

## Annual Report 2020

In 2020 the total traded volume increased by 13,45% to 25 234 486,1 MWh compared to 22 243 437,4 MWh in 2019. The average daily traded volume was 68 947,8 MWh. The highest daily traded volume was 90 323,8 MWh on 4.7.2020 delivery day which is a record daily traded volume since the launch of HUPX DAM market. The number of admitted members was 64 in the examined year.

### List of the Members

#### Founder members

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

#### New members

- E.ON Energiamegoldások Kft.
- EDF Trading Markets (Ireland) Limited
- ENERGOVIA EOOD
- Freepoint Commodities B.V.
- Grand Energy Distribution Ltd
- L-NRG Energiakereskedelmi Zrt.
- OMV PETROM SA
- RESPECT ENERGY SPÓŁKA AKCYJNA

#### Admitted members

- AXPO Solutions AG
- AYEN ENERGIJA d.o.o.
- BC-Energiakereskedo Kft.
- Budapesti Eromu Zrt.
- Centrica Energy Trading A/S
- CHP-EROMU Kft.
- Citigroup Global Markets Europe AG
- E.ON Energiakereskedelmi Kft.
- EDF Trading Limited
- EDS International SK
- Ekologicke Zdroje Energie s.r.o.
- Enel Global Trading S.p.A.
- Energi Danmark A/S
- ENERGO-PRO Energy Services EAD
- Energy Financing Team (Switzerland) AG, organizational unit, Praha, Cze
- Energy Supply EOOD
- ENGIE Global Markets
- EP Commodities, a.s.
- EPS Trgovanje, d.o.o.
- EVN Trading South East Europe EAD
- Ezpada AG - organizacna zlozka zahranicnej osoby
- Freepoint Commodities Europe LLP
- Gazprom Marketing & Trading Ltd
- Greek Environmental & Energy Network Societe Anonyme
- Greenergy-Trade Kft.
- HEP d.d.
- Interenergo d.o.o.
- ISD Power Kft.
- LE Trading a.s.
- MAVIR Zrt.
- MET Austria Energy Trade GmbH
- MFT Energy A/S
- MOL Magyar Olaj- és Gázipari Nyrt.
- Monsson Trading S.R.L.
- OAM Ozdi Acelmuevek Kft.
- Petrol d.d., Ljubljana
- RWE Supply & Trading GmbH
- SINERGY Energiakereskedő Kft.
- Slovenske elektrarne, a.s.
- TINMAR ENERGY SA
- Trailstone GmbH
- Vattenfall Energy Trading GmbH
- VERBUND Energy4Business GmbH
- Vitol Gas & Power B.V.

### HUPX Day-Ahead Market

Description	2019	2020	Change	
HUPX Base Average Price (EUR/MWh)*	50,36	39,00	-11,35	-22,55%
HUPX Peak Average Price (EUR/MWh)*	57,01	43,54	-13,47	-23,63%
HUPX Base Trimmed Mean Price (EUR/MWh)**	50,23	38,84	-11,39	-22,67%
HUPX Peak Trimmed Mean Price (EUR/MWh)**	56,83	43,25	-13,58	-23,89%
OTC Base Trimmed Mean Price (EUR/MWh)**	49,72	38,75	-10,98	-22,08%
OTC Peak Trimmed Mean Price (EUR/MWh)**				
Trimmed Diff. BL. HUPX↔OTC	-1,34	-0,09	1,25	-93,11%
Trimmed Diff. PL. HUPX↔OTC		-4,50		

Highest Traded Price (EUR/MWh)	138,82	150,02	11,20	8,07%
Lowest Traded Price (EUR/MWh)	0,00	-8,12	-8,12	

Total Turnover (EUR)	1 110 851 834	985 279 803	-125 572 031	-11,30%
Average Daily Turnover (EUR)	3 043 491	2 692 213	-351 278	-11,54%
Max. Daily Turnover (EUR)	6 576 117	7 002 010	425 893	6,48%
Min. Daily Turnover (EUR)	1 217 312	559 683	-657 629	-54,02%

