

Monthly Report November 2016

HUPX DAM market reached record traded volume in November. In November the total traded volume increased by 5,31% to 1 614 395,9 MWh compared to 1 533 020,1 MWh in October. The average daily traded volume was 53 813,2 MWh. The highest daily traded volume was 62 124,0 MWh on 2.11.2016. delivery day. The number of admitted members was 59 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

- CHP-EROMU Kft.

Admitted members

- ARELCO POWER S.R.L.
- AXPO Trading AG
- AYEN ENERGIJA d.o.o.
- BC-Energiakereskedő Kft.
- Budapesti Eromu Zrt.
- 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
- 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	10/2016	11/2016	Change	
HUPX Base Average Price (EUR/MWh)*	45,61	40,64	-4,97	-10,90%
HUPX Peak Average Price (EUR/MWh)*	52,54	47,55	-4,99	-9,50%
HUPX Base Trimmed Mean Price (EUR/MWh)**	45,20	40,88	-4,32	-9,56%
HUPX Peak Trimmed Mean Price (EUR/MWh)**	51,89	47,49	-4,40	-8,48%
OTC Base Trimmed Mean Price (EUR/MWh)**	45,93	41,04	-4,89	-10,64%
OTC Peak Trimmed Mean Price (EUR/MWh)**	N/A	N/A	N/A	N/A
Trimmed Diff. BL. HUPX↔OTC	0,44	0,32	-0,12	-28,12%
Trimmed Diff. PL. HUPX↔OTC	N/A	N/A	N/A	N/A

Highest Traded Price (EUR/MWh)	95,43	95,79	0,36	0,38%
Lowest Traded Price (EUR/MWh)	23,25	3,94	-19,31	-83,05%

Total Turnover (EUR)	71 736 345	65 528 449	-6 207 895	-8,65%
Average Daily Turnover (EUR)	2 313 170	2 184 282	-128 888	-5,57%
Max. Daily Turnover (EUR)	3 823 737	2 988 511	-835 226	-21,84%
Min. Daily Turnover (EUR)	1 504 674	947 776	-556 898	-37,01%

Description	10/2016	11/2016	Change	
Total Volume (MWh)	1 533 020,1	1 614 395,9	81 375,8	5,31%
Average Daily Traded Volume (MWh)	49 445,5	53 813,2	4 367,7	8,83%
Highest Daily Traded Volume (MWh)	63 183,4	62 124,0	-1 059,4	-1,68%
Lowest Daily Traded Volume(MWh)	41 598,0	45 505,6	3 907,6	9,39%
Highest Hourly Traded Volume (MWh)	3 263,2	3 007,5	-255,7	-7,84%
Lowest Hourly Traded Volume(MWh)	1 427,2	1 560,4	133,2	9,33%
Average Hourly Traded Volume (MWh)	2 057,7	2 242,2	184,5	8,96%

DAM - Weekdays	01-24 (Baseload)	01-24 (Baseload)		
Average Daily Traded Volume (MWh)	51 364,0	54 396,9	3 032,9	5,90%
DAM - Weekend	01-24 (Baseload)	01-24 (Baseload)		
Average Daily Traded Volume (MWh)	45 437,7	52 208,0	6 770,3	14,90%

