

## Monthly Report December 2015

In December the total traded volume decreased by 7,92% to 1 237 509,7 MWh compared to 1 344 013,0 MWh in November. The average daily traded volume was 39 919,7 MWh. The highest daily traded volume was 46 150,3 MWh on 2015.12.12. delivery day. The number of admitted members was 61 in the examined month.

### List of the Members

#### Founder members

- ALPIQ ENERGY SE
- CEZ, a.s.
- Danske Commodities A/S
- E.ON Global Commodities SE
- Energy Financing Team (Switzerland) AG
- GEN-I, trgovanje in prodaja električne energije, d.o.o.
- Holding Slovenske Elektranje d.o.o.
- JAS Budapest Zrt.
- Magyar Aramszolgáltató Kft.
- Matrai Eromu ZRt.
- MVM Partner ZRt.
- Statkraft Markets GmbH

#### New member

- EDF DEMASZ Zrt.

#### Admitted members

- ARELCO POWER S.R.L.
- BC-Energiakereskedo Kft.
- Budapesti Eromu Zrt.
- Citigroup Global Markets Limited
- Dufenergy Global Commodities
- EDF Trading Limited
- Edison Trading S.p.A.
- EDS International SK
- EGL AG
- Elektro Energija d.o.o.
- Enel Trade S.p.A.
- Energi Danmark A/S
- Energija Naturalis Int d.o.o.
- Energo-pro Trading JSC
- Energy Supply EOOD
- Energya VM Gestion De Energia S.L.U.
- EPS Trgovanje, d.o.o.
- EVN Trading South East Europe EAD
- Ezpada s.r.o.
- Freepoint Commodities Europe LLP
- Gazprom Marketing & Trading Ltd
- GDF Suez Trading SAS
- Greenergy-Trade Kft.
- Gunvor International B.V.
- HEP d.d.
- IFC Energy Kereskedelmi Kft.
- Interenergo d.o.o.
- ISD Power Kft.
- KDF Energy SRL
- LE Trading a.s.
- MAVIR ZRt.
- Mercuria Energy Trading SA
- MET Power Hungary Kft.
- Monsson Trading S.R.L.
- Morgan Stanley Capital Group Energy Europe Limited
- NEAS Energy A/S
- OAM Ozdi Acelmuevek Kft.
- OMV Trading GmbH
- Petrol d.d., Ljubljana
- RWE Supply & Trading GmbH
- TEI Energy S.p.A.
- TINMAR ENERGY SA
- Trailstone GmbH
- TRANSENERGO COM S.A.
- Vattenfall Energy Trading GmbH
- VERBUND AG
- Vitol Gas & Power B.V.
- VPP ENERGY Eromu-uzemelteto es Kereskedelmi Zrt.

### HUPX Day-Ahead Market

Description	11/2015	12/2015	Change	
HUPX Base Average Price (EUR/MWh)*	41,51	42,27	0,76	1,82%
HUPX Peak Average Price (EUR/MWh)*	48,56	50,22	1,66	3,41%
HUPX Base Trimmed Mean Price (EUR/MWh)**	41,87	42,66	0,78	1,87%
HUPX Peak Trimmed Mean Price (EUR/MWh)**	49,09	50,47	1,38	2,81%
OTC Base Trimmed Mean Price (EUR/MWh)**	43,75	42,55	-1,20	-2,74%
OTC Peak Trimmed Mean Price (EUR/MWh)**	53,66	53,04	-0,62	-1,15%
Trimmed Diff. BL. HUPX↔OTC	1,84	0,31	-1,52	-82,88%
Trimmed Diff. PL. HUPX↔OTC	2,59	-0,46	-3,05	-117,61%

Highest Traded Price (EUR/MWh)	71,38	75,96	4,58	6,42%
Lowest Traded Price (EUR/MWh)	0,22	0,04	-0,18	-81,82%

Total Turnover (EUR)	55 041 180	52 576 296	-2 464 885	-4,48%
Average Daily Turnover (EUR)	1 834 706	1 696 010	-138 696	-7,56%
Max. Daily Turnover (EUR)	2 219 537	2 352 481	132 943	5,99%
Min. Daily Turnover (EUR)	1 144 679	893 900	-250 779	-21,91%

