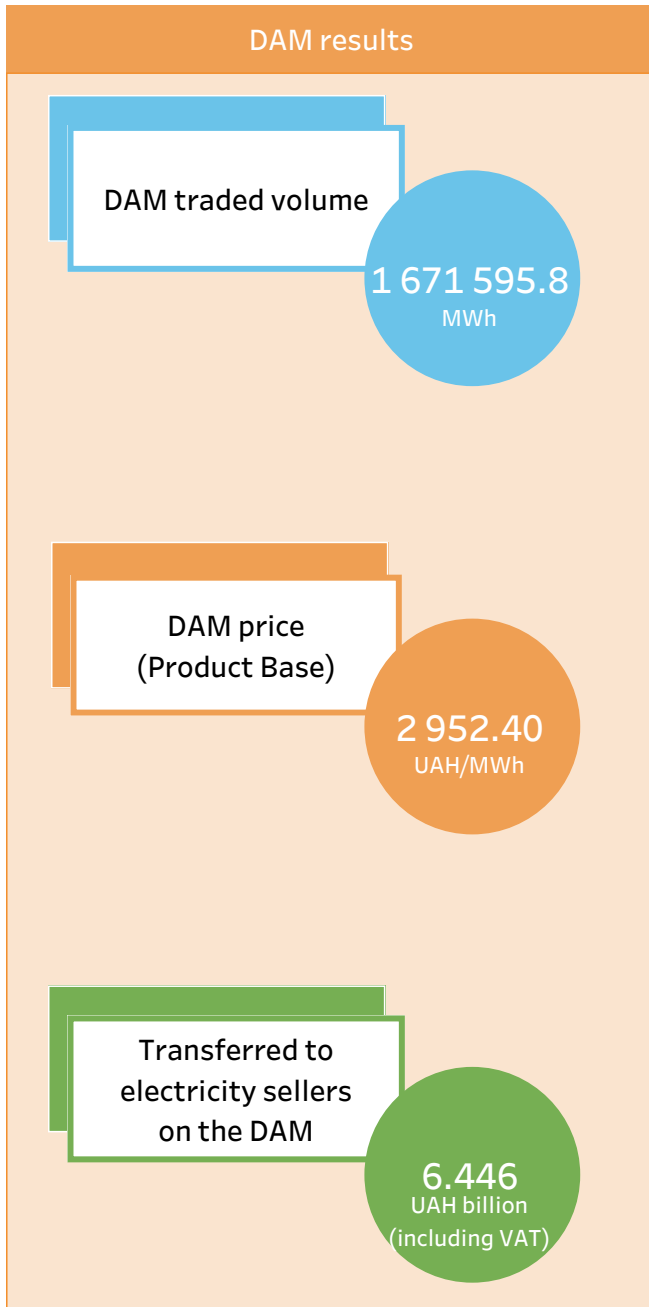




BRAVERY 
TO THINK ABOUT TOMORROW

**EMPHASES
OF DAM AND IDM
FEBRUARY 2023**

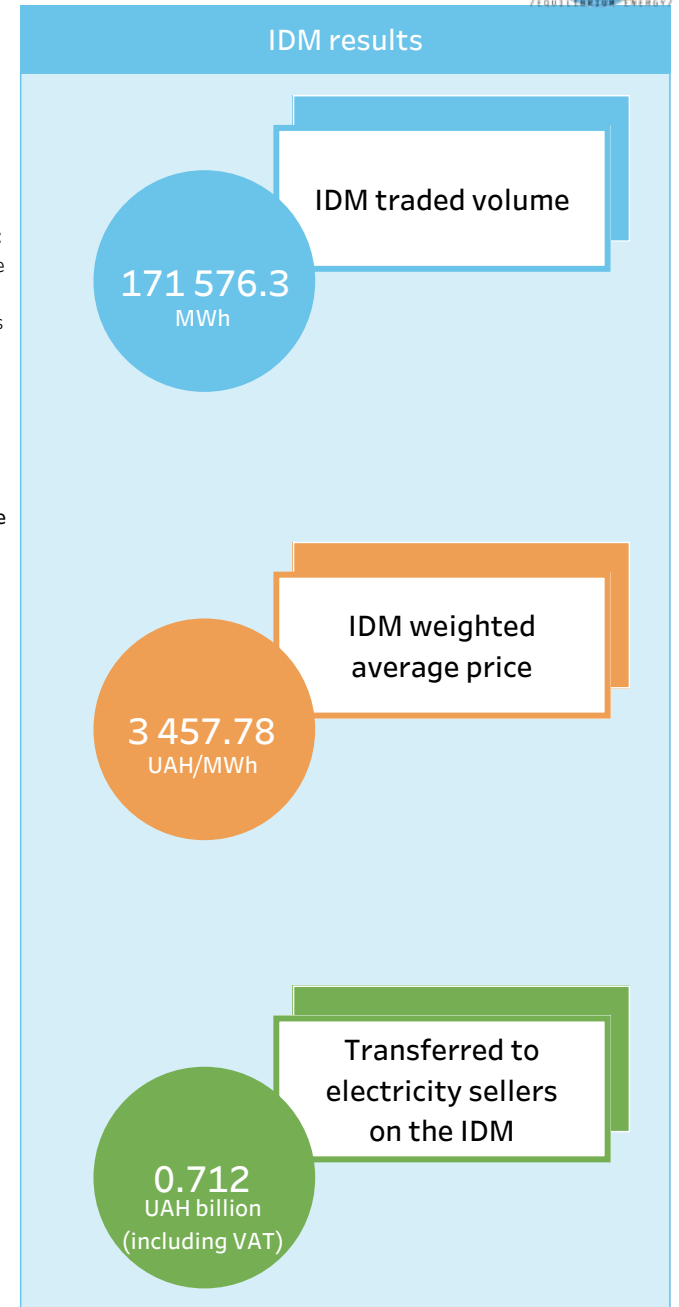


Legislative changes in the electricity market, extended in February:

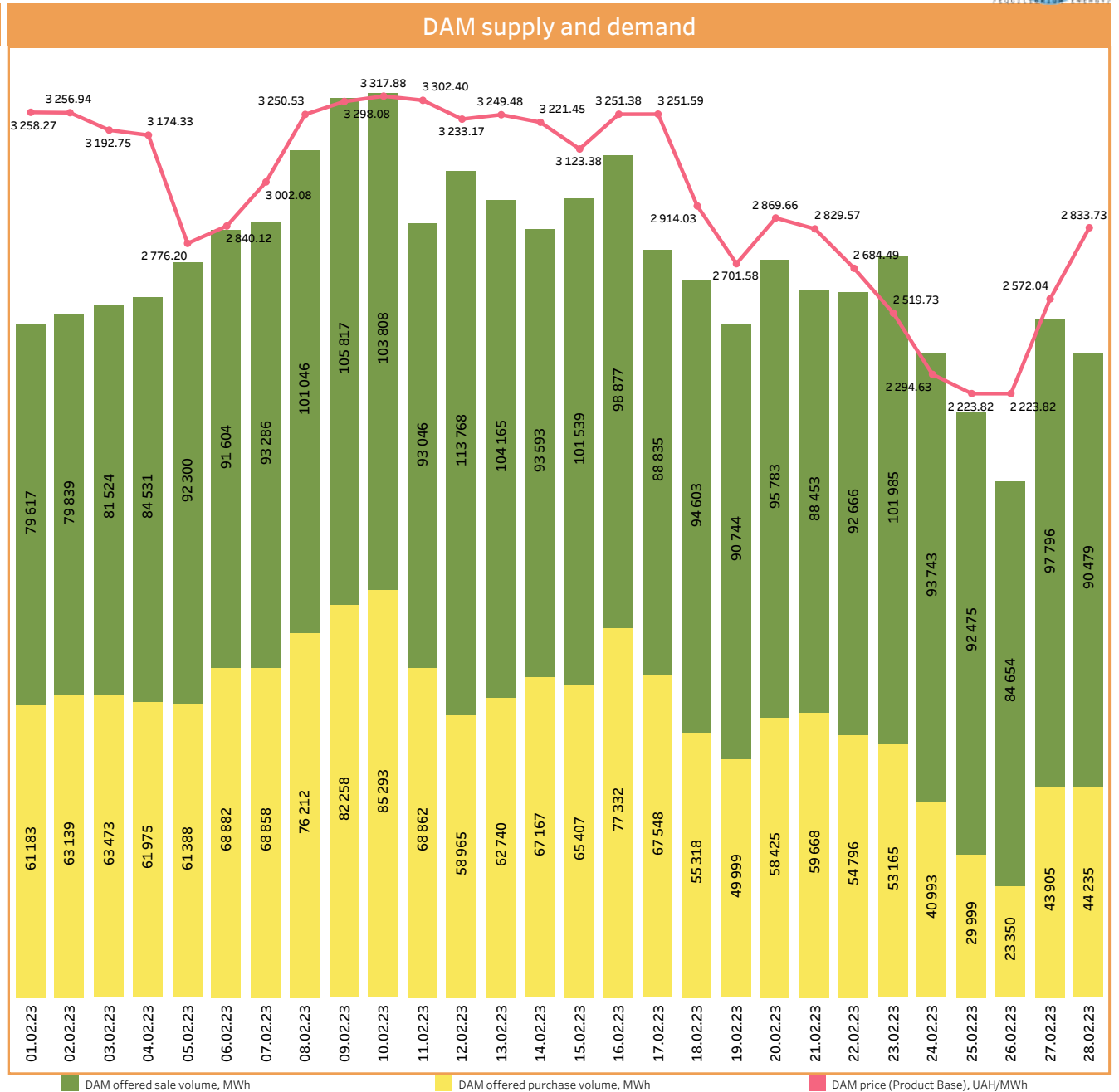
NEURC’s Resolution №1690 dated on 19.12.2022
 «On approval of JSC «MARKET OPERATOR» of a fixed payment for the use of the market operator’s software and the tariff for the purchase and sale transactions on the DAM and on the IDM for 2023»:
 From January 1, 2023, the tariff for the purchase and sale of electricity on the day-ahead market and the intraday market is UAH 7,61/MWh (net of VAT).
 From January 1, 2023, the fixed payment for the use of the market operator’s software is UAH 3 831,66 (net of VAT).

NEURC’s Resolution №332 dated on 25.02.2022 (with changes as of 27.02.2022)
 «On ensuring the stable operation of the electric energy market, including the financial condition of participants in the electric energy market during the period of martial law in Ukraine»:
 There are minimum price caps on the DAM:
 2 646,25 UAH/MWh (net of VAT) for hours of max. load (from 07:00 to 23:00),
 1 378,97 UAH/MWh (net of VAT) for hours of min. load (from 00:00 to 07:00 and from 23:00 to 24:00).
 There are maximum price caps on the DAM:
 4 000 UAH/MWh (net of VAT) for hours of max. load (from 07:00 to 23:00),
 2 000 UAH/MWh (net of VAT) for hours of min. load (from 00:00 to 07:00 and from 23:00 to 24:00).

Increased opportunities for electricity import from the EU to Ukraine:
 From February 14, 2023, the available cross-border transmission capacity of electricity between Slovakia and Ukraine has increased to 700 MW (the capacity of the Slovakia-Ukraine crossing was 600 MW).



DAM emphases	
DAM price (Product Base)	2 952.40 UAH/MWh
DAM price (Product Base) change	-10.24%
	-336.72 UAH/MWh
DAM traded volume	1 671 595.8 MWh
DAM traded volume change	-11.64%
	-220 099.3 MWh
Demand	1 674 533.7 MWh
Demand change	-15.50%
	-307 155.5 MWh
Supply	2 630 573.7 MWh
Supply change	18.50%
	+410 672.1 MWh



