4**	94 199
July 2014	14	28	140 375 000	681 909	678 140	828 292	1 269	6.2++	112 032
June 2014	12	33	136 372 000	660 091	646 313	816 730	1 107	5.3**	124 763
May 2014	11	33	133 689 500	694 972	699 945	866 444	1 104	5.9 <sup>++</sup>	121 290
April 2014	12	28	177 597 500	836 027	837 724	980 403	1 095	5.2**	159 901
March 2014	14	31	280 163 000	1 193 513	1 148 209	1 702 509	1 306	5.4**	227 677
Feb 2014	13	33	216 991 500	832 851	847 623	1 251 932	1 006	3.9**	216 967
Jan 2014	12	33	178 198 500	690 216	677 561	980 028	941	3.6**	191 935

<sup>++:</sup> indicates simple average

<sup>(1):</sup> Number of unique individual bidders or unique successful bidders present in a whole month

<sup>&</sup>lt;sup>5</sup> Monthly weighted average of the average bid volume per bidder in each auction (total bid volume in each auction divided by number of bidders participating in that auction), weighted by volume auctioned in each auction.

Average over the whole month of the volume bid by bidders each time they are present in an auction (computed as total volume bid for the month / sum over whole month of number of bidders present in each auction).

<sup>&</sup>lt;sup>7</sup> Standard deviation of total volume bid per bidder in each auction over the month.

<sup>&</sup>lt;sup>8</sup> Monthly simple average of the average number of bids per bidder in each auction (total number of bids in each auction divided by number of bidders participating in that auction).

<sup>&</sup>lt;sup>9</sup> Monthly weighted average of the average bid size per bidder in each auction (total bid volume in each auction divided by number of bids in that auction), weighted by volume auctioned in each auction.

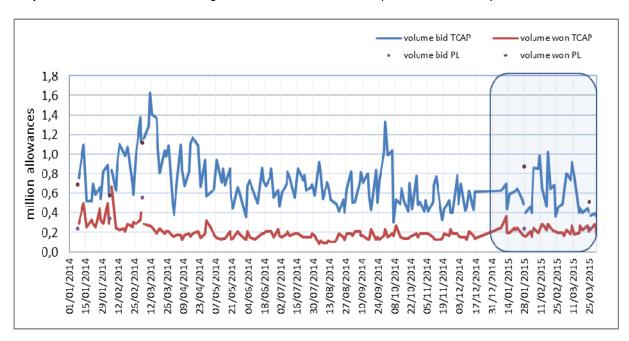
Table 3 provides monthly data on successful bids from January 2014 to March 2015. See also Graph 4.

Table 3: General Allowances - monthly statistics on successful bids

Month	Nr of auctions	Nr of successful bidders <sup>(1)</sup>	Total auction volume	Average volume won per bidder per auction <sup>10</sup>	Average volume won per bidder per auction over the month <sup>11</sup>	Standard deviation of volume won per bidder per auction over the month <sup>12</sup>	Total monthly nr of successful bids
March 2015	15	29	43 706 000	220 982	215 300	270 467	362
Feb. 2015	12	24	35 016 000	224 610	218 850	227 190	256
Jan. 2015	11	25	32 034 000	223 767	213 560	238 463	249
Dec. 2014	8	25	14 838 500	164 821	161 288	182 952	172
Nov. 2014	12	23	22 476 000	170 316	165 265	173 792	206
Oct. 2014	13	23	24 349 000	172 199	167 924	189 785	308
Sept. 2014	14	22	26 222 000	173 941	167 019	207 239	295
Aug. 2014	12	18	11 208 000	124 351	116 750	131 148	169
July 2014	14	25	26 222 000	173 989	172 513	185 218	330
June 2014	12	29	22 476 000	180 673	174 233	194 252	212
May 2014	11	24	20 766 500	165 468	160 981	179 425	250
April 2014	12	25	23 130 000	186 447	177 923	223 208	196
March 2014	14	26	42 048 500	297 314	267 825	360 413	291
Feb. 2014	13	31	52 667 000	314 017	283 156	464 816	335
Jan. 2014	12 29 48		48 648 500	324 599	307 902	359 814	257

<sup>(1):</sup> Number of unique individual bidders or unique successful bidders present in a whole month

**Graph 4:** General allowances - average bid volume and volume won per bidder over one year 13



<sup>&</sup>lt;sup>10</sup> Monthly weighted average of the average volume won per bidder in each auction (total volume won in each auction divided by the number of successful bidders in that auction), weighted by total bid volume in each auction.

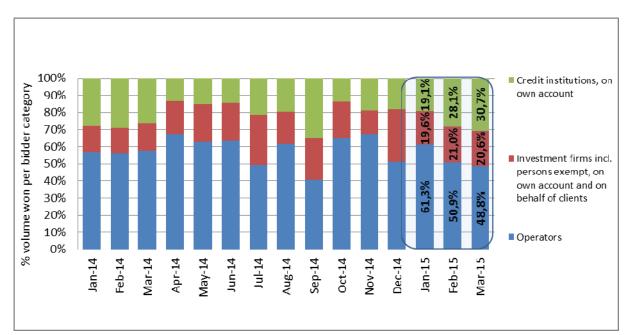
Average over the whole month of the volume won per bidder each time they are successful in an auction (computed as total volume auctioned for the month / sum over whole month of number of bidders successful in each auction).

Standard deviation of volume won per bidder in each auction over the month.

<sup>&</sup>lt;sup>13</sup> Auctions on behalf of Poland were held on the following days: 8/1/2014, 5/2/2014, 5/3/2014, 28/1/2015 and 25/3/2015.

#### 1.1.3. Type of bidders - general allowances

In January to March 2015, almost all volume bid was done on own account, with only 0.15%, 0.08% and 0.26% of the volume submitted by intermediaries on behalf of a client in January, February and March, respectively. The shares in the total successful bid volume per bidder category are indicated in graph 5 and in table 4.