Description	2019	2020	Change	
Total Volume (MWh)	22 243 437,4	25 234 486,1	2 991 048,7	13,45%
Average Daily Traded Volume (MWh)	60 942,0	68 947,8	8 005,8	13,14%
Highest Daily Traded Volume (MWh)	77 811,2	90 323,8	12 512,6	16,08%
Lowest Daily Traded Volume (MWh)	46 198,9	53 508,8	7 309,9	15,82%
Highest Hourly Traded Volume (MWh)	3 869,1	4 387,3	518,2	13,39%
Lowest Hourly Traded Volume (MWh)	1 483,0	1 655,3	172,3	11,62%
Average Hourly Traded Volume (MWh)	2 539,2	2 872,8	333,6	13,14%

DAM - Weekdays	01-24 (Baseload)	01-24 (Baseload)		
Average Daily Traded Volume (MWh)	60 829,9	67 784,5	6 954,6	11,43%
DAM - Weekend	01-24 (Baseload)	01-24 (Baseload)		
Average Daily Traded Volume (MWh)	61 219,5	71 874,5	10 655,0	17,40%

DAM - Weekdays	09-20 (Peakload)	09-20 (Peakload)		
Average Daily Traded Volume (MWh)	31 063,2	35 293,1	4 229,9	13,62%
DAM - Weekend	09-20 (Peakload)	09-20 (Peakload)		
Average Daily Traded Volume (MWh)	31 443,9	37 438,2	5 994,3	19,06%