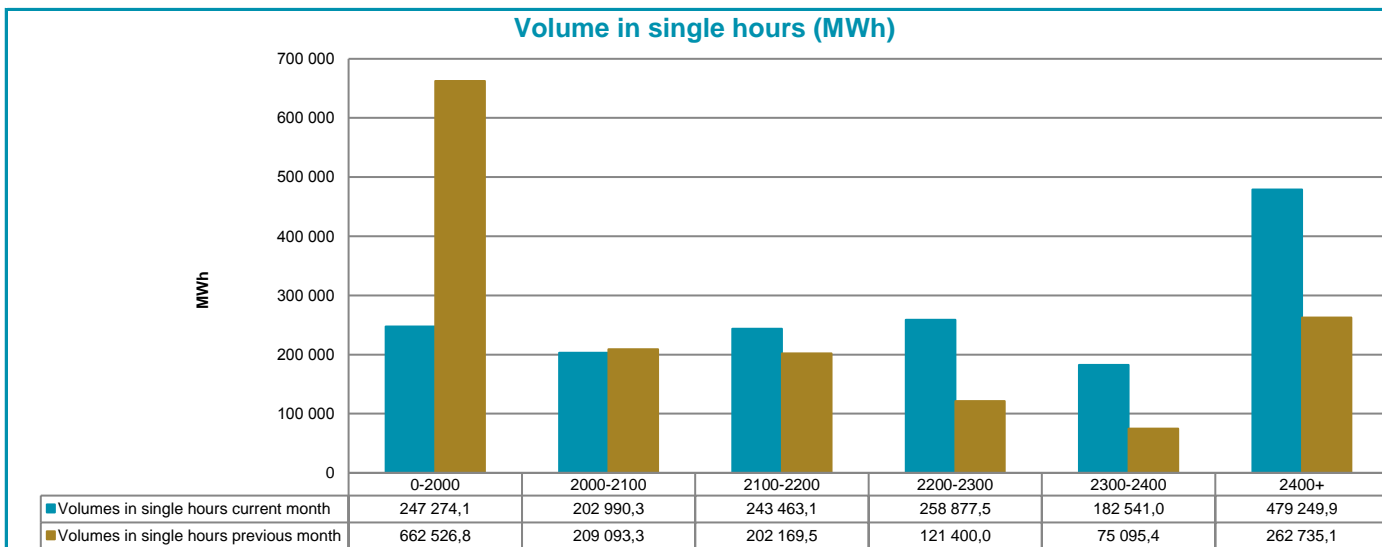
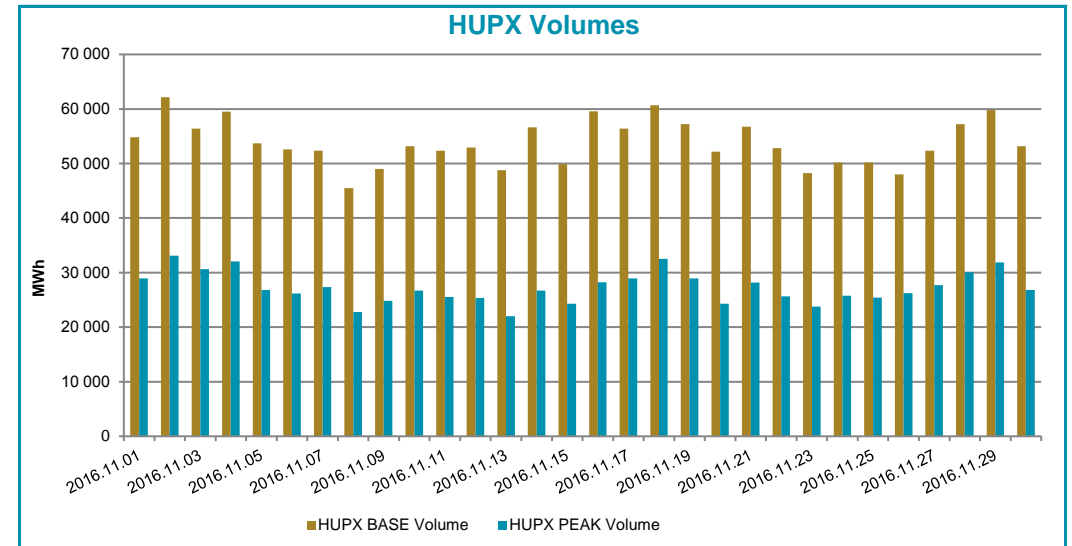
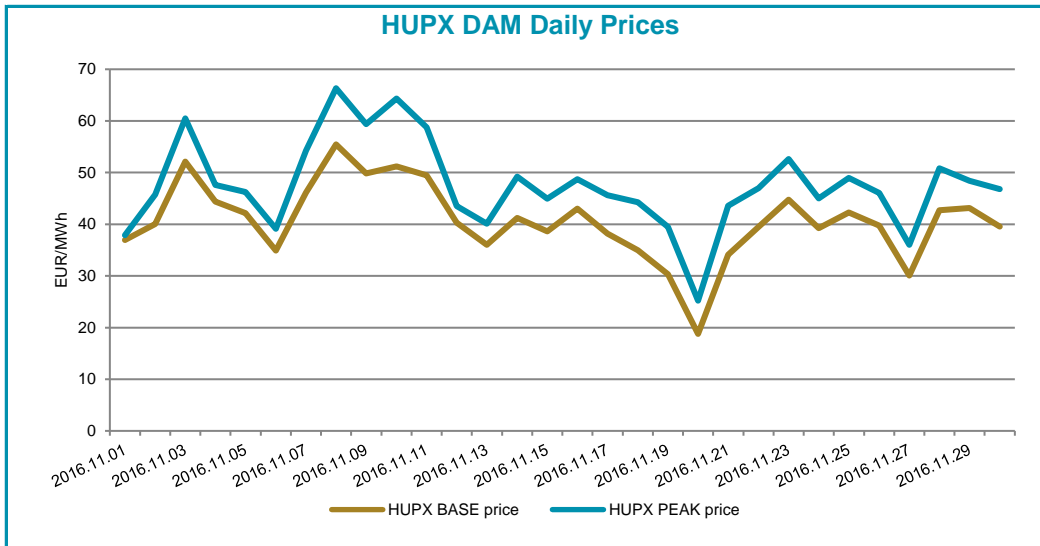
DAM - Weekdays	09-20 (Peakload)	09-20 (Peakload)		
Average Daily Traded Volume (MWh)	27 198,9	27 731,0	532,1	1,96%
DAM - Weekend	09-20 (Peakload)	09-20 (Peakload)		
Average Daily Traded Volume (MWh)	22 706,2	25 934,3	3 228,1	14,22%

