

Annual Report 2016

In 2016 the total traded volume increased by 18,36% to 17 720 696,5 MWh compared to 14 972 329,4 MWh in 2015. The average daily traded volume was 48 418,4 MWh. The highest daily traded volume was 63 183,4 MWh on 13.10.2016 delivery day which is a record daily traded volume since the launch of HUPX DAM market. The number of admitted members was 60 in the examined year.

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 elektricne 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

- AYEN ENERGIJA d.o.o.
- CHP-EROMU Kft.
- E.ON Energiakereskedelmi Kft.
- JWM Energia Sp. Z.o.o.
- MET Austria Energy Trade GmbH
- SINERGY Energiakereskedő Kft.

Admitted members

- ARELCO POWER S.R.L.
- AXPO Trading AG
- BC-Energiakereskedő Kft.
- Budapesti Eromu Zrt.
- Citigroup Global Markets Limited
- Dufenergy Global Commodities
- 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.
- 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	2015	2016	Change	
HUPX Base Average Price (EUR/MWh)*	40,60	35,43	-5,17	-12,75%
HUPX Peak Average Price (EUR/MWh)*	46,84	40,30	-6,55	-13,98%
HUPX Base Trimmed Mean Price (EUR/MWh)**	40,48	35,42	-5,06	-12,49%
HUPX Peak Trimmed Mean Price (EUR/MWh)**	46,62	40,28	-6,35	-13,61%
OTC Base Trimmed Mean Price (EUR/MWh)**	40,31	35,30	-5,01	-12,42%
OTC Peak Trimmed Mean Price (EUR/MWh)**	50,81	38,65	-12,16	-23,94%
Trimmed Diff. BL. HUPX↔OTC	-0,01	-0,17	-0,17	2689,05%
Trimmed Diff. PL. HUPX↔OTC	0,03	-0,02	-0,05	-187,70%

Highest Traded Price (EUR/MWh)	150,06	101,70	-48,36	-32,23%
Lowest Traded Price (EUR/MWh)	0,00	-6,07	-6,07	

Total Turnover (EUR)	607 399 497	635 816 403	28 416 906	4,68%
Average Daily Turnover (EUR)	1 664 235	1 737 353	73 118	4,39%
Max. Daily Turnover (EUR)	4 491 641	3 823 737	-667 904	-14,87%
Min. Daily Turnover (EUR)	498 558	324 942	-173 616	-34,82%

Description	2015	2016	Change	
Total Volume (MWh)	14 972 329,4	17 720 696,5	2 748 367,1	18,36%
Average Daily Traded Volume (MWh)	41 021,1	48 418,4	7 397,4	18,03%
Highest Daily Traded Volume (MWh)	56 849,2	63 183,4	6 334,2	11,14%
Lowest Daily Traded Volume(MWh)	28 986,4	33 702,4	4 716,0	16,27%
Highest Hourly Traded Volume (MWh)	2 877,1	3 263,2	386,1	13,42%
Lowest Hourly Traded Volume(MWh)	939,6	1 142,6	203,0	21,60%
Average Hourly Traded Volume (MWh)	1 709,2	2 017,4	308,2	18,03%

DAM - Weekdays	01-24 (Baseload)	01-24 (Baseload)		
Average Daily Traded Volume (MWh)	41 387,5	49 542,1	8 154,6	19,70%
DAM - Weekend	01-24 (Baseload)	01-24 (Baseload)		
Average Daily Traded Volume (MWh)	40 098,1	45 621,1	5 523,0	13,77%

