

Monthly Report December 2016

HUPX DAM market reached record traded volume in December. In December the total traded volume increased by 2,43% to 1 653 583,4 MWh compared to 1 614 395,9 MWh in November. The average daily traded volume was 53 341,4 MWh. The highest daily traded volume was 60 285,5 MWh on 20.12.2016. delivery day. The number of admitted members was 60 in the examined month.

List of the Members

Founder members

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

New members

- JWM Energia Sp. Z.o.o.
- SINERGY Energiakereskedő Kft.

Admitted members

- ARELCO POWER S.R.L.
- AXPO Trading AG
- AYEN ENERGIJA d.o.o.
- BC-Energiakereskedő Kft.
- Budapesti Eromu Zrt.
- CHP-EROMU Kft.
- Citigroup Global Markets Limited
- Dufenergy Global Commodities
- E.ON Energiakereskedelmi Kft.
- EDF DEMASZ Zrt.
- EDF Trading Limited
- Edison Trading S.p.A.
- EDS International SK
- 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.
- HEP d.d.
- Interenergo d.o.o.
- ISD Power Kft.
- KDF Energy SRL
- LE Trading a.s.
- MAVIR Zrt.
- MET Austria Energy Trade GmbH
- Monsson Trading S.R.L.
- 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
- Vattenfall Energy Trading GmbH
- VERBUND AG
- Vitol Gas & Power B.V.
- VPP ENERGY Eromu-uzemelteto es Kereskedelmi Zrt.

HUPX Day-Ahead Market

Description	11/2016	12/2016	Change	
HUPX Base Average Price (EUR/MWh)*	40,64	49,13	8,49	20,90%
HUPX Peak Average Price (EUR/MWh)*	47,55	56,42	8,87	18,65%
HUPX Base Trimmed Mean Price (EUR/MWh)**	40,88	49,24	8,36	20,46%
HUPX Peak Trimmed Mean Price (EUR/MWh)**	47,49	56,33	8,85	18,63%
OTC Base Trimmed Mean Price (EUR/MWh)**	41,04	47,51	6,47	15,75%
OTC Peak Trimmed Mean Price (EUR/MWh)**	N/A	N/A	N/A	N/A
Trimmed Diff. BL. HUPX↔OTC	0,32	-1,23	-1,55	-487,11%
Trimmed Diff. PL. HUPX↔OTC	N/A	N/A	N/A	N/A

Highest Traded Price (EUR/MWh)	95,79	96,20	0,41	0,43%
Lowest Traded Price (EUR/MWh)	3,94	19,90	15,96	405,08%

Total Turnover (EUR)	65 528 449	81 310 151	15 781 701	24,08%
Average Daily Turnover (EUR)	2 184 282	2 622 908	438 626	20,08%
Max. Daily Turnover (EUR)	2 988 511	3 279 778	291 267	9,75%
Min. Daily Turnover (EUR)	947 776	1 551 542	603 766	63,70%

Description	11/2016	12/2016	Change	
Total Volume (MWh)	1 614 395,9	1 653 583,4	39 187,5	2,43%
Average Daily Traded Volume (MWh)	53 813,2	53 341,4	-471,8	-0,88%
Highest Daily Traded Volume (MWh)	62 124,0	60 285,5	-1 838,5	-2,96%
Lowest Daily Traded Volume(MWh)	45 505,6	45 506,1	0,5	0,00%
Highest Hourly Traded Volume (MWh)	3 007,5	3 155,8	148,3	4,93%
Lowest Hourly Traded Volume(MWh)	1 560,4	1 537,8	-22,6	-1,45%
Average Hourly Traded Volume (MWh)	2 242,2	2 222,6	-19,7	-0,88%

DAM - Weekdays	01-24 (Baseload)	01-24 (Baseload)		
Average Daily Traded Volume (MWh)	54 396,9	54 282,4	-114,5	-0,21%
DAM - Weekend	01-24 (Baseload)	01-24 (Baseload)		
Average Daily Traded Volume (MWh)	52 208,0	51 041,3	-1 166,7	-2,23%