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.

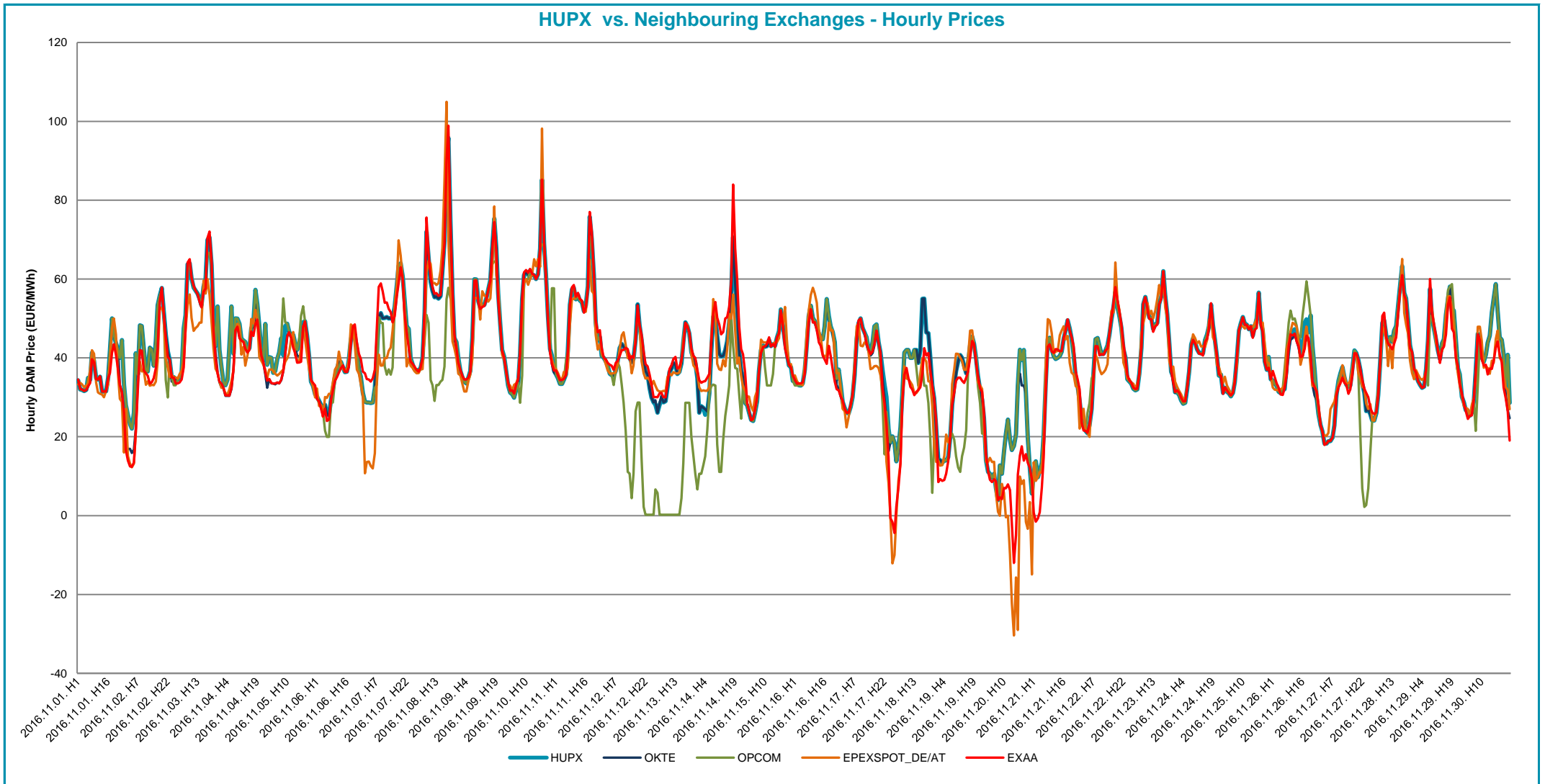
Prices and volumes



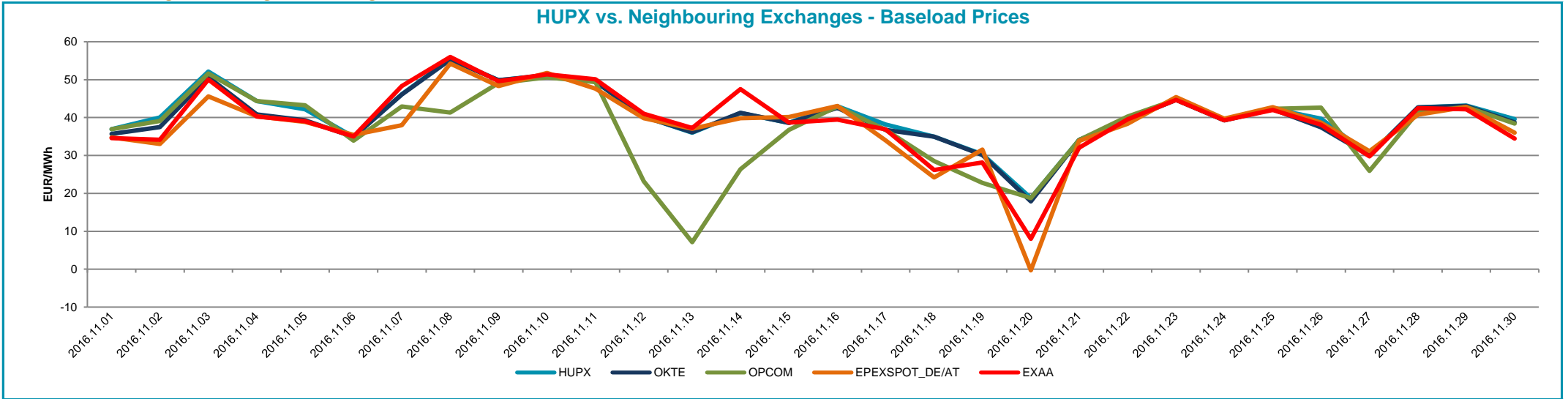
Note:

The bar chart shows the traded volumes in single hours in the examined period (01/11/2016-30/11/2016). 