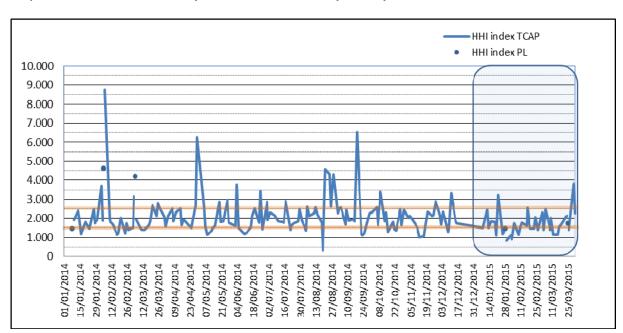
Graph 5: General allowances - distribution of successful won volume per bidder category since January 2014

**Table 4:** General allowances – distribution of volume won per bidder category and their standard deviations for January 2015 to March 2015

Month	% volume won coming from bidding on behalf of a client	Bidder category	% volume won	Standard deviation of % of volume won
March		Operators (including Business groupings)	48.8%	18.8% points
2015	0.62%	Investment firms (including persons exempt)	30.7%	17.7% points
2013		Credit institutions	20.6%	19.6% points
		Operators (including Business groupings)	50.9%	18.2% points
Feb. 2015	0.31%	Investment firms (including persons exempt)	21.0%	10.7% points
		Credit institutions	28.1%	13.4% points
		Operators (including Business groupings)	61.3%	12.8% points
Jan. 2015	0.48%	Investment firms (including persons exempt)	19.6%	7.7% points
		Credit institutions	19.1%	17.0% points

#### 1.1.4. Concentration - general allowances

The Herfindahl-Hirschman Index (HHI) of successful bids is used to measure market concentration <sup>14</sup>. The HHI ranges from a value of 0 (perfect competition) to 10 000 (a single monopsonistic buyer). A common interpretation of the HHI is that a score below 1 500 is 'not-concentrated', between 1 500 and 2 500 is 'moderately concentrated,' and above 2 500 is 'highly concentrated' – these thresholds are indicated on Graphs 6 and 7. Graph 6 indicates the HHI of the individual auctions. Graph 7 indicates the monthly and quarterly HHI and successful bidder participation (number of bidders successful at least once in the period of interest) so as to show the variation over different periods, due to the turnover of participants in the auctions.

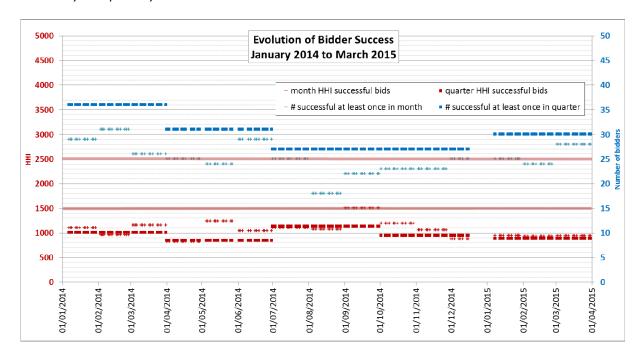


**Graph 6:** General allowances - Herfindahl-Hirschman Index of successful bids in individual auctions<sup>15</sup>

<sup>&</sup>lt;sup>14</sup> The HHI is calculated as the sum of the squares of all successful bidders' shares (in % points) of the total auctioned volume over the period of interest.

<sup>&</sup>lt;sup>15</sup> Auctions on behalf of Poland were held on the following days: 8/1/2014, 5/2/2014, 5/3/2014, 28/1/2015 and 25/3/2015.

**Graph 7:** General allowances - Herfindahl-Hirschman Index of successful bids and successful bidder participation at monthly and quarterly level



#### **Aviation allowances auctions** 1.2.

The auctioning of aviation allowances restarted as of September 2014<sup>16</sup>. Pursuant to the published auction calendar, only aviation allowances for the calendar year 2012 were auctioned in 2014<sup>17</sup>; the aviation allowances for the calendar years 2013-2015 are auctioned in 2015, in accordance with the published 2015 auction calendar. Poland decided to aggregate the aviation allowances for the calendar years 2012 to 2015 in a single auction held in March 2015.

#### 1.2.1. Clearing prices and participation – aviation allowances

An overview of the auction results from September 2014 to March 2015 is provided in Table 5.

**Table 5**: Aviation allowances – main statistics on the results of the auctions per month

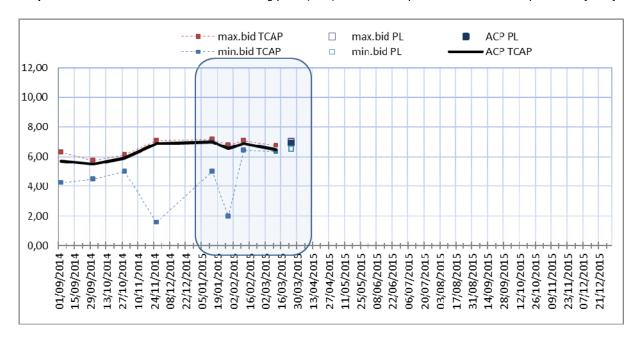
Month	Total auction volume	Total bid volume	Total revenue (€)	Average Cover ratio <sup>18</sup>	Average number of bidders	Average number of successful bidders	Average auction clearing price (€)
March 2015	1 927 500	6 016 500	12 663 600	3.1	11.0	6.7	6.57
February 2015	1 494 000	3 750 000	10 263 780	2.5	9.0	8.0	6.87
January 2015	2 988 000	11 244 000	20 243 700	3.8	11.5	9.0	6.78
Dec. 2014	-	-	-	-	-	-	-
Nov. 2014	1 641 500	7 665 500	11 326 350	4.7	14.0	7.0	6.90
Oct. 2014	3 286 000	14 685 000	18 763 060	4.5	13.5	8.0	5.71
Sept. 2014	1 643 000	5 851 000	9 365 100	3.6	11.0	9.0	5.70
2014 total	6 570 500	28 201 500	39 454 510	4.3	13.0	8.0	6.00

<sup>&</sup>lt;sup>16</sup> The auctions were suspended end 2012, see the Regulatory update published by the Commission on 16 November 2012 http://ec.europa.eu/clima/news/articles/news 2012111601 en.htm.

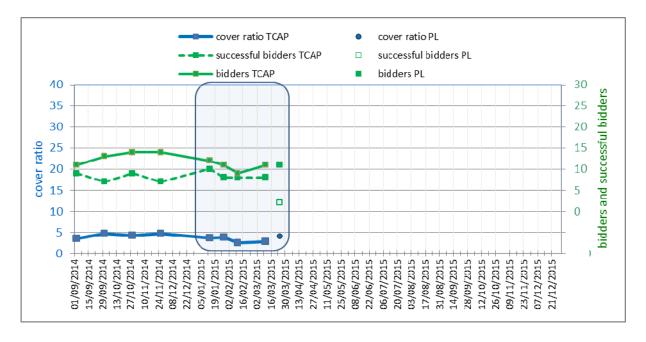
See also the regulatory update July 2014; Commission 29 http://ec.europa.eu/clima/news/articles/news 2014072901 en.htm.

The cover ratio is the ratio between the total bid volume and the auction volume.