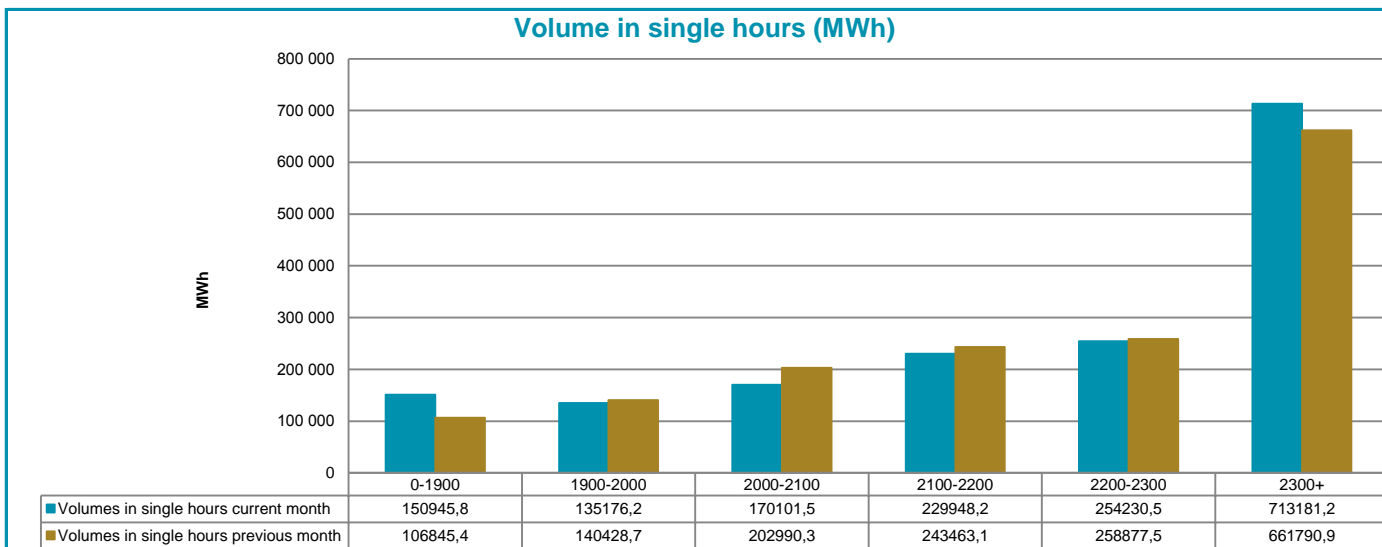
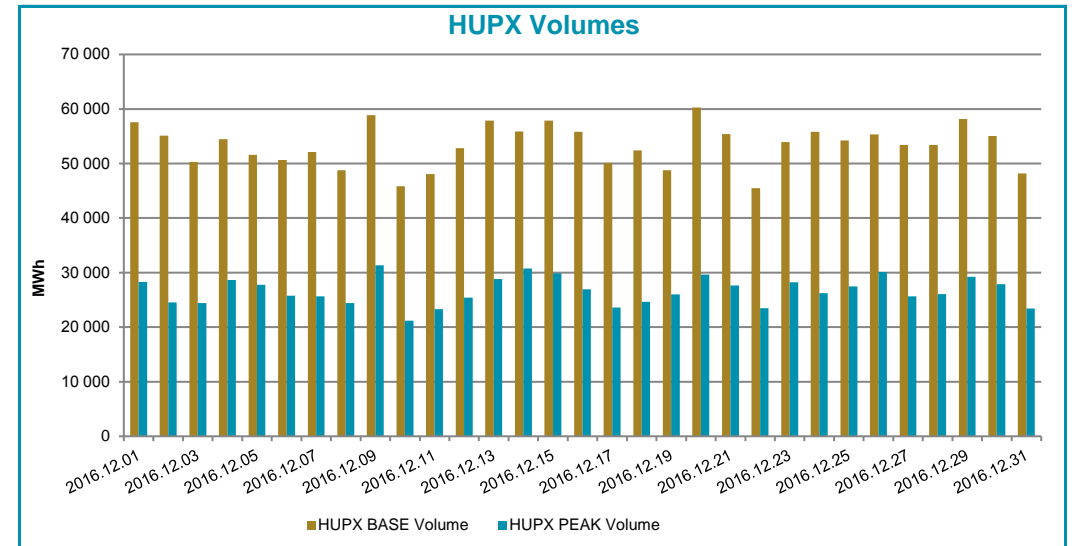
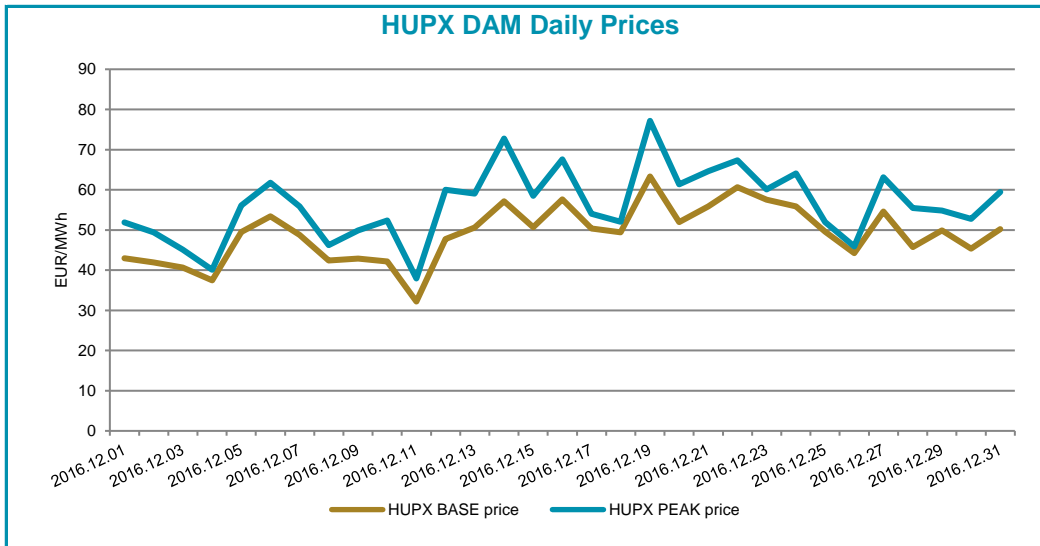
DAM - Weekdays	09-20 (Peakload)	09-20 (Peakload)		
Average Daily Traded Volume (MWh)	27 731,0	27 432,2	-298,8	-1,08%
DAM - Weekend	09-20 (Peakload)	09-20 (Peakload)		
Average Daily Traded Volume (MWh)	25 934,3	24 759,8	-1 174,5	-4,53%