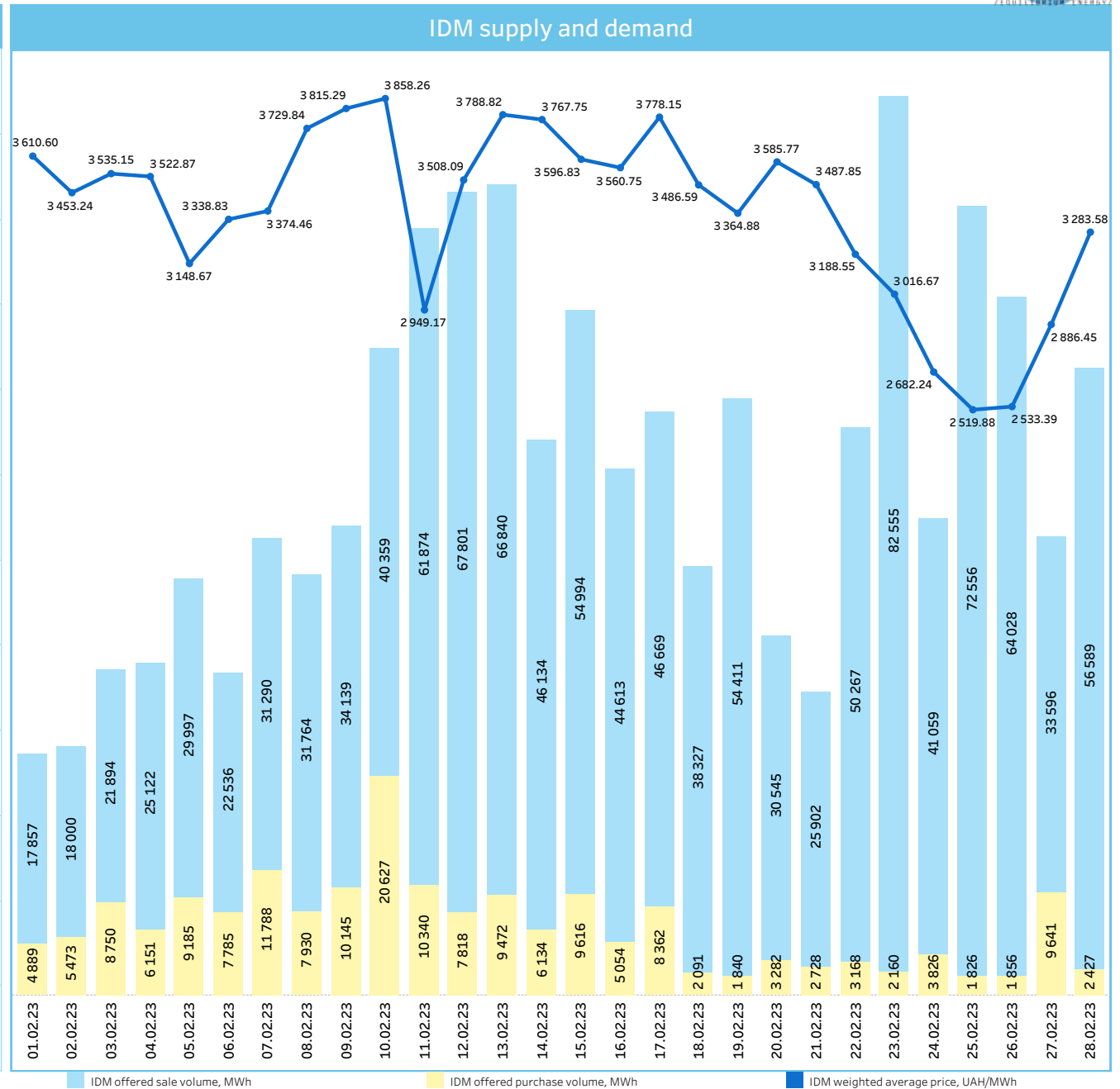
*Compared with January 2023 **all prices are net of VAT ***Ukraine's IPS data

■ DAM offered sale volume, MWh

■ DAM offered purchase volume, MWh

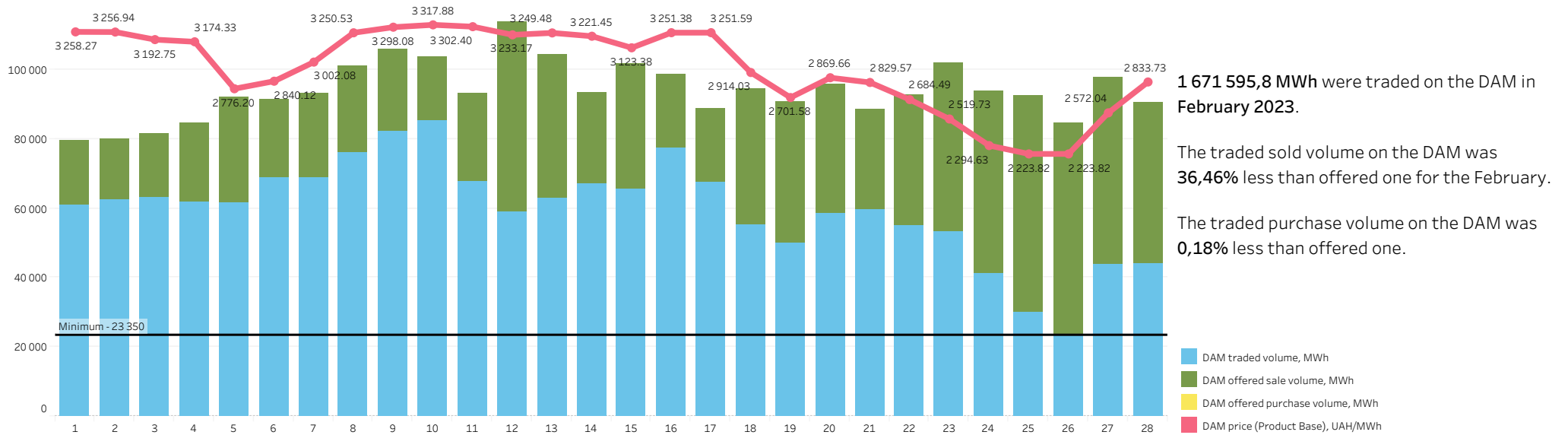
■ DAM price (Product Base), UAH/MWh

IDM emphases	
IDM weighted average price	3 457.78 UAH/MWh
IDM weighted average price change	-6.15%
	-226.48 UAH/MWh
IDM traded volume	171 576.3 MWh
IDM traded volume change	-17.03%
	-35 212.0 MWh
Demand	184 362.9 MWh
Demand change	-37.00%
	-108 278.1 MWh
Supply	1 211 714.8 MWh
Supply change	121.06%
	+663 580.1 MWh