**Graph 8:** Aviation allowances - auction clearing price (ACP) & maximum prices bid & minimum prices bid [euro]



**Graph 9:** Aviation allowances - cover ratio (left axis), number of bidders and successful bidders (right axis) per auction



There were 65 eligible bidders in January 2015, 67 in February 2015 and 66 in March 2015. Out of these, 12 different bidders participated in the auctions in January, 9 in February and 13 in March 2015. Graph 10 indicates the participation frequency in January to March 2015.

90% 79% percentage of all admitted bidders 80% 70% 60% 50% 40% 30% 20% 12% 10% 3% 3% 3% 0% 0% 0 2 number of auctions in which each bidder participated

Graph 10 Aviation allowances - bidders participation frequency in January to March 2015

#### 1.2.2. Bidding behaviour – aviation allowances

Table 6 provides monthly data on the bids submitted from January 2014 to March 2015. See also Graph 11.

**Table 6**: Aviation allowances – monthly statistics on the submitted bids

Month	Nr of auctions	Nr of bidders <sup>(1)</sup>	Total volume of bids	Average total volume bid per bidder per auction <sup>19</sup>	per blader per auction	standard deviation of total volume bid per bidder per auction over the month <sup>21</sup>	Total monthly nr of bids	Average nr. of bids per bidder per auction <sup>22</sup>	Average bid size <sup>23</sup>
March 2015	2	13	6 016 500	333 461	273 477	290 869	60	2.7**	122 269
Feb. 2015	1	9	3 750 000	416 667	416 667	434 388	39	4.3**	96 154
Jan. 2015	2	12	11 244 000	490 432	488 870	512 660	70	3.0**	168 321
Dec. 2014	-	-	-	-	-	-	-	-	-
Nov. 2014	1	14	7 665 500	547 536	547 536	654 163	63	4.5**	121 675
Oct. 2014	2	15	14 685 000	545 940	543 889	555 854	83	4.5**	177 573
Sept. 2014	1	11	5 851 000	531 909	531 909	483 194	65	5.9 <sup>++</sup>	90 015

<sup>++:</sup> indicates simple average

(1): Number of unique individual bidders or unique successful bidders present in a whole month

<sup>&</sup>lt;sup>19</sup> Monthly weighted average of the average bid volume per bidder in each auction (total bid volume in each auction divided by number of bidders participating in that auction), weighted by volume auctioned in each auction.

Average over the whole month of the volume bid by bidders each time they are present in an auction (computed as total volume bid for the month / sum over the whole month of number of bidders present in each auction).

<sup>&</sup>lt;sup>21</sup> Standard deviation of total volume bid per bidder in each auction over the month.

Monthly simple average of the average number of bids per bidder in each auction (total number of bids in each auction divided by number of bidders participating in that auction).

23 Monthly weighted average of the average bid size per bidder in each auction (total bid volume in each auction divided by number of bids

in that auction), weighted by volume auctioned in each auction.

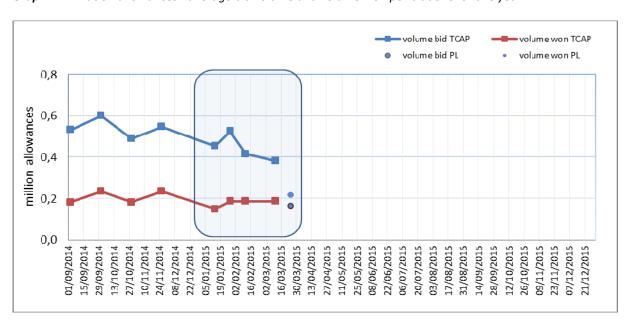
Table 7 provides monthly data on successful bids from January 2014 to March 2015. See also Graph 11.

Table 7: Aviation Allowances – Monthly statistics on successful bids

Month	Nr of auctions	Nr of successful bidders <sup>(1)</sup>	Total auction volume	Average volume won per bidder per auction <sup>24</sup>	Average volume won per bidder per auction over the month <sup>25</sup>	Standard deviation of volume won per bidder per auction over the month <sup>26</sup>	Total monthly nr of successful bids
March 2015	2	9	1 927 500	193 497	192 750	176 192	18
Feb. 2015	1	8	1 494 000	186 750	186 750	136 102	17
Jan. 2015	2	10	2 988 000	168 075	166 000	170 471	24
Dec. 2014	-	-	-	_	-	-	-
Nov. 2014	1	7	1 641 500	234 500	234 500	171 897	9
Oct. 2014	2	11	3 286 000	208 635	205 375	165 517	19
Sept. 2014	1	9	1 643 000	182 556	182 556	159 714	20

<sup>(1):</sup> Number of unique individual bidders or unique successful bidders present in a whole month

Graph 11: Aviation allowances - average bid volume and volume won per bidder over one year



<sup>&</sup>lt;sup>24</sup> Monthly weighted average of the average volume won per bidder in each auction (total volume won in each auction divided by the number of successful bidders in that auction), weighted by total bid volume in each auction.

Average over the whole month of the volume won per bidder each time they are successful in an auction (computed as total volume auctioned for the month / sum over the whole month of number of bidders present in each auction).

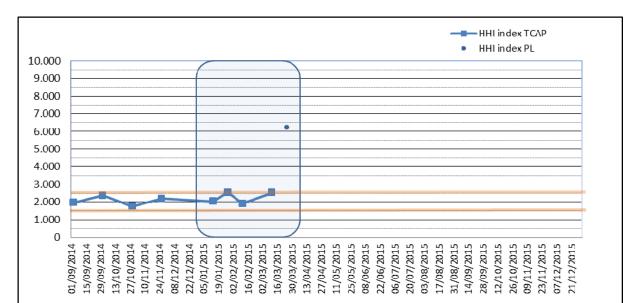
Standard deviation of volume won per bidder in each auction over the month.

#### 1.2.3. Type of bidders – aviation allowances

In January to March 2015, all volume bid was done on own account.

#### 1.2.4. Concentration – aviation allowances

The HHI of successful bids is used to measure market concentration<sup>27</sup>. The HHI ranges from a value of 0 (perfect competition) to 10 000 (a single monopsonistic buyer). A common interpretation of the HHI is that a score below 1 500 is 'not-concentrated', between 1 500 and 2 500 is 'moderately concentrated,' and above 2 500 is 'highly concentrated'. Graph 12 indicates the HHI of the individual auctions.



Graph 12: Aviation allowances - Herfindahl-Hirschman index of successful bids in individual auctions.

Auctions by the transitional common auction platform January to March 2015

<sup>&</sup>lt;sup>27</sup> The HHI is calculated as the sum of the squares of all successful bidders' shares (in % points) of the total auctioned volume over the period of interest.