### Note:

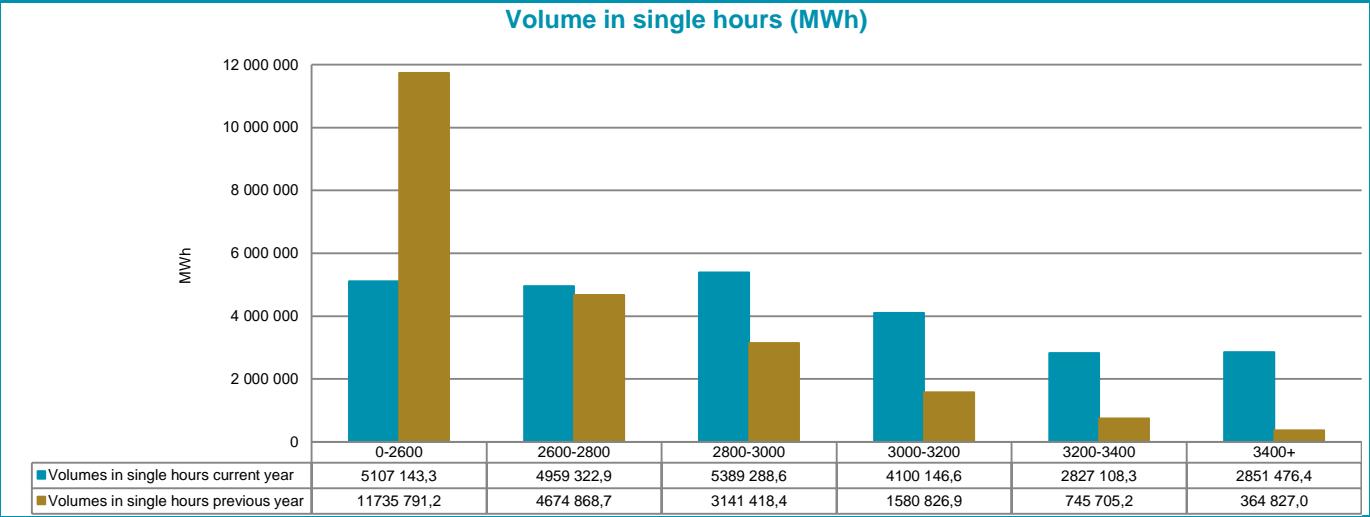
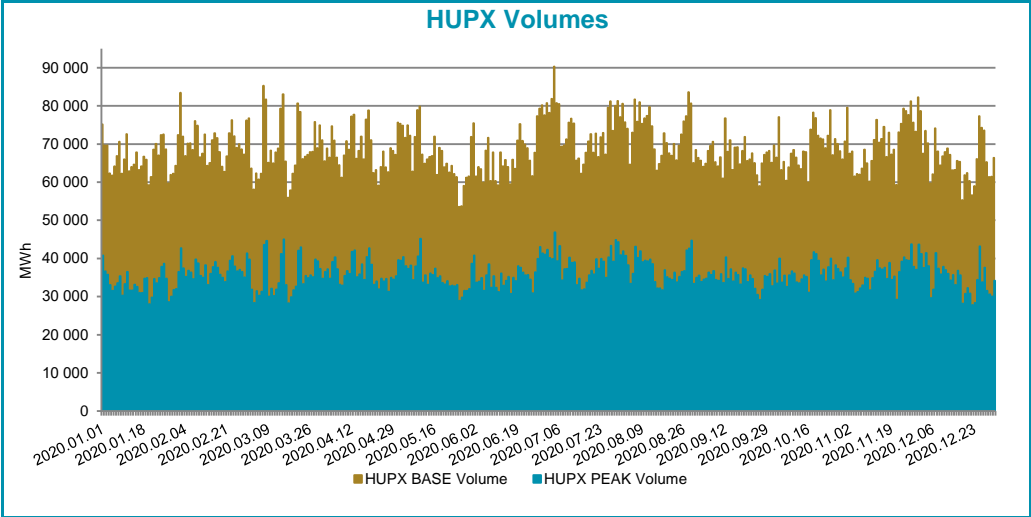
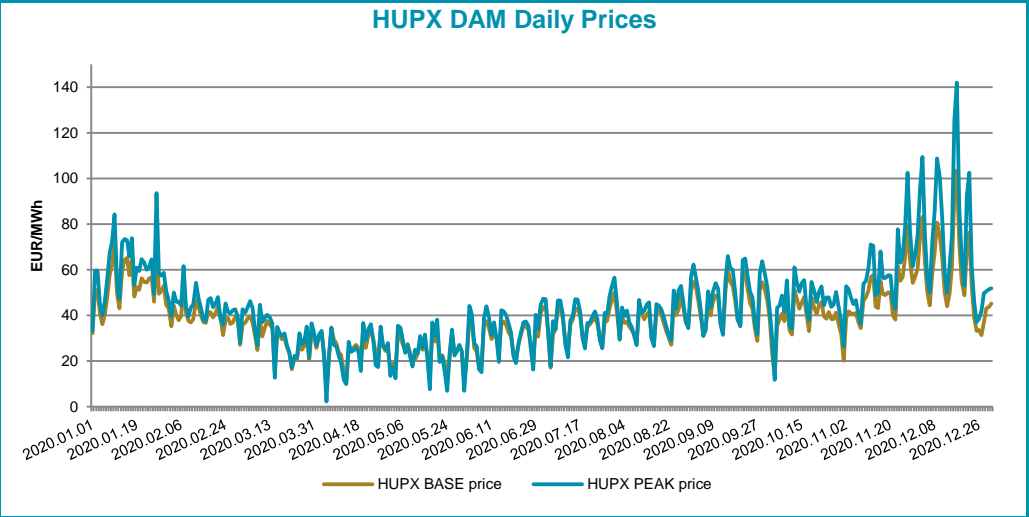
\*The average price contains all the hourly prices in the examined periods.

\*\*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.