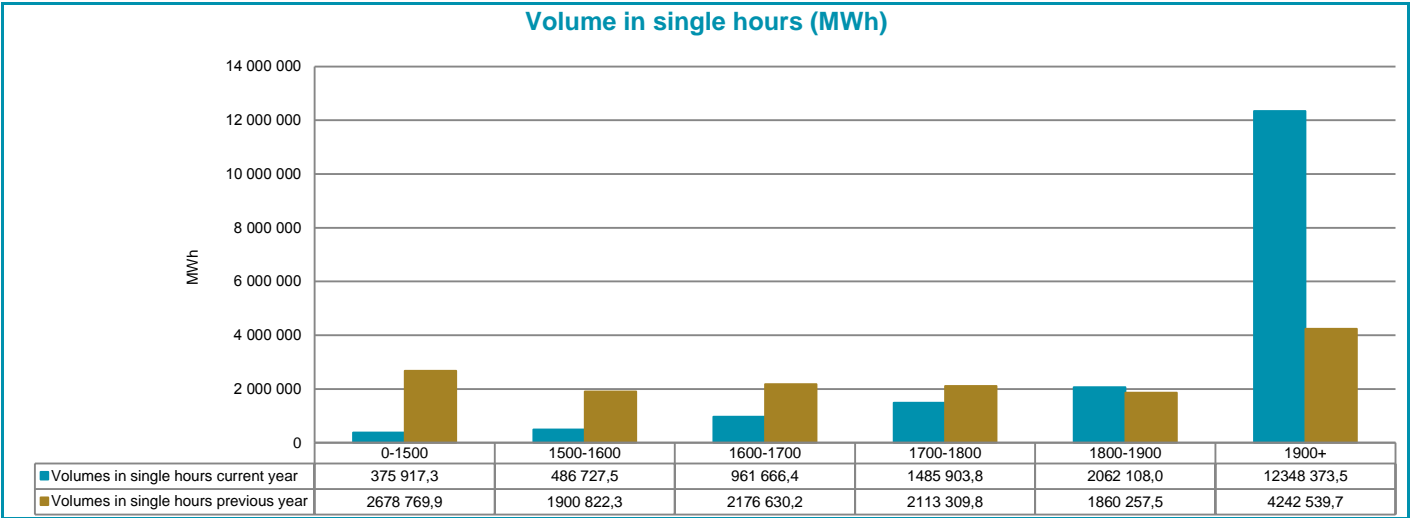
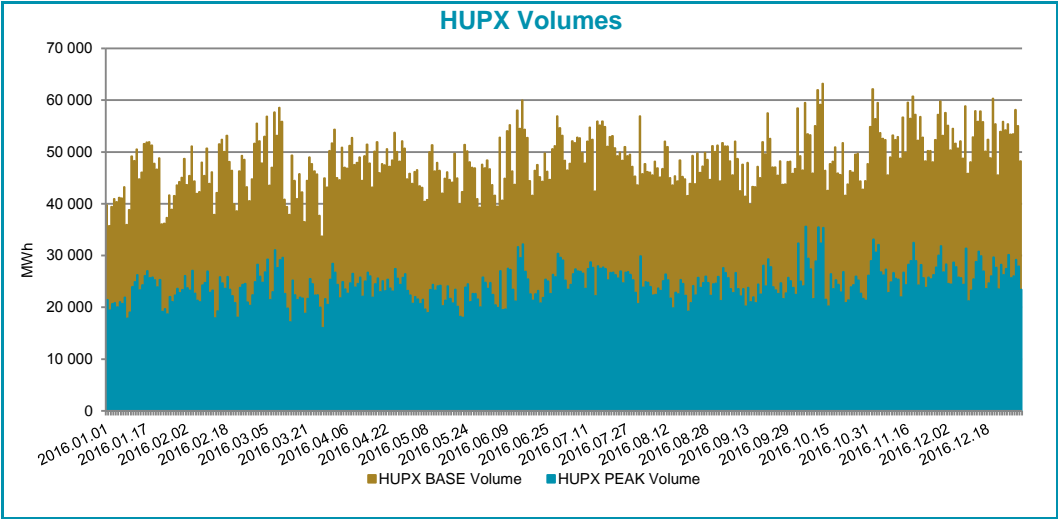
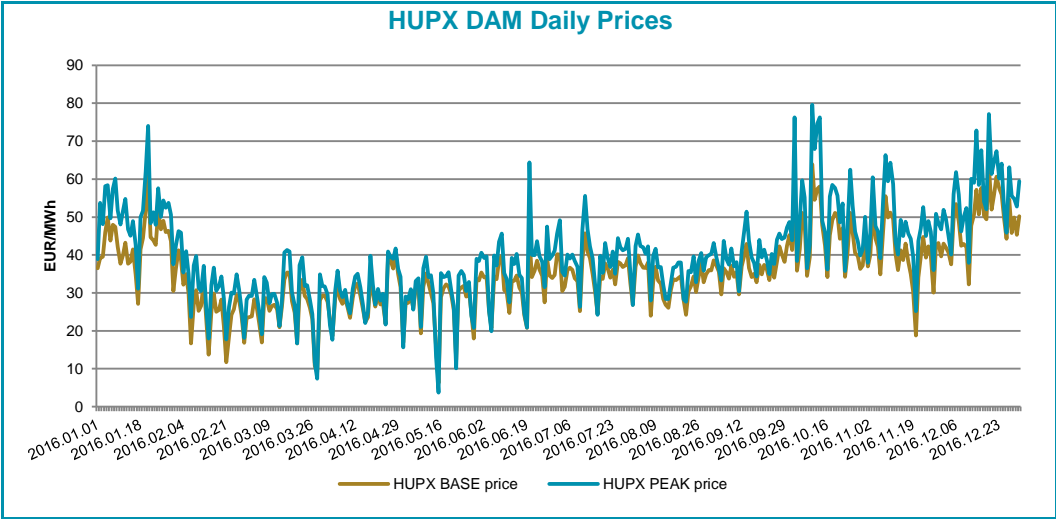
DAM - Weekdays	09-20 (Peakload)	09-20 (Peakload)		
Average Daily Traded Volume (MWh)	20 627,3	25 195,1	4 567,7	22,14%
DAM - Weekend	09-20 (Peakload)	09-20 (Peakload)		
Average Daily Traded Volume (MWh)	19 679,7	22 805,7	3 126,0	15,88%