#### 2. Implementation of and compliance with the applicable rules

#### Fair and open access

EEX verified that each auction participant belonged to one of the categories of eligible bidders set out in Article 18 of the *Auctioning Regulation*. Table 8 presents the number of eligible bidders under each category in January to March 2015

Most of the active participants in the secondary carbon market are assumed to also have been admitted to bid in the auctions<sup>28</sup>.

Table 8: Eligible participants to the auctions in January to March 2015, by category

		Opera	ator	Investment	Credit	Business	Person exempt	
Number of part	ticipants	Stationary	Aircraft	firm	Institution	grouping	from MiFID requirements	Total
Participants admitted	January 2015							115
to EEX's emissions spot secondary	February 2015							115
market	March 2015							111
Dauticinante elicible	January 2015	44	1	9	6	0	5	65
Participants eligible to bid in the auctions	February 2015	46	1	9	6	0	5	67
to bid iii the auctions	March 2015	45	1	9	5	0	6	66
(Of which:)	January 2015	-	-	2	2	-	1	5
Participants eligible to bid in the auctions	February 2015	-	-	2	2	-	1	5
on behalf of clients	March 2015	-	-	2	2	-	1	5
(Of which:) Auction-	January 2015	2	0	0	0	0	0	2
only access	February 2015	2	0	0	0	0	0	2
only access	March 2015	2	0	0	0	0	0	2

Throughout the period, EEX actively promoted the auctions in view of attracting bidders.

No irregularities or deviations from the admission and access requirements were found.

#### **Transparency**

The results for each auction were published in accordance with Article 61 of the *Auctioning Regulation*, not later than 15 minutes after the close of the *bidding window*.

EEX revised its webpage on auctioning where necessary for keeping it up to date.

#### **Technical and operational aspects**

No irregularities or deviations from the requirements were found as regards the auctions themselves or the *clearing* and *settlement* processes.

<sup>&</sup>lt;sup>28</sup> This assessment is based on the auction participants' activity in EEX's secondary market and general market knowledge of EEX.

EEX's Market Surveillance department surveyed all auctions with a view to detecting any *market abuse*, money laundering, terrorist financing or other criminal activities. No such wrongdoing was publicly reported. EEX's Market Surveillance department takes its instructions only from SMWA (Saxony's Ministry for Economy and Employment) and is independent of the exchange itself.

No infringements of the confidentiality requirements were identified.

#### Other aspects

No problems or issues were identified as regards coordination of the auctions between the various auction platforms.

A new auctioneer was appointed by Greece in November 2014 and by Hungary in January 2015.

### 3. Overview of, and any updates on breaches of provisions or ongoing proceedings

No breaches or problems of non-conformity were reported. There were no proceedings on such breaches or problems of non-conformity dating from before the reporting period.

Comments of the auction platform on the draft of this report and the way they have been taken into account

EEX made no comments on the report.

Date of publication: 15/06/2015

#### Glossary

Auction calendar Document setting out the bidding windows, individual volumes and

auction dates of the auctions in a given calendar year. See Articles 11, 13

and 32 of the Auctioning Regulation.

Auction Clearing Price Price determined upon closure of the bidding window.

Auction-only access Access to the auctions without becoming a member of or participant in

other markets organised by the auction platform.

Auctioning Regulation Commission Regulation (EU) No 1031/2010 — Timing, administration and

other aspects of auctioning of greenhouse gas emission allowances pursuant to Directive 2003/87/EC of the European Parliament and of the Council establishing a scheme for greenhouse gas emission allowances trading within the Community, Official Journal L 302, 18.11.2010, p. 1, as subsequently amended. See:

http://ec.europa.eu/clima/policies/ets/cap/auctioning/documentation\_en

<u>.htm</u>.

Best-bid and best-ask prices

Auctioneer Entity appointed by a Member State that offers the allowances to be

auctioned to the auction platform and receives the auction proceeds due to the appointing Member State. See Articles 22 and 23 of the *Auctioning* 

Regulation.

Back-loading Proposal by the Commission to postpone, as a short-term measure, the

auctioning of 900 million allowances from the years 2013-2015 until 2019-2020. See: http://ec.europa.eu/clima/policies/ets/reform/index en.htm.

The best-bid price is the highest price any buyer is willing to pay and the

best-ask price is the lowest price any seller is willing to accept.

Business groupings Groupings of operators or aircraft operators. See Article 18(1)(d) of the

Auctioning Regulation.

Bidding window Time during which bidders can submit bids. See Article 8(1) of the

Auctioning Regulation.

Clearing Processes preceding the opening of the Bidding window, during the

Bidding window and following the closure of the Bidding window until Settlement, involving the management of any risks arising during that interval including margining, netting or novation or any other services carried out possibly by a Clearing or Settlement system. See Article 3(31)

of the Auctioning Regulation.

Cover ratio Total bid volume divided by the available volume in the auction.

Credit institution Credit institution as defined in EU legislation on credit institutions (Article

4(1) of Directive 2006/48/EC).

ETS Directive Directive 2003/87/EC of the European Parliament and of the Council of 13

October 2003 establishing a scheme for greenhouse gas emission allowance trading within the Community and amending Council Directive

96/61/EC, OJ L 275, 25.10.2003, p. 32, as subsequently amended. See: http://ec.europa.eu/clima/policies/ets/documentation\_en.htm.

General Allowance Allowance to emit one tonne of CO<sub>2</sub>-equivalent, see Article 3(a) of the ETS

Directive, also referred to as EUA.

**Aviation Allowance** Allowance to emit one tonne of CO2-equivalent that can be used by

aircraft operators, also referred to as EUAA. See Article 12(2a) and (3) of

the ETS Directive.

Investment firms Investment firms as defined in EU financial markets legislation (point (1) of

Article 4(1) of Directive 2004/39/EC).

Market abuse Insider dealing and market manipulation. See Article 36 of the Auctioning

Regulation and Article 1 of Directive 2003/6/EC ('Market Abuse Directive').

Participating Member States All EU Member States except Germany, Poland and the UK, which decided

to opt out from the joint procurement of a common auction platform

pursuant to Article 30 of the Auctioning Regulation.

Persons exempt from MiFID Natural or legal persons exempt from the authorisation requirements in

EU financial law because their trading and investment services activities are only ancillary to their main business (Article 2(1)(i) of Directive 2004/39/EC) and that have been authorised under national legislation implementing the rules laid down in the Auctioning Regulation to bid for allowances in the auctions. See Article 18(2) of the Auctioning Regulation.

Secondary market Market in which persons buy or sell allowances either before or after they are allocated either free of charge or through auctioning. To be

distinguished from the 'primary market', consisting of the auctions of

allowances.