# HUPX DAM

Trading Year 2020

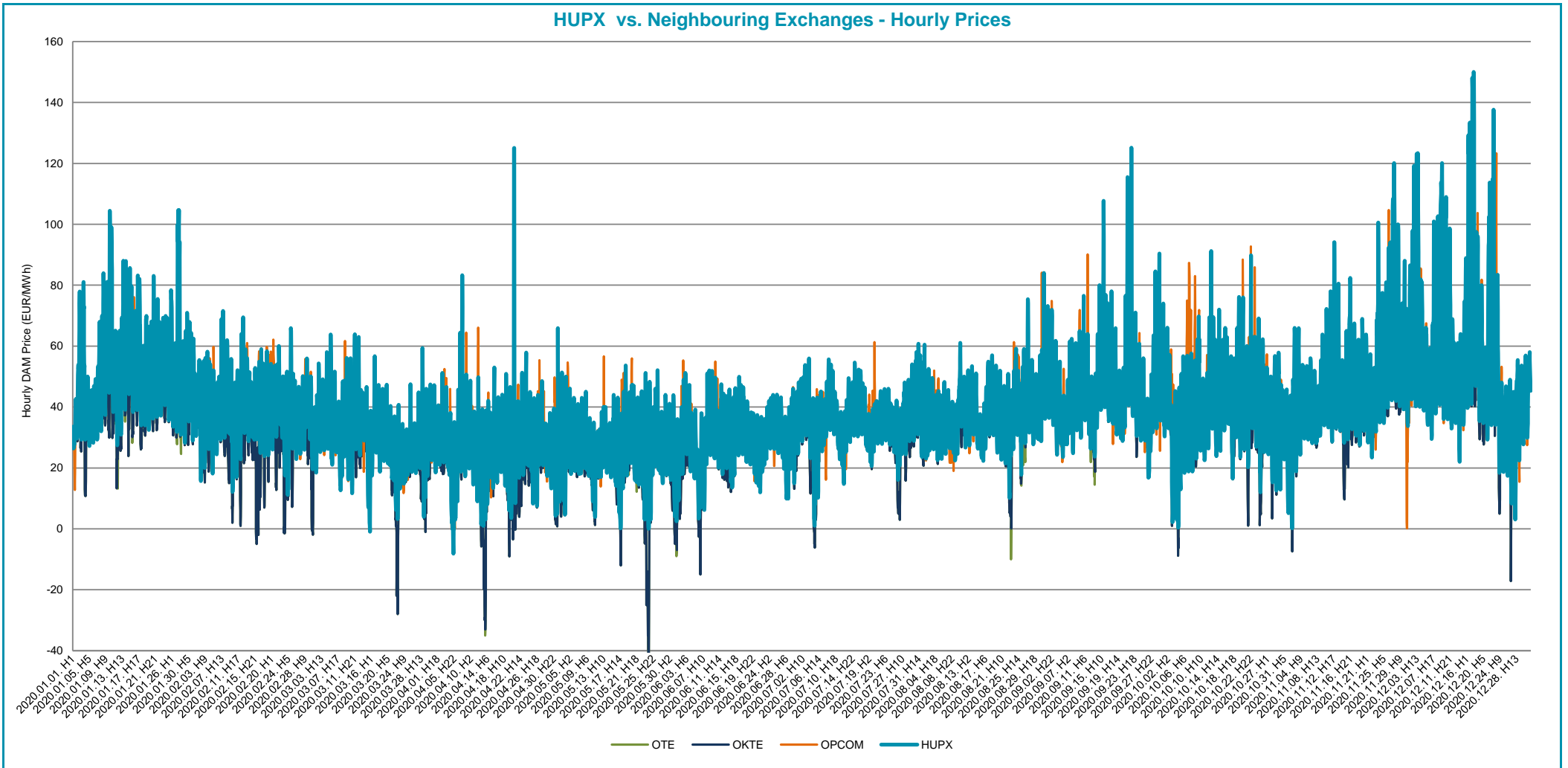
## Prices and volumes



**Note:**

The bar chart shows the traded volumes in single hours in the examined period (01/01/2020-31/12/2020). 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 0-2600 MWh decreased, while the ratio increased regarding the 2600-2800 MWh, 2800-3000 MWh, 3000-3200 MWh, 3200-3400 MWh and 3400+ MWh.