Description	11/2015	12/2015	Change	
Total Volume (MWh)	1 344 013,0	1 237 509,7	-106 503,3	-7,92%
Average Daily Traded Volume (MWh)	44 800,4	39 919,7	-4 880,8	-10,89%
Highest Daily Traded Volume (MWh)	50 494,6	46 150,3	-4 344,3	-8,60%
Lowest Daily Traded Volume(MWh)	39 474,5	33 137,4	-6 337,1	-16,05%
Highest Hourly Traded Volume (MWh)	2 669,4	2 367,8	-301,6	-11,30%
Lowest Hourly Traded Volume(MWh)	1 272,7	1 151,0	-121,7	-9,56%
Average Hourly Traded Volume (MWh)	1 866,7	1 663,3	-203,4	-10,89%

DAM - Weekdays	01-24 (Baseload)	01-24 (Baseload)		
Average Daily Traded Volume (MWh)	44 797,0	40 148,8	-4 648,3	-10,38%
DAM - Weekend	01-24 (Baseload)	01-24 (Baseload)		
Average Daily Traded Volume (MWh)	44 808,4	39 261,0	-5 547,3	-12,38%

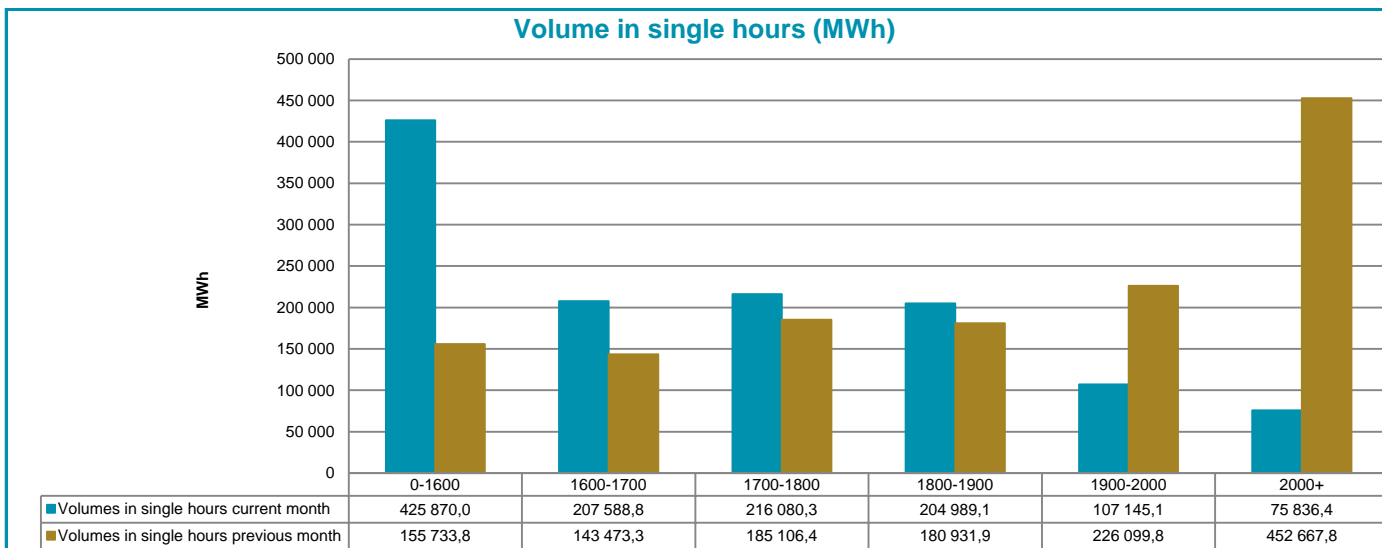
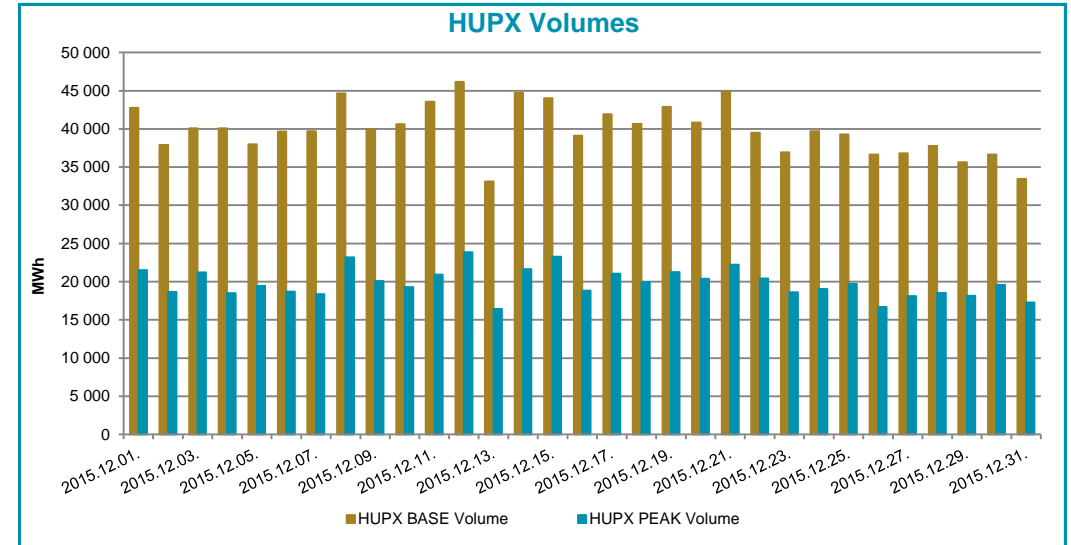
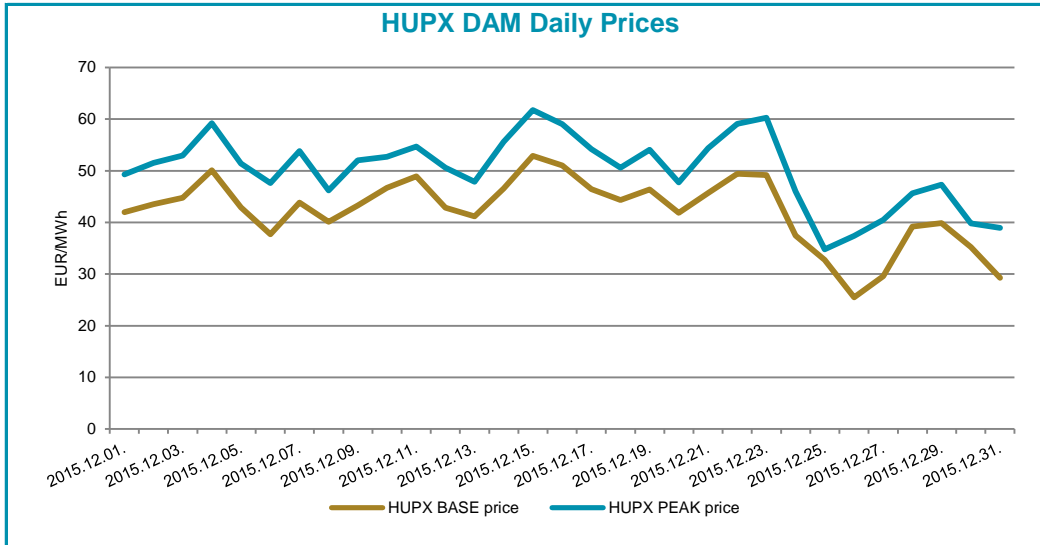
DAM - Weekdays	09-20 (Peakload)	09-20 (Peakload)		
Average Daily Traded Volume (MWh)	21 060,7	19 999,4	-1 061,4	-5,04%
DAM - Weekend	09-20 (Peakload)	09-20 (Peakload)		
Average Daily Traded Volume (MWh)	21 489,6	19 367,5	-2 122,1	-9,87%

### Note:

\***The average price** contains all the hourly prices in the examined periods.

\*\***Trimmed Mean** is a special average which shows monthly mean prices considering all prices except for the two lowest and the two highest. We applied this indicator to avoid from distortion of the results. Mean is very sensitive to extreme values.