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.

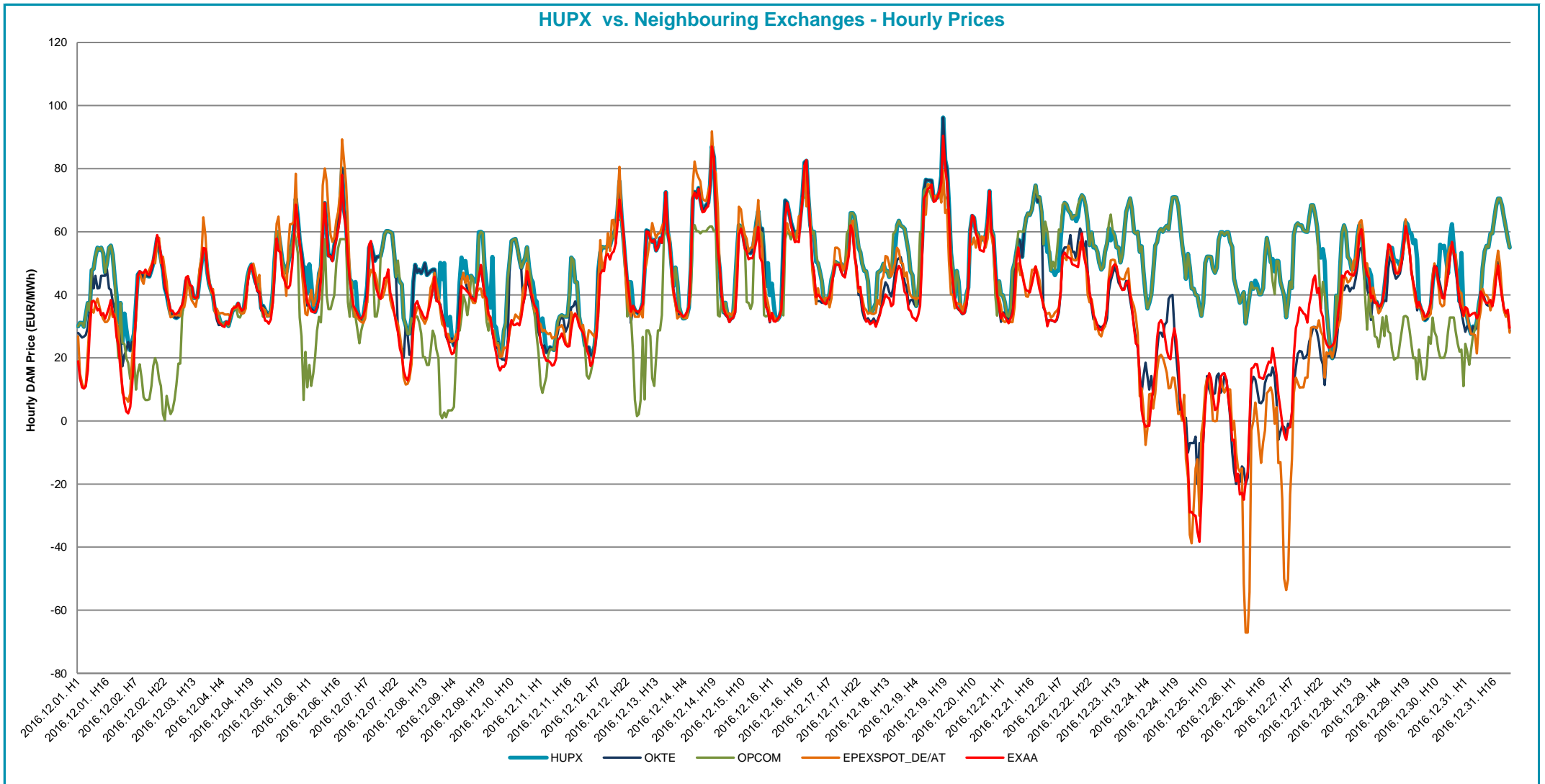
Prices and volumes



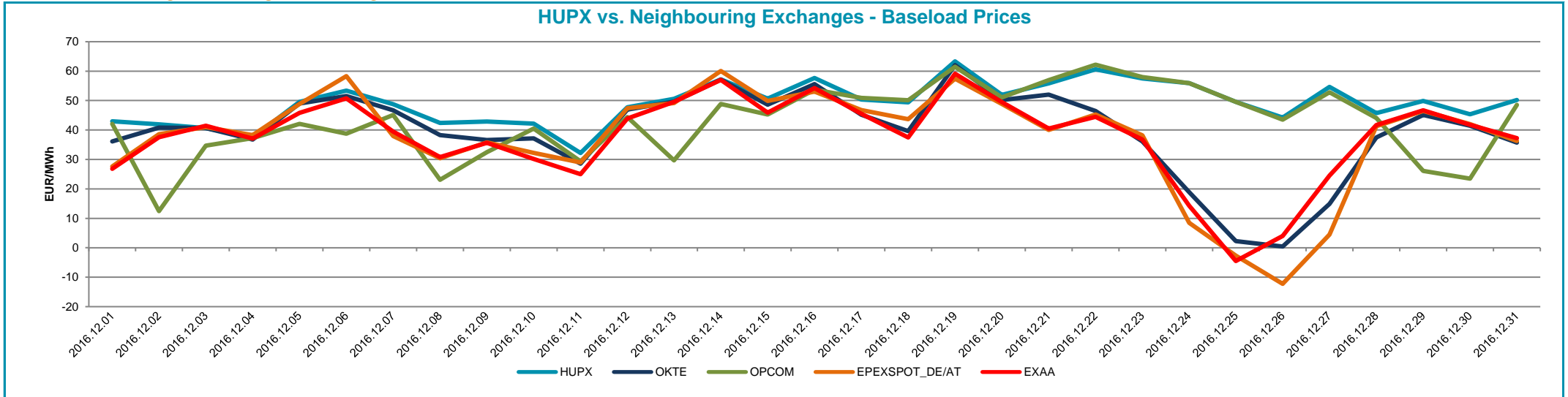
Note:

The bar chart shows the traded volumes in single hours in the examined period (01/12/2016-31/12/2016). 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, 2000-2100 MWh, 2100-2200 MWh and 2200-2300 MWh decreased, while the ratio increased regarding the 0-1900 MWh and 2300+ MWh.

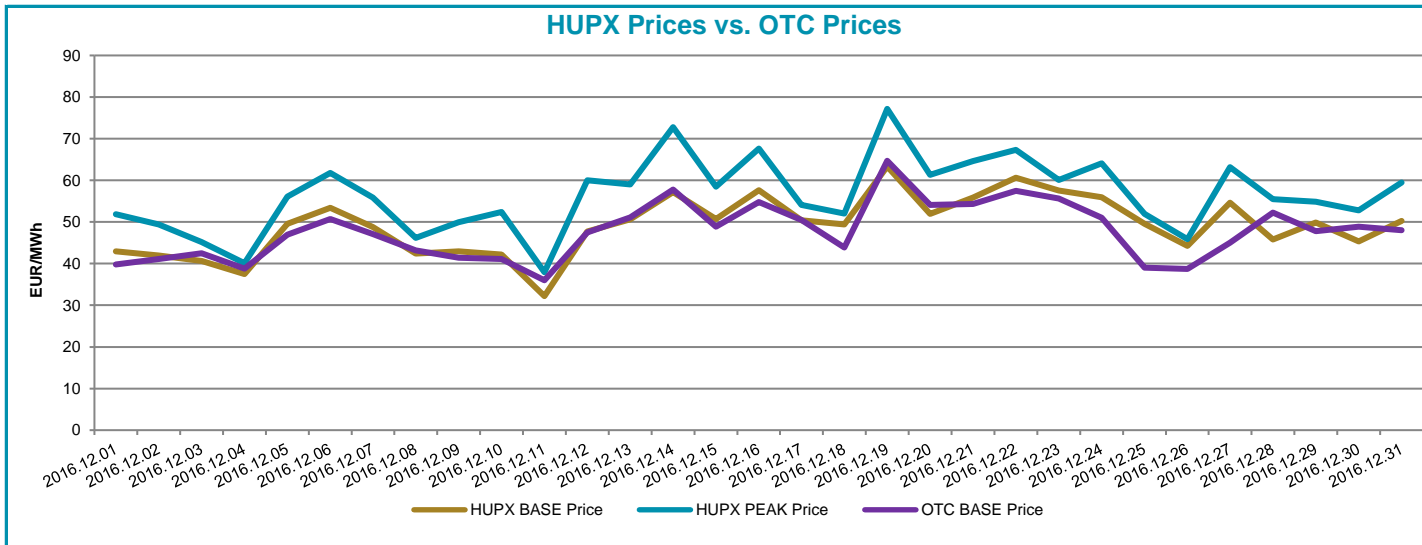
HUPX vs. Neighbouring Exchanges - Hourly Prices