*Compared with January 2023 **all prices are net of VAT ***Ukraine's IPS data

Prices, traded and offered volumes on the DAM

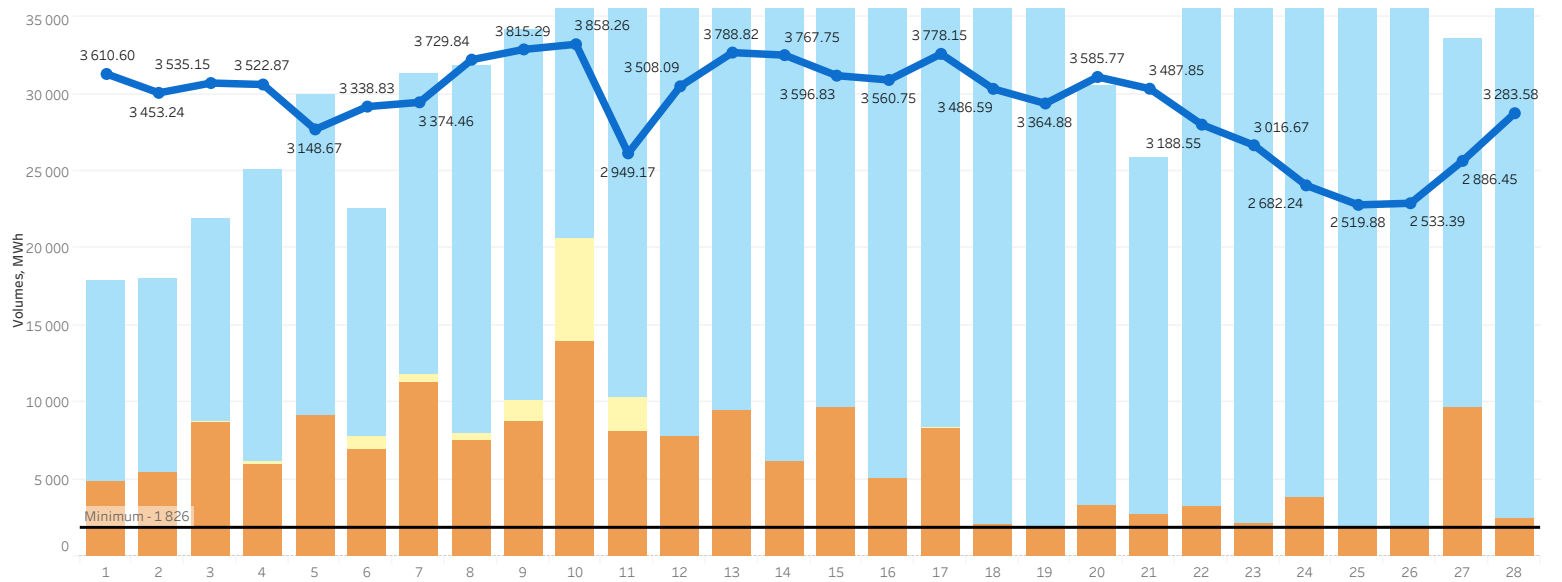


Prices, traded and offered volumes on the IDM

171 576,3 MWh were traded on the IDM in February 2023.

The traded sold volume on the IDM was **85,84%** less than offered one for February.

The traded purchase volume on the IDM was **6,94%** less than offered one.



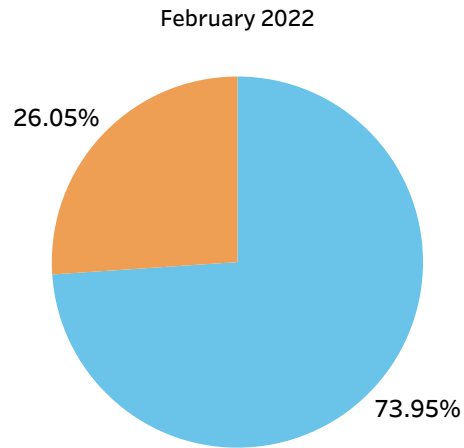
*all prices are net of VAT **IPS Ukraine data

Comparison of the electricity traded volumes on the DAM and IDM for February 2022 and 2023

The total traded volume of electricity within the two market segments amounted to **4 805 409,3 MWh** (IPS: 4 359 300,8 MWh, BEI: 446 108,5 MWh) in **February 2022**.

The share of the DAM was **73,95%** or **3 553 640,5 MWh** (IPS: 3 109 733,6 MWh, BEI: 443 906,9 MWh) in the total volume.

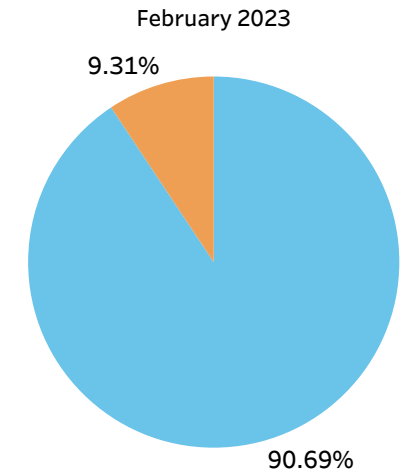
The share of the IDM was **26,05%** or **1 251 768,8 MWh** (IPS: 1 249 567,2 MWh, BEI: 2 201,6 MWh) in the total volume.



The total traded volume of electricity within the two market segments amounted to **1 843 172,1 MWh** in **February 2023**.