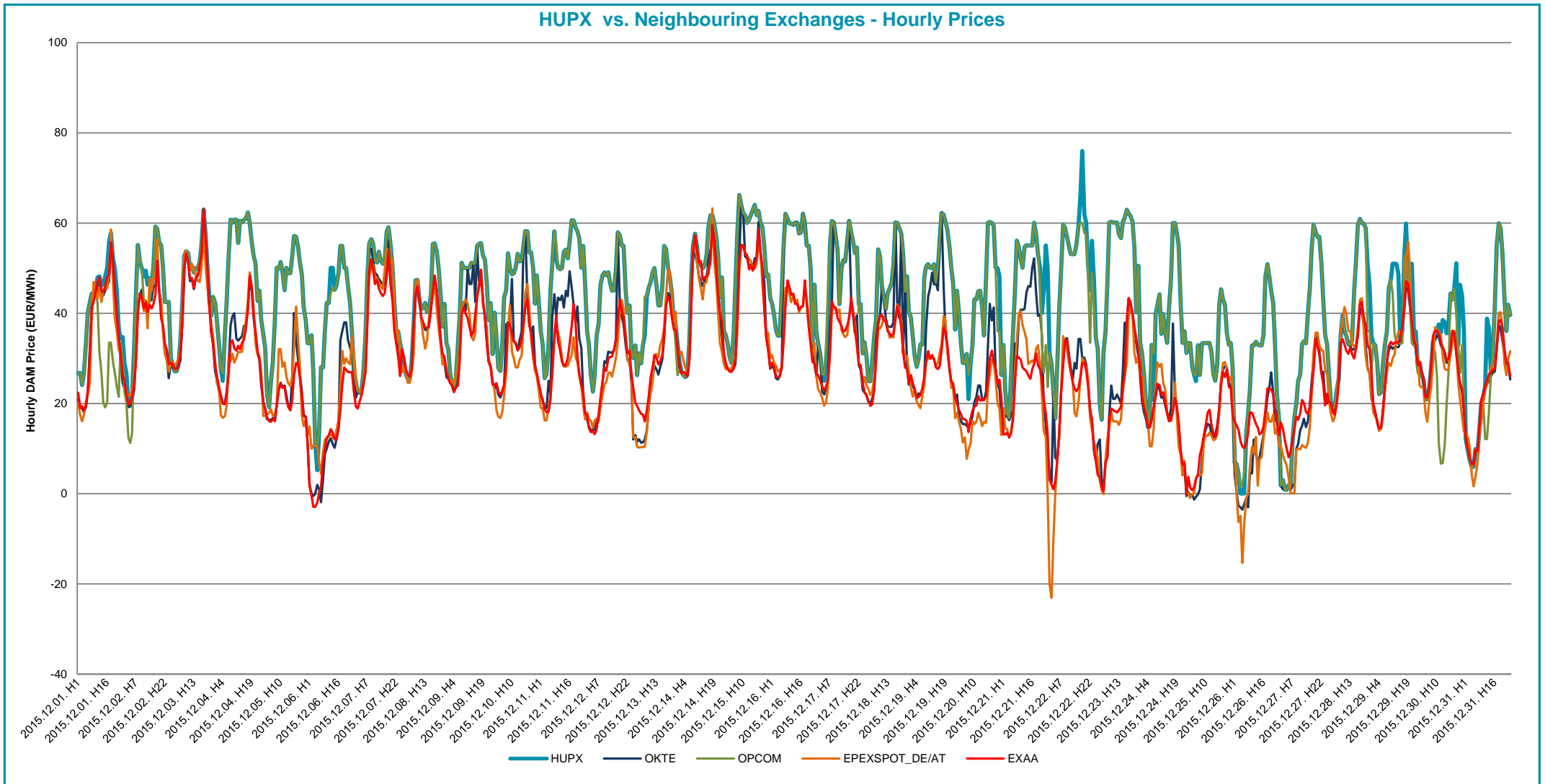
## Prices and volumes



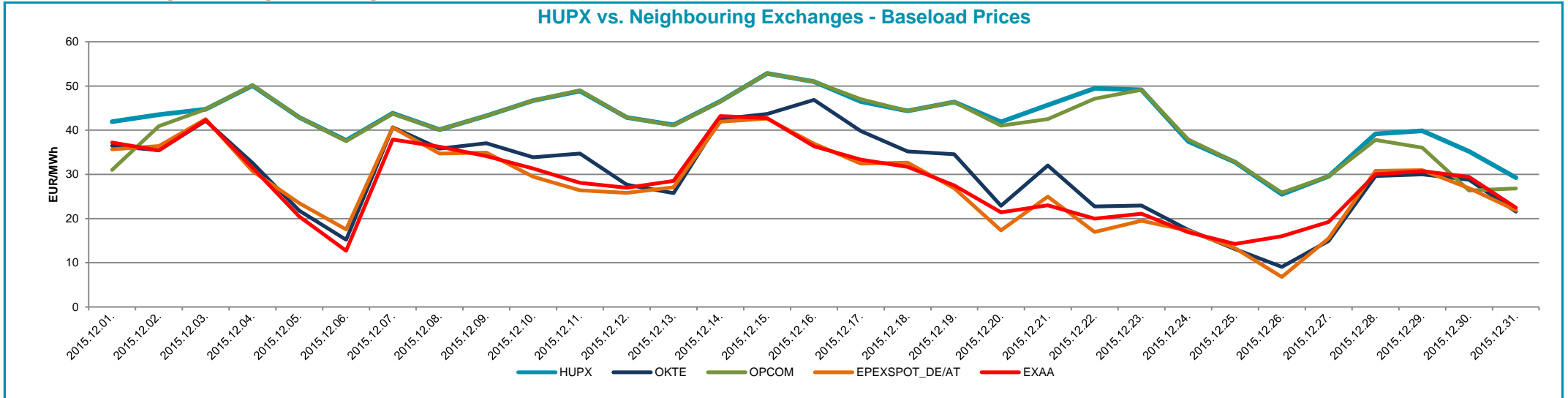
**Note:**

The bar chart shows the traded volumes in single hours in the examined period (01/12/2015-31/12/2015). We categorized the results according to the traded volume of each hour. Compared to the previous month, the distribution of executed volumes shows changes in the traded volumes: the ratio of the range 1900-2000 MWh and 2000+ MWh decreased, while the ratio increased regarding the 0-1600 MWh, 1600-1700 MWh, 1700-1800 MWh and 1800-1900 MWh.