Settlement Payment on delivery of the allowances. See Article 3(34) of the Auctioning

Regulation.

Spot secondary market Secondary market for allowances with delivery within 5 days from the

transaction.

platform

Transitional common auction Auction platform appointed pursuant to Article 26(2) of the Auctioning

Regulation, also referred to as TCAP.

Third trading period The period 2013-2020, including the allowances referred to in Article 10(1)

> of the Auctioning Regulation auctioned in 2012. Allowances are valid during a given period without distinction as regards the year within that

period. See Article 13 of the ETS Directive.

#### Annex 1 Auction revenues per Member State until March 2015 (reported in euros)

(The data used in this annex can also be obtained directly from the EEX website.)

	General All	owances	Aviation All	owances	All Allowances
	November 2012 to December 2014	January 2015 to March 2015	September 2014 to December 2014	January 2015 to March 2015	November 2012 to March 2015
Austria	118 971 145	18 537 000	1 176 980	1 210 500	139 895 625
Belgium	210 022 310	33 567 000	2 048 600	1 371 900	247 009 810
Bulgaria	110 959 205	29 308 500	223 080	457 300	140 948 085
Croatia	-	20 791 500	-	215 200	21 006 700
Cyprus	2 359 150	-	298 460	726 300	3 383 910
Czech Republic	135 928 400	26 553 000	466 730	618 700	163 566 830
Denmark	104 050 600	16 533 000	1 163 310	1 371 900	123 118 810
Estonia	25 482 675	5 010 000	37 690	80 700	30 611 065
Finland	142 928 700	22 044 000	813 230	1 076 000	166 861 930
France	468 006 185	72 645 000	10 050 580	6 213 900	556 915 665
Greece	292 445 825	46 092 000	1 098 020	2 555 500	342 191 345
Hungary	94 790 800	19 789 500	288 240	511 100	115 379 640
Ireland	76 787 325	12 274 500	871 620	1 102 900	91 036 345
Italy	823 726 535	127 755 000	5 243 260	7 343 700	964 068 495
Latvia	23 004 655	3 507 000	140 670	269 000	26 921 325
Lithuania	40 545 275	6 763 500	58 390	134 500	47 501 665
Luxemburg	10 232 965	1 503 000	631 420	107 600	12 474 985
Malta	8 553 290	1 252 500	99 530	295 900	10 201 220
The Netherlands	285 480 035	44 589 000	5 469 660	1 883 000	337 421 695
Poland	322 031 455	38 614 620	-	2 982 480	363 628 555
Portugal	149 255 870	23 296 500	1 273 060	1 479 500	175 304 930
Romania	260 012 970	46 843 500	322 480	807 000	307 985 950
Slovak Republic	131 486 535	20 290 500	44 590	107 600	151 929 225
Slovenia	37 844 480	5 761 500	48 040	80 700	43 734 720
Spain	738 176 860	114 478 500	6 564 360	8 312 100	867 531 820
Sweden	76 083 425	11 773 500	1 022 510	1 856 100	90 735 535
TOTAL	4 689 166 670	769 573 620	39 454 510	43 171 080	5 541 365 880

#### Annex 2 Results of individual auctions on behalf of participating Member States and Poland in January to March 2015

(The data used in the highlighted subsection of the tables presented in this annex can also be obtained directly from the EEX website.)

							Ge	nera	l Allov	vances -	- January 20	)15							
Date	Auction Clearing Price	Minimum Bid price	Maximum Bid price	Mean Bid price	Median Bid price	Total Auction Volume	Total Bid Volume	Cover ratio	Nr of Bidders	Nr of Successful Bidders	Total Revenue	Nr of Bids	Nr of Successful Bids	Avg nr of bids per bidder	Average bid size	Avg total volume bid per bidder	standard deviation of total volume bid per bidder	Average volume won per bidder	Standard deviation of volume won per bidder
08/01/2015	6.70	6.50	7.10	6.67	6.65	2 918 000	11 226 000	3.9	18	12	19 550 600	79	19	4.4	142 608	625 889	773 066	243 167	214 237
12/01/2015	6.59	4.52	7.01	6.51	6.55	2 918 000	9 069 500	3.1	13	8	19 229 620	69	14	5.3	131 442	697 654	743 295	364 750	355 090
13/01/2015	6.77	6.60	7.10	6.76	6.75	2 918 000	7 408 000	2.5	17	15	19 754 860	68	26	4.0	108 941	435 765	513 189	194 533	219 121
15/01/2015	7.10	1.59	7.55	5.91	7.04	2 918 000	10 123 500	3.5	17	15	20 717 800	85	19	5.0	119 100	595 500	759 504	194 533	258 378
19/01/2015	7.06	5.13	7.60	6.96	7.01	2 918 000	13 468 500	4.6	22	12	20 601 080	87	16	4.0	154 810	612 205	770 600	243 167	261 997
20/01/2015	7.25	6.50	8.00	7.19	7.19	2 918 000	12 501 500	4.3	20	13	21 155 500	81	17	4.0	154 340	625 075	741 999	224 462	145 746
22/01/2015	7.02	5.00	7.60	6.90	7.03	2 918 000	9 774 000	3.4	15	12	20 484 360	58	33	3.9	168 517	651 600	1 233 205	243 167	411 286
26/01/2015	7.76	5.49	8.00	6.75	6.74	2 918 000	11 241 000	3.9	21	16	19 725 680	69	30	3.3	162 913	535 286	765 256	182 375	172 399
27/01/2015	6.82	6.64	7.50	6.82	6.80	2 918 000	10 439 000	3.6	21	17	19 900 760	63	23	3.0	165 698	497 095	729 435	171 647	184 860
29/01/2015	6.92	6.75	7.40	6.93	6.92	2 918 000	8 818 000	3.0	22	18	20 192 560	74	29	3.4	119 162	400 818	574 558	162 111	116 601
(PL) 28/01/2015	6.76	3.51	7.15	6.49	6.72	2 854 000	14 796 000	5.2	17	12	19 293 040	76	23	4.5	194 684	870 353	1 414 503	237 833	202 218
<b>Monthly Value</b>	-	-	-	-	-	32 034 000	118 905 000	-	29 <sup>(1)</sup>	25 <sup>(1)</sup>	220 605 860	809	249	4.0 <sup>(2)</sup>	146 978 <sup>(3)</sup>	585 739 <sup>(4)</sup>	850 655 <sup>(5)</sup>	213 560 <sup>(6)</sup>	238 463 <sup>(7)</sup>
Monthly minimum	6.59	1.59	7.01	-	-	2 854 000	7 408 000	2.5	13	8	19 229 620	58	14	3.0	108 941	400 818	-	162 111	-
Monthly average	6.89	5.30	7.46	6.72 **	-	2 912 182++	10 801 581	3.7	18.5	13.6	20 055 078**	73.5	22.6	4.1	147 380	594 654	-	223 767	-
Monthly maximum	7.76	6.75	8.00	-	-	2 918 000	14 796 000	5.2	22	18	21 155 500	87	33	5.3	168 517	870 353	-	364 750	-