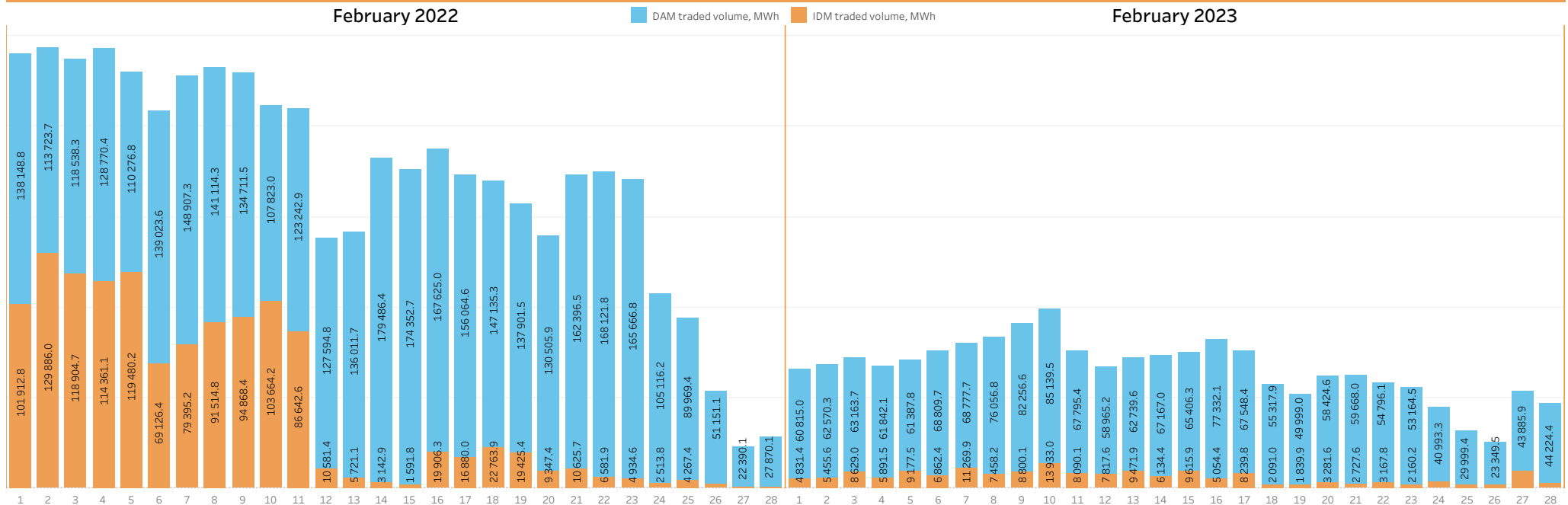
The share of the DAM was **90,69%** or **1 671 595,8 MWh** in the total volume.

The share of the IDM was **9,31%** or **171 576,3 MWh** in the total volume.



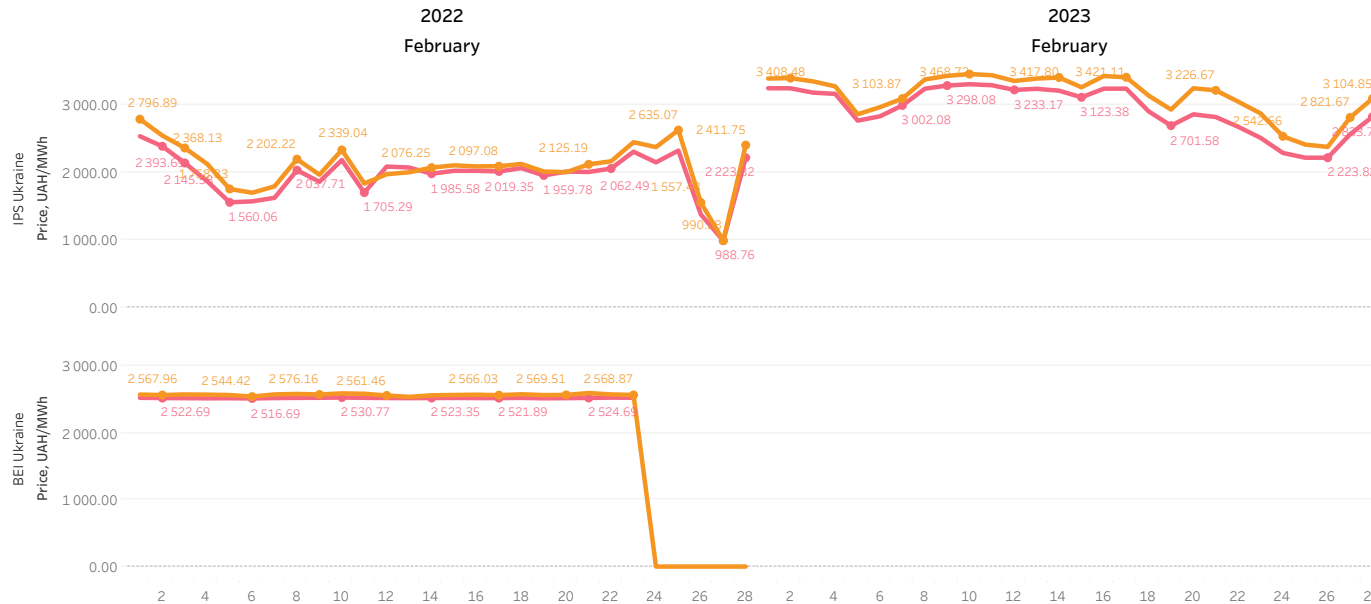
In February 2023 the total traded volume was **61,64%** or **2 962 237,2 MWh** less than the total traded volume in February 2022: on the DAM traded volume was **52,96%** or **1 882 044,7 MWh** lower, on the IDM traded volume was **82,29 %** or **1 080 192,5 MWh** lower.

Distribution of traded volumes



Prices comparison for February 2022 and 2023

DAM prices comparison: price (Product Base) and weighted average price



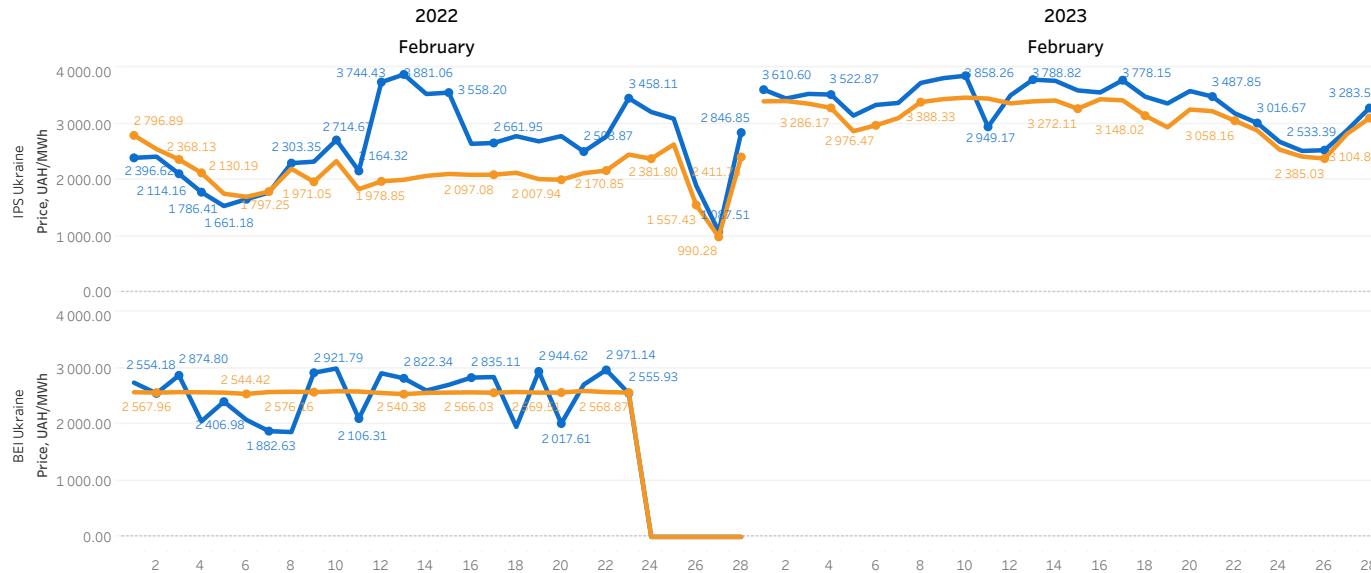
In February 2023:
 DAM price (Product Base) was **2 952,40 UAH/MWh**;
 DAM weighted average price was **3 123,43 UAH/MWh**;
 DAM price (Product Peak) was **3 591,50 UAH/MWh**;
 DAM price (Product OffPeak) was **2 313,29 UAH/MWh**.