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 0-2000 MWh and 2000-2100 MWh decreased, while the ratio increased regarding the 2100-2200 MWh, 2200-2300 MWh, 2300-2400 MWh and 2400+ MWh.

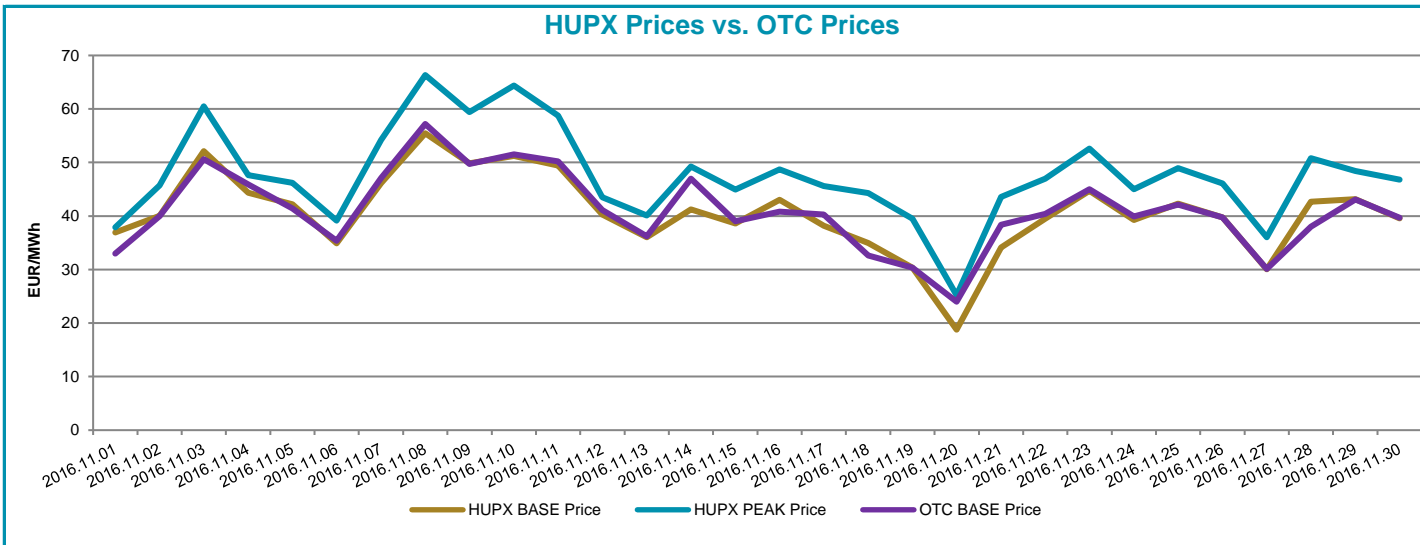
HUPX vs. Neighbouring Exchanges - Hourly Prices