<sup>(1):</sup> Number of unique individual bidders or unique successful bidders present in a whole month. (2): Average number of bids submitted over the whole month by each bidder in each auction. Computed as total number of bids for the month / sum over whole month of number of bidders present in each auction. (3): Average size of all bids submitted in all auctions over the month. Computed as total bid volume for the month / number of bidders present in each auction. (4): Average over the whole month of the volume bid by bidders each time they are present in an auction. Computed as total volume bid for the month / sum over whole month of number of bidders present in each auction. (5): Standard deviation of the total volume bid, by each bidder in each auction, over the whole month. (6): Average over the whole month of the volume won by bidders each time they are successful in an auction. Computed as total auction volume for the month / sum over whole month of number of bidders successful in each auction. (7): Standard deviation of the total volume won by each bidder in each auction, over the whole month.

++: indicates simple average

							G	iener	al Allo	wance	s - February	2015							
Date	Auction Clearing Price	Minimum Bid price	Maximum Bid price	Mean Bid price	Median Bid price	Total Auction Volume	Total Bid Volume	Cover ratio	Nr of Bidders	Nr ot Successful Bidders	Total Revenue	Nr of Bids	Nr of Successful Bids	Avg nr of bids per bidder	Average bid size	Avg total volume bid per bidder	standard deviation of total volume bid per bidder	Average volume won per bidder	Standard deviation of volume won per bidder
02/02/2015	7.06	6.90	7.15	7.05	7.05	2 918 000	7 888 000	2.7	17	14	20 601 080	55	19	3.2	143 418	464 000	539 892	208 429	157 715
03/02/2015	7.06	6.90	7.45	7.06	7.05	2 918 000	8 090 000	2.8	20	18	20 601 080	59	27	3.0	137 119	404 500	483 602	162 111	130 114
05/02/2015	6.87	4.50	7.25	6.67	6.83	2 918 000	15 481 000	5.3	18	12	20 046 660	71	20	3.9	218 042	860 056	1 603 178	243 167	252 072
09/02/2015	6.86	5.00	7.05	6.68	6.83	2 918 000	17 126 000	5.9	20	15	20 017 480	80	24	4.0	214 075	856 300	1 957 257	194 533	166 556
10/02/2015	6.88	4.25	7.30	6.67	6.83	2 918 000	19 805 500	6.8	20	13	20 075 840	78	17	3.9	253 917	990 275	1 928 792	224 462	213 544
12/02/2015	7.29	7.00	8.00	7.25	7.25	2 918 000	11 666 500	4.0	18	10	21 272 220	62	13	3.4	188 169	648 139	785 317	291 800	259 482
16/02/2015	7.66	5.49	8.50	7.60	7.62	2 918 000	9 379 000	3.2	20	13	22 351 880	53	16	2.7	176 962	468 950	638 530	224 462	233 717
17/02/2015	7.62	5.49	8.01	7.45	7.57	2 918 000	16 344 500	5.6	16	10	22 235 160	53	14	3.3	308 387	1 021 531	1 571 586	291 800	362 345
19/02/2015	7.37	7.12	8.00	7.35	7.35	2 918 000	9 695 000	3.3	15	12	21 505 660	51	20	3.4	190 098	646 333	823 871	243 167	209 675
23/02/2015	7.20	5.49	8.00	7.13	7.19	2 918 000	10 290 000	3.5	15	14	21 009 600	63	30	4.2	163 333	686 000	1 054 182	208 429	213 259
24/02/2015	7.66	7.20	8.00	7.62	7.64	2 918 000	6 272 000	2.2	17	14	22 351 880	61	25	3.6	102 820	368 941	490 295	208 429	285 349
26/02/2015	7.29	5.49	8.01	7.24	7.28	2 918 000	8 282 000	2.8	18	15	21 272 220	70	31	3.9	118 314	460 111	561 507	194 533	205 232
<b>Monthly Value</b>	-	-	-	-	-	35 016 000	140 319 500	-	27 <sup>(1)</sup>	24 <sup>(1)</sup>	253 340 760	756	256	3.5 <sup>(2)</sup>	185 607 <sup>(3)</sup>	655 699 <sup>(4)</sup>	1 209 247 <sup>(5)</sup>	218 850 <sup>(6)</sup>	227 190 <sup>(7)</sup>
Monthly minimum	6.86	4.25	7.05	-	-	2 918 000	6 272 000	2.2	15	10	20 017 480	51	13	2.7	102 820	404 500	-	162 111	-
Monthly average	7.24	5.90	7.73	7.15**	-	2 918 000**	11 693 292	4.0	17.8	13.3	21 111 730**	63.0	21.3	3.5	184 555	656 261	-	224 610	-
Monthly maximum	7.66	7.20	8.50	-	-	2 918 000	19 805 500	6.8	20	18	22 351 880	80	31	4.2	308 387	1 021 531	-	291 800	-

<sup>(1):</sup> Number of unique individual bidders or unique successful bidders present in a whole month. (2): Average number of bids submitted over the whole month by each bidder in each auction. Computed as total number of bids for the month / sum over whole month of number of bidders present in each auction. (3): Average size of all bids submitted in all auctions over the month. Computed as total bid volume for the month / number of bidders present in each auction. (4): Average over the whole month of the volume bid by bidders each time they are present in an auction. Computed as total volume bid for the month / sum over whole month of number of bidders present in each auction, over the whole month of the volume won by bidders each time they are successful in an auction. Computed as total auction volume for the month / sum over whole month of number of bidders successful in each auction. (7): Standard deviation of the total volume won by each bidder in each auction, over the whole month.