The difference between the DAM price (Product Base) and the weighted average price on the DAM was **261,03 UAH/MWh**.

In February 2022:
 DAM price (Product Base) was **2 248,55 UAH/MWh** (IPS: 1 973,54 UAH/MWh, BEI: 2 523,55 UAH/MWh);
 DAM weighted average price was **2 182,82 UAH/MWh** (IPS: 2 127,23 UAH/MWh, BEI: 2 572,28 UAH/MWh).

In February 2023 the DAM price (Product Base) was **703,85 UAH/MWh** higher than the DAM price (Product Base) in February 2022.

Weighted average prices comparison : on the DAM and IDM



In February 2023 the DAM weighted average price was **1030,61 UAH/MWh** higher than the DAM weighted average price in February 2022.

In January 2023:
 IDM weighted average price was **3 457,78 UAH/MWh**.

In January 2022:
 IDM weighted average price was **2 206,63 UAH/MWh** (IPS: 2 206,12 UAH/MWh, BEI: 2 493,03 UAH/MWh).

The IDM weighted average price was **1 251,15 UAH/MWh** higher in February 2023 than the IDM weighted average price in February 2022.

*all prices are net of VAT

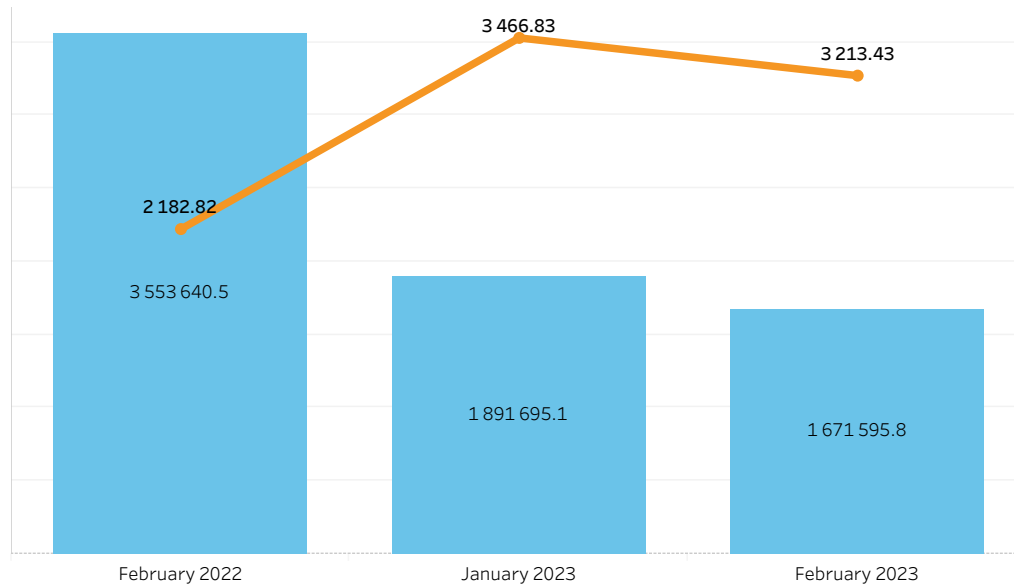
Weighted average prices and traded volumes on the DAM and on the IDM compared with the previous periods



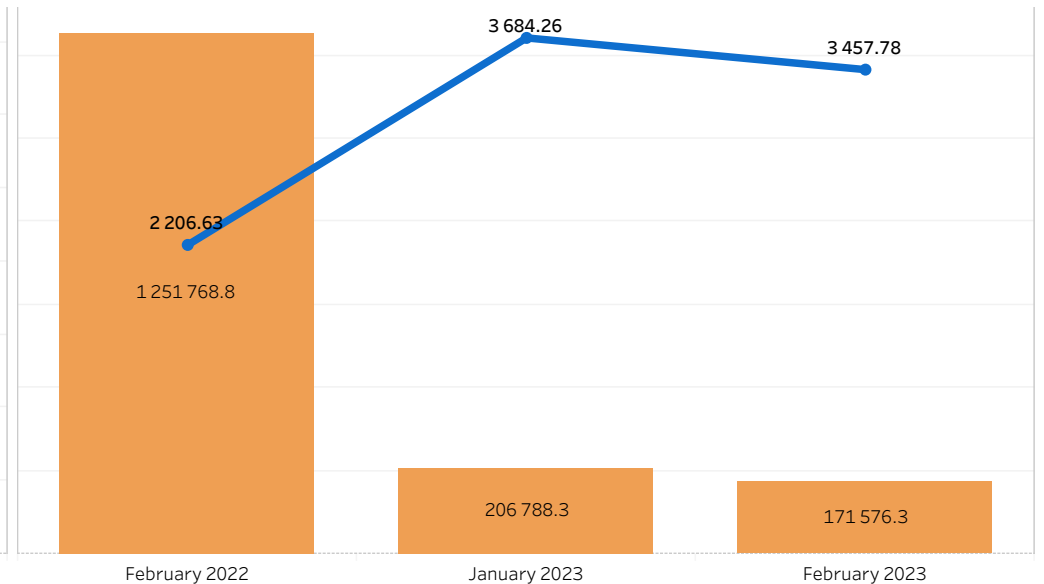
Indicator		February 2022	January 2023	February 2023
IPS Ukraine	DAM weighted average price, UAH/MWh	2 127.23	3 466.83	3 213.43
	DAM traded volume, MWh	3 109 733.6	1 891 695.1	1 671 595.8
	IDM weighted average price, UAH/MWh	2 206.12	3 684.26	3 457.78
	IDM traded volume, MWh	1 249 567.2	206 788.3	171 576.3
BEI Ukraine	DAM weighted average price, UAH/MWh	2 572.28	0.00	0.00
	DAM traded volume, MWh	443 906.9	0.0	0.0
	IDM weighted average price, UAH/MWh	2 493.03	0.00	0.00
	IDM traded volume, MWh	2 201.6	0.0	0.0
Total	DAM weighted average price, UAH/MWh	2 182.82	3 466.83	3 213.43
	DAM traded volume, MWh	3 553 640.5	1 891 695.1	1 671 595.8
	IDM weighted average price, UAH/MWh	2 206.63	3 684.26	3 457.78
	IDM traded volume, MWh	1 251 768.8	206 788.3	171 576.3