Note:

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

**Trimmed Mean is a special average which shows yearly 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.

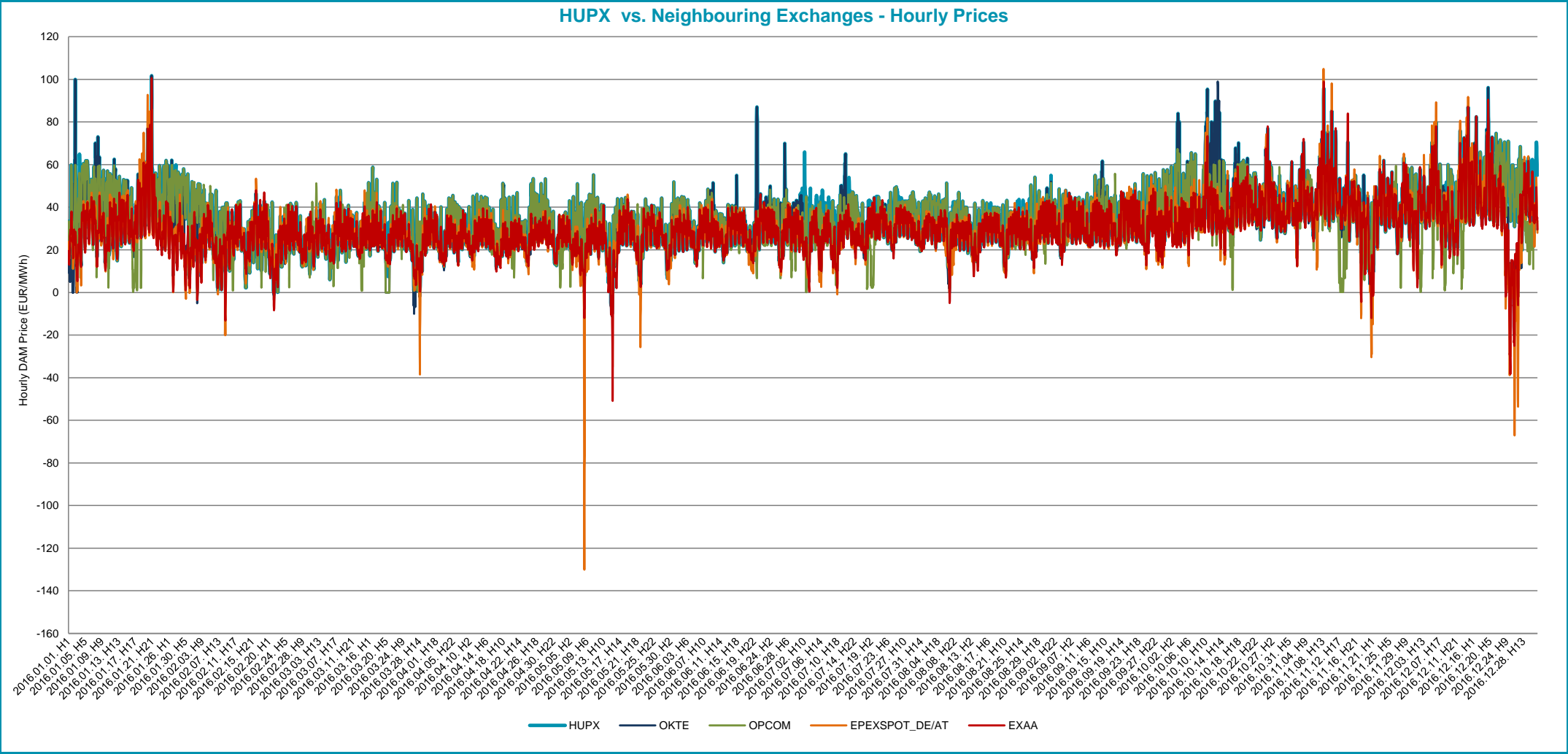
Prices and volumes



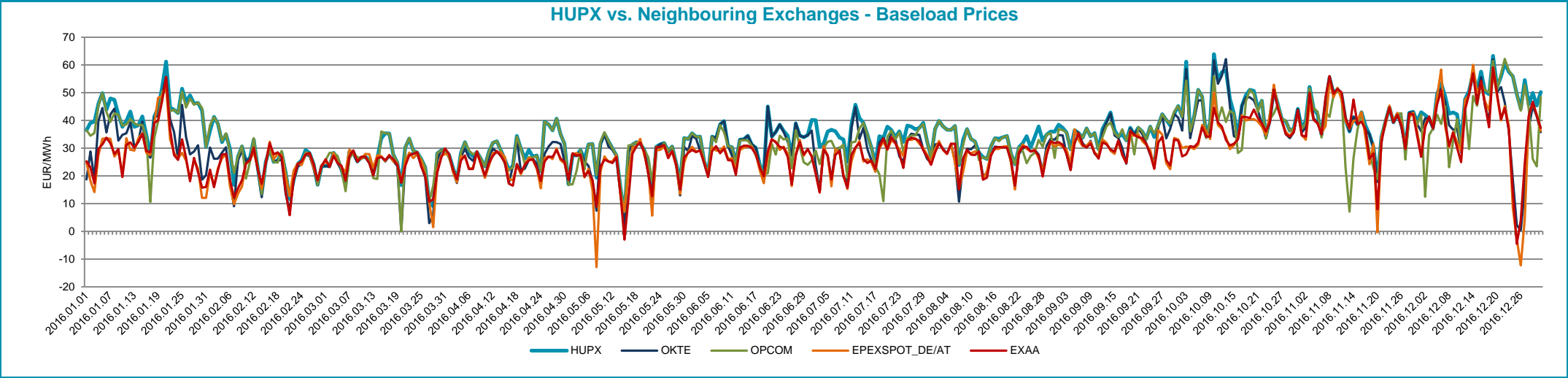
Note:

The bar chart shows the traded volumes in single hours in the examined period (01/01/2016-31/12/2016). We categorized the