HUPX vs. Neighbouring Exchanges - Baseload Prices



HUPX vs. OTC



Trimmed Diff. BL.	HUPX↔OTC	-1,23
Trimmed Diff. PL.	HUPX↔OTC	N/A

Average of aggregated OFFERS/BIDS 01/12/2016-31/12/2016

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	3 008,3	3 512,3	2 234,6
H2	3 005,8	3 445,9	2 246,3
H3	3 015,5	3 305,3	2 218,3
H4	3 024,3	3 158,2	2 148,5
H5	2 969,6	3 184,2	2 115,6
H6	2 950,9	3 333,5	2 166,2
H7	2 917,8	3 599,4	2 247,9
H8	2 910,1	3 440,7	2 134,7
H9	2 963,0	3 593,2	2 169,1
H10	2 954,9	3 653,7	2 177,6
H11	2 965,7	3 698,6	2 209,2
H12	2 988,0	3 766,9	2 261,3
H13	2 956,6	3 727,2	2 249,9
H14	2 938,8	3 717,7	2 217,6
H15	2 898,9	3 686,9	2 168,2
H16	2 897,7	3 762,3	2 181,4
H17	2 892,4	3 880,2	2 223,3
H18	2 973,1	3 884,6	2 283,9
H19	2 960,3	3 770,2	2 252,7
H20	2 971,9	3 742,6	2 262,3
H21	2 964,6	3 798,8	2 284,7
H22	3 033,7	3 883,2	2 375,6
H23	2 895,2	3 687,5	2 270,2
H24	3 181,2	3 661,0	2 242,4
Σ	71 238,4	86 894,3	53 341,4

Aggregated OFFERS/BIDS 01/12/2016-31/12/2016

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

Base	
MIN (offer)	2 892,4
MAX (offer)	3 181,2
MIN (bid)	3 158,2
MAX (bid)	3 884,6
Average (offer)	2 968,3
Average (bid)	3 620,6

Peak	
MIN (offer)	2 892,4
MAX (offer)	2 988,0
MIN (bid)	3 593,2
MAX (bid)	3 884,6
Average (offer)	2 946,8
Average (bid)	3 740,3

Hour	Offers	Bids	Index volumes
H1	93 258,7	108 882,8	69 271,7
H2	93 180,2	106 823,9	69 635,7
H3	93 480,0	102 464,8	68 766,8
H4	93 751,9	97 905,3	66 604,4
H5	92 057,6	98 710,5	65 584,7
H6	91 477,6	103 339,3	67 153,4
H7	90 451,8	111 581,6	69 685,5
H8	90 214,3	106 661,9	66 176,2
H9	91 853,2	111 389,3	67 240,8
H10	91 602,9	113 264,1	67 506,5
H11	91 937,3	114 656,5	68 483,8
H12	92 627,3	116 774,4	70 101,0
H13	91 653,6	115 544,7	69 746,0
H14	91 101,5	115 247,5	68 744,7
H15	89 866,0	114 294,9	67 212,8
H16	89 829,0	116 631,0	67 622,3
H17	89 664,7	120 286,4	68 922,9
H18	92 165,9	120 424,0	70 799,8
H19	91 770,4	116 876,6	69 834,5
H20	92 130,2	116 019,3	70 130,7
H21	91 903,3	117 762,0	70 825,7
H22	94 043,9	120 377,9	73 643,6
H23	89 752,4	114 313,5	70 375,0
H24	98 618,1	113 491,8	69 514,9
Σ	2 208 391,8	2 693 724,0	1 653 583,4

Base	
MIN (offer)	89 664,7
MAX (offer)	98 618,1
MIN (bid)	97 905,3
MAX (bid)	120 424,0
Average (offer)	92 016,3
Average (bid)	112 238,5

Peak	
MIN (offer)	89 664,7
MAX (offer)	92 627,3
MIN (bid)	111 389,3
MAX (bid)	120 424,0
Average (offer)	91 350,2
Average (bid)	115 950,7