Indicator		1 decade of February 2023	2 decade of February 2023	3 decade of February 2023
DAM weighted average price, UAH/MWh		3 280.65	3 326.77	2 876.60
DAM traded volume, MWh		690 819.2	630 695.5	350 081.1
IDM weighted average price, UAH/MWh		3 554.10	3 557.11	2 949.29
IDM traded volume, MWh		82 308.6	61 636.6	27 631.1

Weighted average prices and traded volumes on the DAM for the periods:
February 2022, January 2022 and February 2023

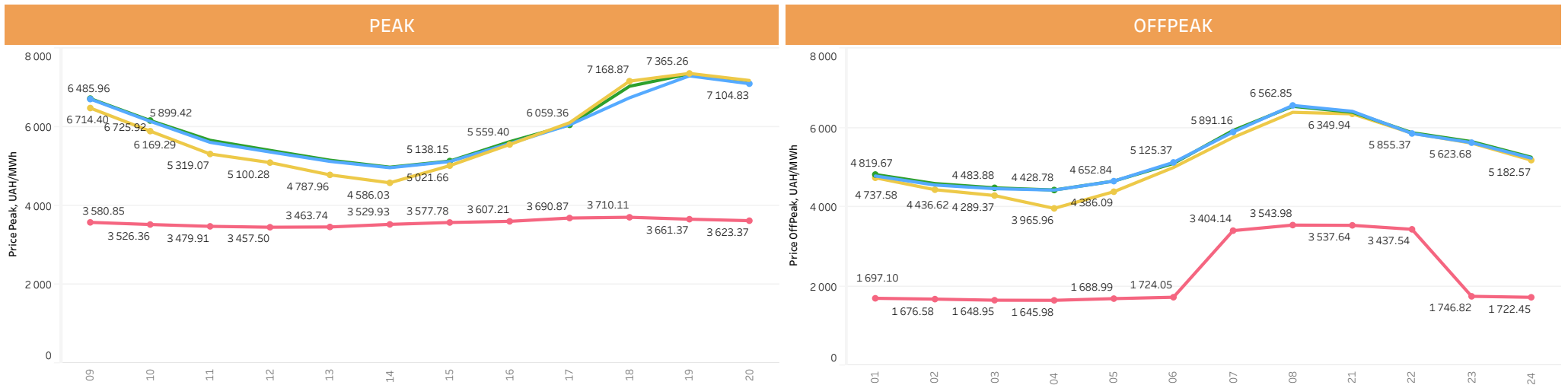


Weighted average prices and traded volumes on the IDM for the periods:
February 2022, January 2022 and February 2023



*all prices are net of VAT

DAM hourly prices (Peak Product and OffPeak Product)*: Ukraine, Romania, Slovak Republic and Hungary



DAM prices (Product Base) were amounted to*:

- Ukraine: 2 952,40 UAH/MWh;
- Romania: 5 523,15 UAH/MWh;
- Slovak Republic: 5 717,05 UAH/MWh;
- Hungary: 5 750,17 UAH/MWh.

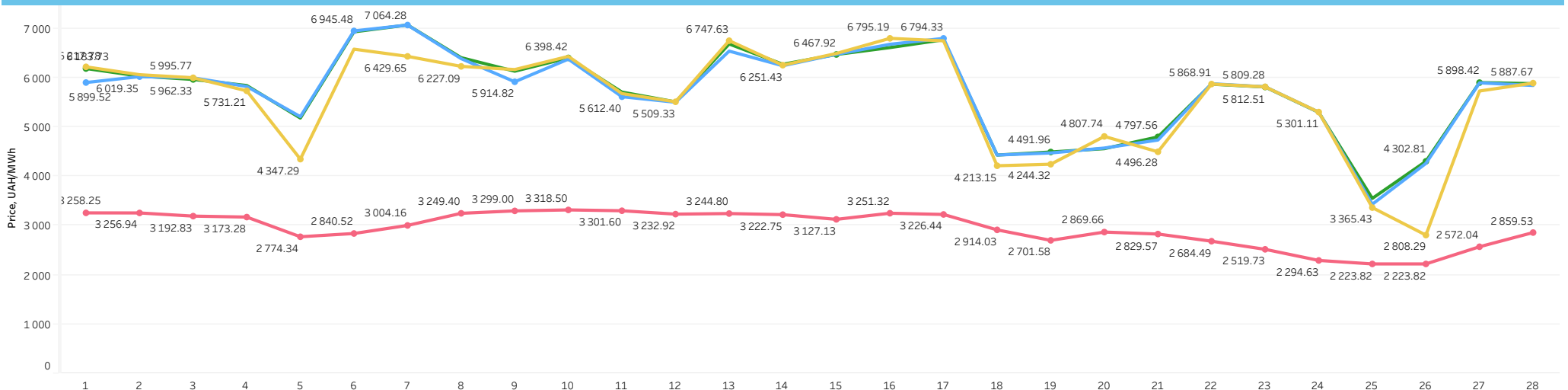
DAM prices (Product Peak) were amounted to*:

- Ukraine: 3 598,00 UAH/MWh;
- Romania: 5 959,35 UAH/MWh;
- Slovak Republic: 6 056,12 UAH/MWh;
- Hungary: 6 114,11 UAH/MWh.