results according to the traded volume of each hour. Compared to the previous year, the distribution of executed volumes shows changes in the traded volumes: the ratio of the range 0-1500 MWh, 1500-1600 MWh, 1600-1700 MWh and 1700-1800 MWh decreased, while the ratio increased regarding the 1800-1900 MWh and 1900+ MWh.

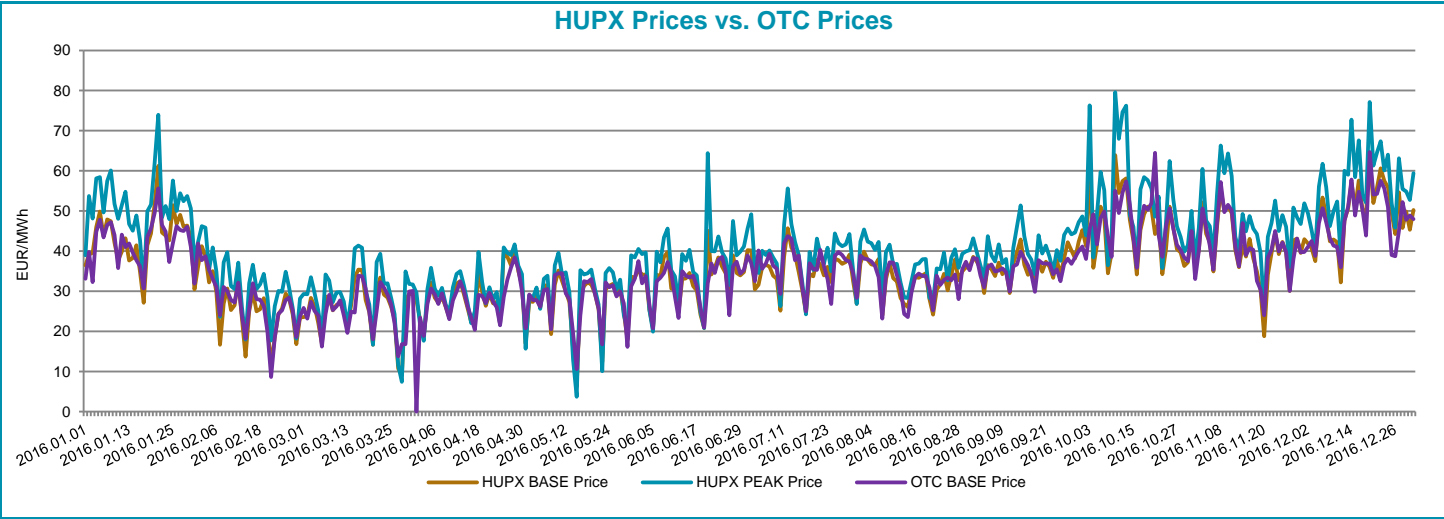
HUPX vs. Neighbouring Exchanges - Hourly Prices