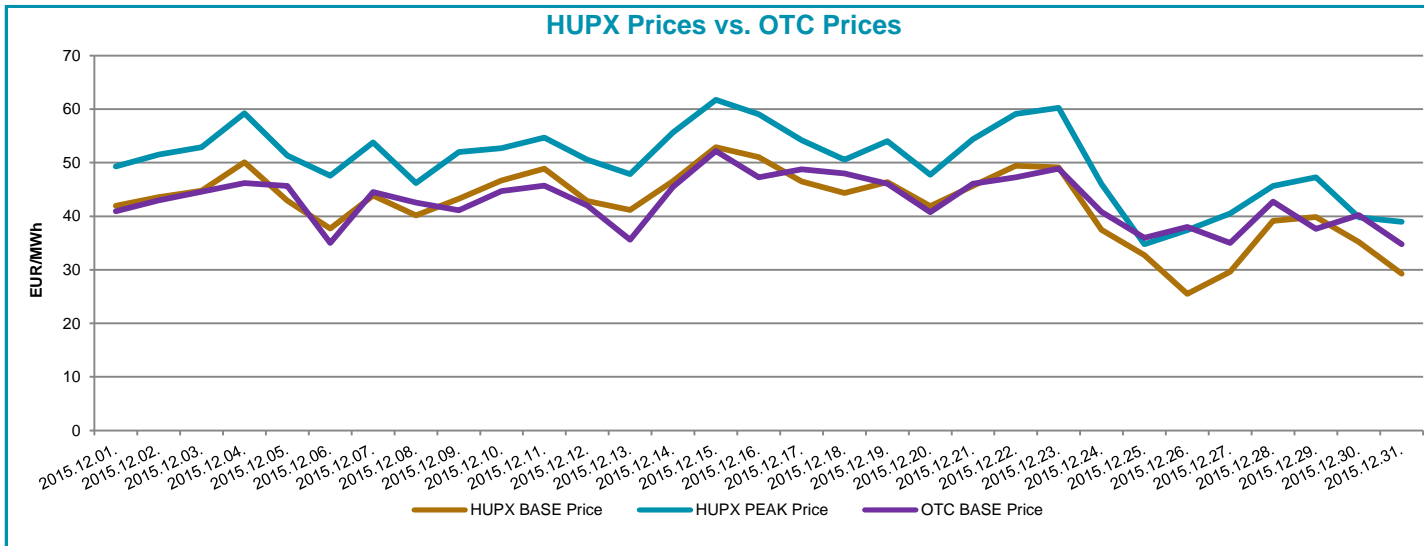
## HUPX vs. Neighbouring Exchanges - Hourly Prices



## HUPX vs. Neighbouring Exchanges - Baseload Prices



## HUPX vs. OTC



Trimmed Diff. BL.	HUPX↔OTC	0,31
Trimmed Diff. PL.	HUPX↔OTC	-0,46

### Average of aggregated OFFERS/BIDS 01/12/2015-31/12/2015

Data shown in the table reflects the average hourly aggregated maximum sell and buy volumes, not considering price steps.