HUPX vs. Neighbouring Exchanges - Baseload Prices



HUPX vs. OTC



Trimmed Diff. BL.	HUPX↔OTC	0,32
Trimmed Diff. PL.	HUPX↔OTC	N/A

Average of aggregated OFFERS/BIDS 01/11/2016-30/11/2016

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	3 137,3	2 842,3	2 100,7
H2	3 255,4	2 891,0	2 156,4
H3	3 378,7	2 984,1	2 263,9
H4	3 470,5	3 005,4	2 308,2
H5	3 388,7	3 025,9	2 280,3
H6	3 162,2	3 010,5	2 158,3
H7	3 178,8	3 197,3	2 185,9
H8	3 221,6	3 237,8	2 159,7
H9	3 224,6	3 439,1	2 253,9
H10	3 213,4	3 517,7	2 269,4
H11	3 208,7	3 452,9	2 260,6
H12	3 177,6	3 469,3	2 261,6
H13	3 163,8	3 505,7	2 279,9
H14	3 156,8	3 509,7	2 291,0
H15	3 177,4	3 504,3	2 283,3
H16	3 184,5	3 597,2	2 341,7
H17	3 065,1	3 645,6	2 283,8
H18	3 102,2	3 549,1	2 245,5
H19	3 198,0	3 419,3	2 225,3
H20	3 173,1	3 486,8	2 255,9
H21	3 065,5	3 293,5	2 172,2
H22	3 215,6	3 343,4	2 309,2
H23	3 102,6	3 206,3	2 260,3
H24	3 462,1	2 932,9	2 206,2
Σ	77 083,9	79 067,2	53 813,2

Aggregated OFFERS/BIDS 01/11/2016-30/11/2016

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

Hour	Offers	Bids	Index volumes
H1	94 118,4	85 267,5	63 021,3
H2	97 660,7	86 729,1	64 692,5
H3	101 360,9	89 523,1	67 916,7
H4	104 115,6	90 163,4	69 245,1
H5	101 659,9	90 775,8	68 410,0
H6	94 864,7	90 314,0	64 750,4
H7	95 363,7	95 919,9	65 577,7
H8	96 648,4	97 134,5	64 789,7
H9	96 739,2	103 173,3	67 617,9
H10	96 400,5	105 531,5	68 082,7
H11	96 260,3	103 586,9	67 817,1
H12	95 327,3	104 079,6	67 849,4
H13	94 915,2	105 169,7	68 396,4
H14	94 704,9	105 291,5	68 729,1
H15	95 321,2	105 129,4	68 499,5
H16	95 535,3	107 915,7	70 250,5
H17	91 952,1	109 367,9	68 512,5
H18	93 064,6	106 473,8	67 365,0
H19	95 938,9	102 579,3	66 758,3
H20	95 194,0	104 603,5	67 678,3
H21	91 964,1	98 805,5	65 166,8
H22	96 466,7	100 302,2	69 274,7
H23	93 077,4	96 189,4	67 807,5
H24	103 862,9	87 988,1	66 186,8
Σ	2 312 516,9	2 372 014,6	1 614 395,9

Base	
MIN (offer)	3 065,1
MAX (offer)	3 470,5
MIN (bid)	2 842,3
MAX (bid)	3 645,6
Average (offer)	3 211,8
Average (bid)	3 294,5

Peak	
MIN (offer)	3 065,1
MAX (offer)	3 224,6
MIN (bid)	3 419,3
MAX (bid)	3 645,6
Average (offer)	3 170,4
Average (bid)	3 508,1

Base	
MIN (offer)	91 952,1
MAX (offer)	104 115,6
MIN (bid)	85 267,5
MAX (bid)	109 367,9
Average (offer)	96 354,9
Average (bid)	98 833,9

Peak	
MIN (offer)	91 952,1
MAX (offer)	96 739,2
MIN (bid)	102 579,3
MAX (bid)	109 367,9
Average (offer)	95 112,8
Average (bid)	105 241,8