<sup>++:</sup> indicates simple average

								Gene	ral Al	lowanc	es – March 2	015							
Date	Auction Clearing Price	Minimum Bid price	Maximum Bid price	Mean Bid price	Median Bid price	Total Auction Volume	Total Bid Volume	Cover ratio	Nr of Bidders	Nr of Successful Bidders	Total Revenue	Nr of Bids	Successful	Avg nr of bids per bidder	Average bid size	Avg total volume bid per bidder	standard deviation of total volume bid per bidder	Average volume won per bidder	Standard deviation of volume won per bidder
02/03/2015	6.90	5.49	7.60	6.86	6.89	2 918 000	9 904 000	3.4	20	15	20 134 200	75	34	3.8	132 053	495 200	764 102	194 533	306 376
03/03/2015	6.82	5.00	11.59	6.82	6.82	2 918 000	12 822 000	4.4	21	17	19 900 760	84	39	4.0	152 643	610 571	1 169 363	171 647	202 160
05/03/2015	6.96	5.00	7.25	6.79	6.92	2 918 000	16 851 000	5.8	21	13	20 309 280	79	19	3.8	213 304	802 429	1 513 523	224 462	334 853
09/03/2015	6.66	4.75	7.15	6.56	6.65	2 918 000	15 465 000	5.3	21	16	19 433 880	82	29	3.9	188 598	736 429	1 384 592	182 375	204 022
10/03/2015	6.67	4.25	7.00	6.50	6.63	2 918 000	18 442 000	6.3	20	11	19 463 060	85	17	4.3	216 965	922 100	1 824 679	265 273	295 466
12/03/2015	6.61	4.75	7.20	6.53	6.64	2 918 000	13 157 000	4.5	17	16	19 287 980	69	44	4.1	190 681	773 941	1 495 154	182 375	165 296
16/03/2015	6.36	6.18	7.00	6.36	6.35	2 918 000	6 803 500	2.3	17	15	18 558 480	66	24	3.9	103 083	400 206	466 596	194 533	166 376
17/03/2015	6.45	6.22	7.05	6.40	6.40	2 918 000	8 850 000	3.0	20	11	18 821 100	84	14	4.2	105 357	442 500	424 157	265 273	219 884
19/03/2015	6.70	5.49	7.10	6.66	6.68	2 918 000	8 473 000	2.9	21	13	19 550 600	83	19	4.0	102 084	403 476	576 690	224 462	246 854
23/03/2015	6.94	6.72	7.25	6.90	6.90	2 918 000	8 507 000	2.9	19	11	20 250 920	68	16	3.6	125 103	447 737	473 016	265 273	301 774
24/03/2015	7.02	6.82	7.25	6.98	6.98	2 918 000	7 841 000	2.7	19	14	20 484 360	67	18	3.5	117 030	412 684	510 838	208 429	293 499
26/03/2015	7.00	6.78	7.30	6.95	6.94	2 918 000	7 529 000	2.6	20	13	20 426 000	65	16	3.3	115 831	376 450	452 396	224 462	199 198
30/03/2015	6.81	6.55	7.10	6.75	6.75	2 918 000	8 325 000	2.9	21	10	19 871 580	79	13	3.8	105 380	396 429	585 966	291 800	489 774
31/03/2015	6.79	6.60	7.50	6.80	6.79	2 918 000	6 771 000	2.3	19	16	19 813 220	70	33	3.7	96 729	356 368	604 218	182 375	295 267
(PL) 25/03/2015	6.77	6.61	7.25	6.78	6.78	2 854 000	6 101 000	2.1	12	12	19 321 580	52	27	4.3	117 327	508 417	413 181	237 833	245 164
Monthly Value		-	-	-	-	43 706 000	155 841 500	-	29 <sup>(1)</sup>	29 <sup>(1)</sup>	295 627 000	1108	362	3.8 <sup>(2)</sup>	140 651 <sup>(3)</sup>	541 116 <sup>(4)</sup>	997 195 <sup>(5)</sup>	215 300 <sup>(6)</sup>	270 467 <sup>(7)</sup>
Monthly minimum	6.36	4.25	7.00	-	-	2 854 000	6 101 000	2.1	12	10	18 558 480	52	13	3.3	96 729	356 368	-	171 647	-
Monthly average	6.76	5.81	7.51	6.71**	-	2 913 733**	10 395 713	3.6	19.2	13.5	19 708 467**	73.9	24.1	3.9	138 843	539 041	-	220 982	-
Monthly maximum	7.02		11.59		-	2 918 000	18 442 000	6.3	21	17	20 484 360	85	44	4.3	216 965	922 100	-	291 800	-

<sup>(1):</sup> Number of unique individual bidders or unique successful bidders present in a whole month. (2): Average number of bids submitted over the whole month by each bidder in each auction. Computed as total number of bids for the month / sum over whole month of number of bidders present in each auction. (3): Average size of all bids submitted in all auctions over the month. Computed as total bid volume for the month / number of bidders present in each auction. (4): Average over the whole month of the volume bid by bidders each time they are present in an auction. Computed as total volume bid for the month / sum over whole month of number of bidders present in each auction, over the whole month. (6): Average over the whole month of the volume won by bidders each time they are successful in an auction. Computed as total auction volume for the month / sum over whole month of number of bidders successful in each auction. (7): Standard deviation of the total volume won by each bidder in each auction, over the whole month.

<sup>++:</sup> indicates simple average

							Av	iation	Allo	wances	- January 20	)15							
Date	Auction Clearing Price	Minimum Bid price	Maximum Bid price	Mean Bid price	Median Bid price	Total Auction Volume	Total Bid Volume	Cover ratio	Nr of Bidders	Nr of Successful Bidders	Total Revenue	Nr of Bids		Avg nr of bids per bidder	Average bid size	Avg total volume bid per bidder	standard deviation of total volume bid per bidder	Average volume won per bidder	Standard deviation of volume won per bidder
14/01/2015	6.99	5.00	7.16	6.89	6.95	1 494 000	5 454 000	3.7	12	10	10 443 060	42	13	3.5	129 857	454 500	456 672	149 400	151 497
28/01/2015	6.56	2.00	6.80	6.29	6.55	1 494 000	5 790 000	3.9	11	8	9 800 640	28	11	2.5	206 786	526 364	565 094	186 750	189 530
Monthly Value	-		-	-	-	2 988 000	11 244 000	-	12 <sup>(1)</sup>	10 <sup>(1)</sup>	20 243 700	70	24	3.0 <sup>(2)</sup>	160 628 <sup>(3)</sup>	488 870 <sup>(4)</sup>	512 660 <sup>(5)</sup>	166 000 <sup>(6)</sup>	170 471 <sup>(7)</sup>
Monthly minimum	6.56	2.00	6.80	-	-	1 494 000	5 454 000	3.7	11	8	9 800 640	42	11	2.5	129 857	454 500	-	149 400	-
Monthly average	6.78	3.50	6.98	6.59**	-	1 494 000**	5 622 000	3.8	11.5	9.0	10 121 850 <sup>++</sup>	35	12.0	3.0	168 321	490 432	-	168 075	-
Monthly maximum	6.99	5.00	7.16	-	-	1 494 000	5 790 000	3.9	12	10	10 443 060	28	13	3.5	206 786	526 364	-	186 750	-

<sup>(1):</sup> Number of unique individual bidders or unique successful bidders present in a whole month. (2): Average number of bids submitted over the whole month by each bidder in each auction. Computed as total number of bids for the month / sum over whole month of number of bidders present in each auction. (3): Average size of all bids submitted in all auctions over the month. Computed as total bid volume for the month / number of bids for the month. (4): Average over the whole month of the volume bid by bidders each time they are present in an auction. Computed as total volume bid for the month / sum over whole month of number of bidders present in each auction. (5): Standard deviation of the total volume bid, by each bidder in each auction, over the whole month. (6): Average over the whole month of the volume won by bidders each time they are successful in an auction. Computed as total auction volume for the month / sum over whole month of number of bidders successful in each auction. (7): Standard deviation of the total volume won by each bidder in each auction, over the whole month.