HUPX vs. Neighbouring Exchanges - Baseload Prices



HUPX vs. OTC



Trimmed Diff. BL.	HUPX↔OTC	-0,17
Trimmed Diff. PL.	HUPX↔OTC	-0,02

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

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	2 931,5	2 938,1	1 893,7
H2	3 067,8	2 925,6	1 961,8
H3	3 192,1	2 943,1	2 043,8
H4	3 231,6	2 942,8	2 067,0
H5	3 191,0	2 942,9	2 036,0
H6	3 072,9	2 951,1	1 953,1
H7	2 947,0	3 130,2	1 963,8
H8	2 936,1	3 281,4	2 022,6
H9	2 905,1	3 345,1	2 031,0
H10	2 899,4	3 400,9	2 054,3
H11	2 907,5	3 397,8	2 054,0
H12	2 888,8	3 425,1	2 061,1
H13	2 862,0	3 450,5	2 069,8
H14	2 859,7	3 391,5	2 039,2
H15	2 892,9	3 352,3	2 026,7
H16	2 904,7	3 377,2	2 044,3
H17	2 897,5	3 381,3	2 029,7
H18	2 893,3	3 386,8	2 030,2
H19	2 894,5	3 383,9	2 031,0
H20	2 857,3	3 421,4	2 038,3
H21	2 814,5	3 402,2	2 026,8
H22	2 893,7	3 307,0	2 006,2
H23	2 919,7	3 183,0	1 977,3
H24	3 009,6	3 072,5	1 955,3
Σ	70 870,1	77 733,6	48 418,4

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

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

Base	
MIN (offer)	2 814,5
MAX (offer)	3 231,6
MIN (bid)	2 925,6
MAX (bid)	3 450,5
Average (offer)	2 952,9
Average (bid)	3 238,9

Peak	
MIN (offer)	2 857,3
MAX (offer)	2 907,5
MIN (bid)	3 345,1
MAX (bid)	3 450,5
Average (offer)	2 888,6
Average (bid)	3 392,8

Hour	Offers	Bids	Index volumes
H1	1 072 941,8	1 075 340,0	693 085,8
H2	1 122 829,7	1 070 778,9	718 025,6
H3	1 168 311,4	1 077 178,9	748 042,2
H4	1 182 747,3	1 077 055,4	756 528,1
H5	1 167 903,4	1 077 114,5	745 177,0
H6	1 124 664,9	1 080 085,0	714 837,9
H7	1 078 594,9	1 145 634,9	718 760,9
H8	1 074 610,0	1 200 999,5	740 288,5
H9	1 063 266,7	1 224 316,2	743 334,9
H10	1 061 187,2	1 244 717,7	751 868,2
H11	1 064 135,5	1 243 593,6	751 771,3
H12	1 057 288,0	1 253 570,2	754 378,3
H13	1 047 503,4	1 262 874,8	757 535,5
H14	1 046 638,1	1 241 300,3	746 356,6
H15	1 058 806,8	1 226 933,8	741 776,2
H16	1 063 107,9	1 236 046,7	748 226,8
H17	1 060 496,9	1 237 558,5	742 877,2
H18	1 058 933,1	1 239 580,0	743 035,1
H19	1 059 397,7	1 238 502,6	743 330,0
H20	1 045 761,6	1 252 228,0	746 016,2
H21	1 030 090,9	1 245 217,3	741 812,5
H22	1 059 085,9	1 210 349,3	734 276,5
H23	1 068 621,7	1 164 971,5	723 709,1
H24	1 101 519,1	1 124 541,7	715 646,1
Σ	25 938 443,9	28 450 489,3	17 720 696,5

Base	
MIN (offer)	1 030 090,9
MAX (offer)	1 182 747,3
MIN (bid)	1 070 778,9
MAX (bid)	1 262 874,8
Average (offer)	1 080 768,5
Average (bid)	1 185 437,1

Peak	
MIN (offer)	1 045 761,6
MAX (offer)	1 064 135,5
MIN (bid)	1 224 316,2
MAX (bid)	1 262 874,8
Average (offer)	1 057 210,2
Average (bid)	1 241 768,5