Hour	Offers	Bids	Index volumes
H1	3 094,7	2 681,3	1 551,5
H2	3 176,2	2 653,9	1 605,4
H3	3 289,5	2 675,3	1 701,3
H4	3 349,8	2 703,7	1 752,9
H5	3 261,2	2 730,0	1 715,6
H6	3 161,5	2 779,6	1 677,7
H7	3 150,9	2 857,1	1 641,9
H8	3 223,8	3 034,4	1 716,2
H9	3 092,1	3 044,6	1 594,2
H10	3 135,1	3 085,9	1 647,7
H11	3 142,4	3 073,4	1 644,5
H12	3 197,9	3 116,9	1 682,1
H13	3 100,3	3 122,9	1 640,8
H14	3 075,2	3 094,7	1 616,5
H15	3 066,8	3 064,0	1 579,9
H16	3 015,8	3 134,1	1 608,1
H17	2 996,0	3 295,2	1 708,5
H18	3 088,2	3 256,0	1 721,5
H19	3 092,9	3 224,1	1 704,8
H20	3 103,9	3 202,9	1 687,6
H21	3 249,2	3 080,3	1 743,0
H22	3 253,4	2 956,3	1 694,5
H23	3 128,8	2 839,3	1 671,7
H24	3 119,3	2 728,3	1 611,8
<b>Σ</b>	<b>75 565,0</b>	<b>71 434,1</b>	<b>39 919,7</b>

### Aggregated OFFERS/BIDS 01/12/2015-31/12/2015

Data shown in the table reflects hourly aggregated maximum sell and buy volumes, not considering price steps.

Base	
MIN (offer)	2 996,0
MAX (offer)	3 349,8
MIN (bid)	2 653,9
MAX (bid)	3 295,2
Average (offer)	3 148,5
Average (bid)	2 976,4

Peak	
MIN (offer)	2 996,0
MAX (offer)	3 197,9
MIN (bid)	3 044,6
MAX (bid)	3 295,2
Average (offer)	3 092,2
Average (bid)	3 142,9

Hour	Offers	Bids	Index volumes
H1	95 935,6	83 120,1	48 095,1
H2	98 463,2	82 272,2	49 767,2
H3	101 974,0	82 935,4	52 741,3
H4	103 842,5	83 813,9	54 338,9
H5	101 095,8	84 628,7	53 182,2
H6	98 005,1	86 166,4	52 008,7
H7	97 679,3	88 570,0	50 899,3
H8	99 939,3	94 067,6	53 202,7
H9	95 856,3	94 383,5	49 421,7
H10	97 187,1	95 662,2	51 079,5
H11	97 414,5	95 276,1	50 980,5
H12	99 134,4	96 623,5	52 145,2
H13	96 109,9	96 811,2	50 865,4
H14	95 330,5	95 934,9	50 111,5
H15	95 071,1	94 982,5	48 975,4
H16	93 488,4	97 157,5	49 852,5
H17	92 876,9	102 152,4	52 963,6
H18	95 734,9	100 935,7	53 365,7
H19	95 881,4	99 946,2	52 847,8
H20	96 221,3	99 290,6	52 316,7
H21	100 726,0	95 488,6	54 031,9
H22	100 856,4	91 644,3	52 528,4
H23	96 993,9	88 018,9	51 822,3
H24	96 697,9	84 576,2	49 966,2
<b>Σ</b>	<b>2 342 515,7</b>	<b>2 214 458,6</b>	<b>1 237 509,7</b>

Base	
MIN (offer)	92 876,9
MAX (offer)	103 842,5
MIN (bid)	82 272,2
MAX (bid)	102 152,4
Average (offer)	97 604,8
Average (bid)	92 269,1

Peak	
MIN (offer)	92 876,9
MAX (offer)	99 134,4
MIN (bid)	94 383,5
MAX (bid)	102 152,4
Average (offer)	95 858,9
Average (bid)	97 429,7