++: indicates simple average

							А	viatio	n Alloı	vances -	February 201	L5							
Date	Auction Clearing Price	Minimum Bid price	Maximum Bid price	Mean Bid price	Median Bid price	Total Auction Volume	Total Bid Volume	Cover ratio	Nr of Bidders	Nr of Successful Bidders	Total Revenue	Nr of Bids	Nr of Successful Bids	Avg nr of bids per bidder	Average bid size	Avg total volume bid per bidder	standard deviation of total volume bid per bidder	Average volume won per bidder	Standard deviation of volume won per bidder
11/02/2015	6.87	6.42	7.10	6.84	6.85	1 494 000	3 750 000	2.5	9	8	10 263 780	39	17	4.3	96 154	416 667	434 388	186 750	136 102
Monthly Value	-	-	-	-	-	1 494 000	3 750 000	-	9 <sup>(1)</sup>	8 <sup>(1)</sup>	10 263 780	39	17	4.3 <sup>(2)</sup>	96 154 <sup>(3)</sup>	416 667 <sup>(4)</sup>	434 388 <sup>(5)</sup>	186 750 <sup>(6)</sup>	136 102 <sup>(7)</sup>
Monthly minimum	6.87	6.42	7.10	-	-	1 494 000	3 750 000	2.5	9	8	10 263 780	39	17	4.3	96 154	416 667	-	186 750	-
Monthly average	6.87	6.42	7.10	6.84**	-	1 494 000**	3 750 000	2.5	9	8	10 263 780**	39	17.0	4.3	96 154	416 667	-	186 750	-
Monthly maximum	6.87	6.42	7.10	-	-	1 494 000	3 750 000	2.5	9	8	10 263 780	39	17	4.3	96 154	416 667	-	186 750	-

<sup>(1):</sup> Number of unique individual bidders or unique successful bidders present in a whole month. (2): Average number of bids submitted over the whole month by each bidder in each auction. Computed as total number of bids for the month / sum over whole month of number of bidders present in each auction. (3): Average size of all bids submitted in all auctions over the month. Computed as total bid volume for the month / number of bids for the month. (4): Average over the whole month of the volume bid by bidders each time they are present in an auction. Computed as total volume bid for the month / sum over whole month of number of bidders present in each auction. (5): Standard deviation of the total volume bid, by each bidder in each auction, over the whole month. (6): Average over the whole month of the volume won by bidders each time they are successful in an auction. Computed as total auction volume for the month / sum over whole month of number of bidders successful in each auction. (7): Standard deviation of the total volume won by each bidder in each auction, over the whole month.

++: indicates simple average

							Aı	viatio	n Allo	wances	- March 20	15							
Date	Auction Clearing Price	Minimum Bid price	Maximum Bid price	Mean Bid price	Median Bid price	Total Auction Volume	Total Bid Volume	Cover ratio	Nr of Bidders	Nr of Successful Bidders	Total Revenue	Nr of Bids	Nr of Successful Bids	Avg nr of bids per bidder	Average bid size	volume bid	standard deviation of total volume bid per bidder	Average volume won per bidder	Standard deviation of volume won per bidder
11/03/2015	6.48	6.32	6.77	6.49	6.46	1 494 000	4 207 500	2.8	11	8	9 681 120	30	12	2.7	140 250	382 500	350 569	186 750	189 144
(PL) 25/03/2015	6.88	6.50	7.01	6.73	6.71	433 500	1 809 000	4.2	11	2	2 982 480	30	6	2.7	60 300	164 455	150 129	216 750	106 750
Monthly Value	-	-	-	-	-	1 927 500	6 016 500	-	13 <sup>(1)</sup>	9 <sup>(1)</sup>	12 663 600	60	18	2.7 <sup>(2)</sup>	100 275 <sup>(3)</sup>	273 477 <sup>4)</sup>	290 869 <sup>(5)</sup>	192 750 <sup>(6)</sup>	176 192 <sup>(7)</sup>
Monthly minimum	6.48	6.32	6.77	-	-	433 500	1 809 000	2.8	11	2	2 982 480	30	6	2.7	60 300	164 455	-	186 750	-
Monthly average	6.57	6.36	6.82	6.61**	-	963 750++	3 668 071	3.1	11	6.7	6 331 800**	30	10.7	2.7	122 269	333 461	-	193 497	-
Monthly maximum	6.88	6.50	7.01	-	-	1 494 000	4 207 500	4.2	11	8	9 681 120	30	12	2.7	140 250	382 500	-	216 750	-

The data for previous auctions can be downloaded from EEX's website: <a href="https://www.eex.com/en/market-data/emission-allowances/auction-market/european-emission-allowances/auction-market/european-emission-allowances-auction-download">https://www.eex.com/en/market-data/emission-allowances/auction-market/european-emission-allowances-auction-market/european-emission-allowances-auction-download</a>

<sup>(1):</sup> Number of unique individual bidders or unique successful bidders present in a whole month. (2): Average number of bids submitted over the whole month by each bidder in each auction. Computed as total number of bids for the month / sum over whole month of number of bidders present in each auction. (3): Average size of all bids submitted in all auctions over the month. Computed as total bid volume for the month / number of bids for the month. (4): Average over the whole month of the volume bid by bidders each time they are present in an auction. Computed as total volume bid for the month / sum over whole month of number of bidders present in each auction. (5): Standard deviation of the total volume bid, by each bidder in each auction, over the whole month. (6): Average over the whole month of the volume won by bidders each time they are successful in an auction. Computed as total auction volume for the month / sum over whole month of number of bidders successful in each auction. (7): Standard deviation of the total volume won by each bidder in each auction, over the whole month.

++: indicates simple average