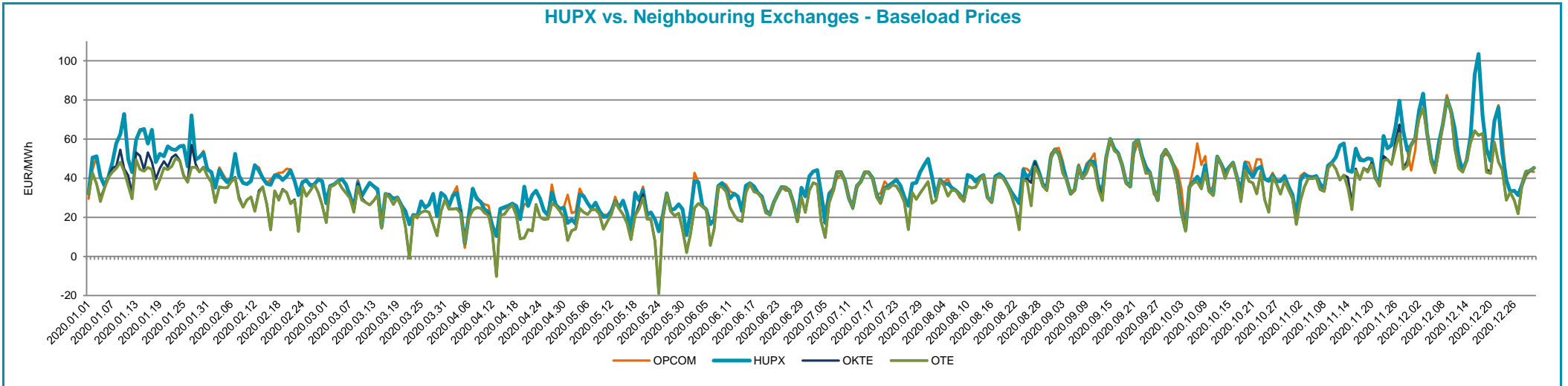
## HUPX vs. Neighbouring Exchanges - Hourly Prices



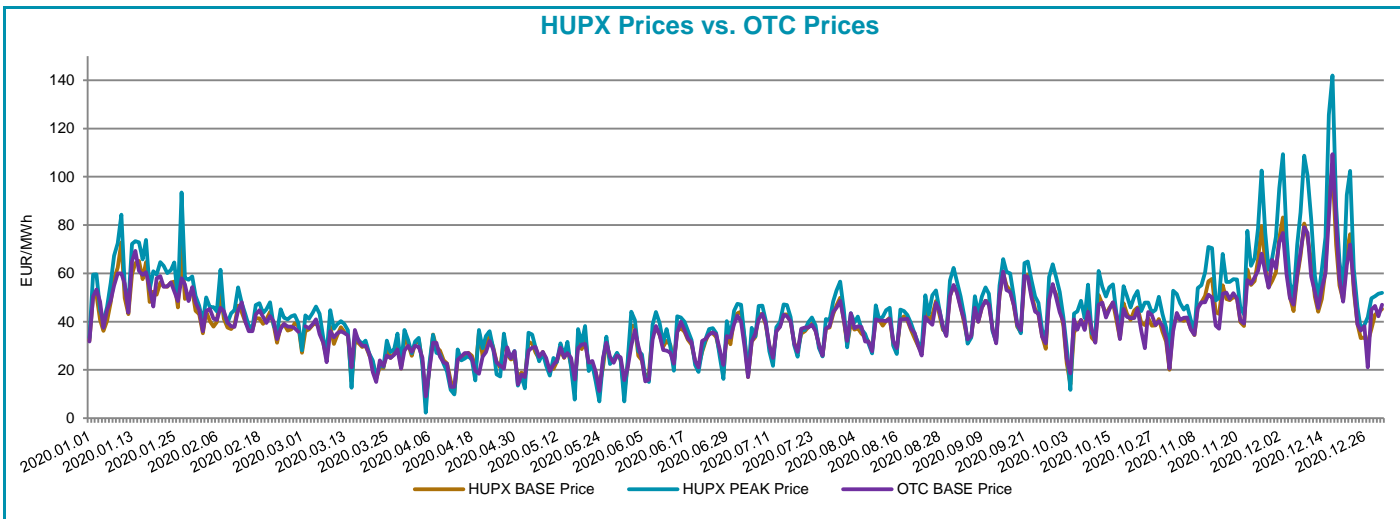
# HUPX DAM

Trading Year 2020

## HUPX vs. Neighbouring Exchanges - Baseload Prices



## HUPX vs. OTC



Trimmed Diff. BL.	HUPX↔-OTC	-0,09
Trimmed Diff. PL.	HUPX↔-OTC	-4,50

**HUPX DAM**

Trading Year 2020

**Average of aggregated OFFERS/BIDS 01/01/2020-31/12/2020**

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	3 770,3	4 092,4	2 827,1
H2	3 818,8	3 966,8	2 786,4
H3	3 804,2	3 861,2	2 724,4
H4	3 804,3	3 818,2	2 698,8
H5	3 759,7	3 810,8	2 676,7
H6	3 657,8	3 875,7	2 644,8
H7	3 439,9	3 903,9	2 595,2
H8	3 470,1	4 074,8	2 702,1
H9	3 610,8	4 223,6	2 841,9
H10	3 703,3	4 312,3	2 940,7
H11	3 780,5	4 371,8	3 018,4
H12	3 879,2	4 518,3	3 158,4
H13	3 827,3	4 547,5	3 156,6
H14	3 783,0	4 481,9	3 103,0
H15	3 746,2	4 407,6	3 036,6
H16	3 669,7	4 359,4	2 964,3
H17	3 599,2	4 377,1	2 925,3
H18	3 605,5	4 401,8	2 929,8
H19	3 596,9	4 356,1	2 904,1
H20	3 641,0	4 365,1	2 923,4
H21	3 619,9	4 361,0	2 904,8
H22	3 648,0	4 252,1	2 864,9
H23	3 675,5	4 174,5	2 833,5
H24	3 716,9	4 047,6	2 785,3
<b>Σ</b>	<b>88 627,9</b>	<b>100 961,6</b>	<b>68 947,8</b>

**Aggregated OFFERS/BIDS 01/01/2020-31/12/2020**

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

Base	
MIN (offer)	3 439,9
MAX (offer)	3 879,2
MIN (bid)	3 810,8
MAX (bid)	4 547,5
Average (offer)	3 692,8
Average (bid)	4 206,7

Peak	
MIN (offer)	3 596,9
MAX (offer)	3 879,2
MIN (bid)	4 223,6
MAX (bid)	4 547,5
Average (offer)	3 703,5
Average (bid)	4 393,5

Hour	Offers	Bids	Index volumes
H1	1 379 917,8	1 497 836,0	1 034 728,3
H2	1 397 691,2	1 451 844,3	1 019 805,1
H3	1 392 353,2	1 413 192,4	997 140,3
H4	1 392 360,3	1 397 472,5	987 761,3
H5	1 376 051,1	1 394 765,4	979 659,4
H6	1 338 753,1	1 418 498,1	967 989,9
H7	1 259 009,5	1 428 842,6	949 851,9
H8	1 270 074,3	1 491 367,9	988 982,8
H9	1 321 550,1	1 545 820,0	1 040 119,8
H10	1 355 401,7	1 578 316,0	1 076 309,8
H11	1 383 657,0	1 600 072,1	1 104 739,1
H12	1 419 772,7	1 653 690,3	1 155 987,1
H13	1 400 800,7	1 664 375,7	1 155 311,1
H14	1 384 576,0	1 640 388,8	1 135 714,6
H15	1 371 102,9	1 613 195,2	1 111 409,0
H16	1 343 120,6	1 595 551,7	1 084 938,9
H17	1 317 311,4	1 602 014,1	1 070 652,9
H18	1 319 602,1	1 611 046,5	1 072 315,1
H19	1 316 457,4	1 594 330,7	1 062 895,4
H20	1 332 618,5	1 597 622,0	1 069 965,9
H21	1 324 866,2	1 596 137,1	1 063 152,5
H22	1 335 158,4	1 556 280,7	1 048 570,9
H23	1 345 244,3	1 527 858,0	1 037 062,3
H24	1 360 379,1	1 481 430,5	1 019 422,7
<b>Σ</b>	<b>32 437 829,6</b>	<b>36 951 948,6</b>	<b>25 234 486,1</b>

Base	
MIN (offer)	1 259 009,5
MAX (offer)	1 419 772,7
MIN (bid)	1 394 765,4
MAX (bid)	1 664 375,7
Average (offer)	1 351 576,2
Average (bid)	1 539 664,5

Peak	
MIN (offer)	1 316 457,4
MAX (offer)	1 419 772,7
MIN (bid)	1 545 820,0
MAX (bid)	1 664 375,7
Average (offer)	1 355 497,6
Average (bid)	1 608 035,3