DAM prices (Product OffPeak) were amounted to*:

- Ukraine: 2 306,79 UAH/MWh;
- Romania: 5 249,30 UAH/MWh;
- Slovak Republic: 5 377,97 UAH/MWh;
- Hungary: 5 386,23 UAH/MWh.

The DAM prices (Product Base) of Ukraine, Romania, Slovak Republic and Hungary



Ukraine DAM price, UAH/MWh

Romania DAM price, UAH/MWh

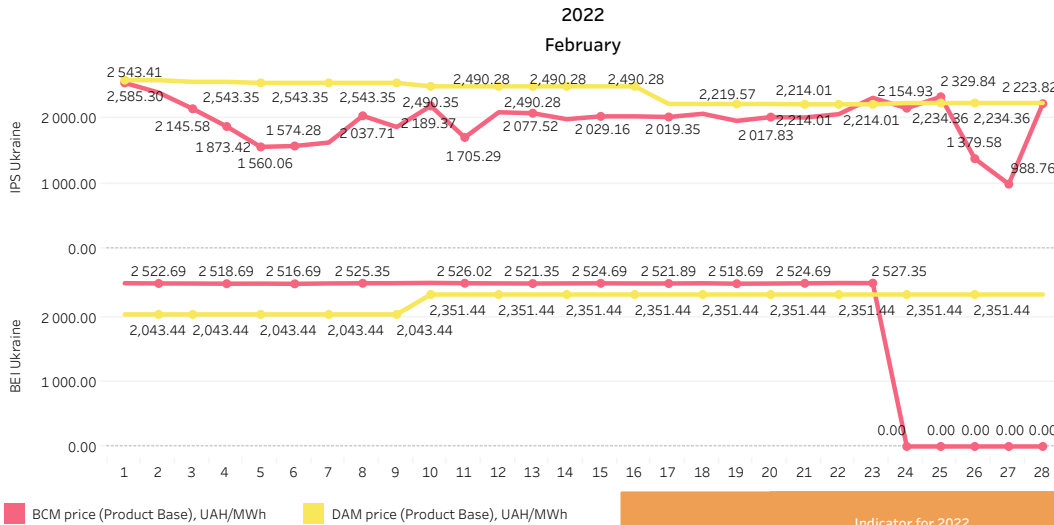
Slovak Republic DAM price, UAH/MWh

Hungary DAM price, UAH/MWh

*the calculation was made according to the unified Central European Time (CET)
 all prices are net of VAT *Ukraine's IPS data

DAM and BCM prices comparison for February 2022 and 2023

The DAM and the BCM prices



■ BCM price (Product Base), UAH/MWh ■ DAM price (Product Base), UAH/MWh

Day	Indicator for 2022			2022			2023		
	DAM price (Product Base), UAH/MWh	BCM price (Product Base), UAH/MWh	Price difference, UAH/MWh	DAM price (Product Base), UAH/MWh	BCM price (Product Base), UAH/MWh	Price difference, UAH/MWh	DAM price (Product Base), UAH/MWh	BCM price (Product Base), UAH/MWh	Price difference, UAH/MWh
1	2 535.05	2 314.37	-220.68	2 543.41	2 585.30	+41.89	2 526.69	2 043.44	-483.25
2	2 458.19	2 314.37	-143.82	2 393.69	2 585.30	+191.61	2 522.69	2 043.44	-479.25
3	2 333.46	2 301.27	-32.18	2 145.58	2 559.11	+413.54	2 521.35	2 043.44	-477.91
4	2 196.05	2 301.27	+105.22	1 873.42	2 559.11	+685.69	2 518.69	2 043.44	-475.25
5	2 040.04	2 293.39	+253.36	1 560.06	2 543.35	+983.29	2 520.02	2 043.44	-476.58
6	2 045.48	2 293.39	+247.91	1 574.28	2 543.35	+969.07	2 516.69	2 043.44	-473.25
7	2 074.66	2 293.39	+218.73	1 626.64	2 543.35	+916.71	2 522.69	2 043.44	-479.25
8	2 281.53	2 293.39	+11.87	2 037.71	2 543.35	+505.64	2 525.35	2 043.44	-481.91
9	2 196.05	2 293.39	+97.34	1 865.42	2 543.35	+677.93	2 526.69	2 043.44	-483.25
10	2 360.07	2 420.90	+60.83	2 189.37	2 490.35	+300.99	2 530.77	2 351.44	-179.33
11	2 115.65	2 420.86	+305.21	1 705.29	2 490.28	+784.99	2 526.02	2 351.44	-174.58
12	2 307.88	2 420.86	+112.99	2 092.40	2 490.28	+397.88	2 523.35	2 351.44	-171.91
13	2 299.44	2 420.86	+121.43	2 077.52	2 490.28	+412.76	2 521.35	2 351.44	-169.91
14	2 254.47	2 420.86	+166.40	1 985.58	2 490.28	+504.70	2 523.35	2 351.44	-171.91
15	2 276.92	2 420.86	+143.94	2 029.16	2 490.28	+461.12	2 524.69	2 351.44	-173.25
16	2 275.88	2 420.86	+144.98	2 029.16	2 490.28	+461.12	2 522.60	2 351.44	-171.16
17	2 270.62	2 285.50	+14.89	2 019.35	2 219.57	+200.22	2 521.89	2 351.44	-170.45
18	2 297.23	2 285.50	-11.73	2 068.95	2 219.57	+150.62	2 525.52	2 351.44	-174.08
19	2 239.24	2 285.50	+46.27	1 959.78	2 219.57	+259.79	2 518.69	2 351.44	-167.25
20	2 269.63	2 285.50	+15.88	2 017.83	2 219.57	+201.74	2 521.43	2 351.44	-169.99
21	2 268.15	2 282.72	+14.58	2 011.62	2 214.01	+202.40	2 524.69	2 351.44	-173.25
22	2 295.75	2 282.72	-13.03	2 062.49	2 214.01	+151.52	2 529.02	2 351.44	-177.58
23	2 420.41	2 282.72	-137.69	2 313.48	2 214.01	-99.47	2 527.35	2 351.44	-175.91
24	1 077.47	2 292.90	+1 215.44	2 154.93	2 234.36	+79.43	0.00	2 351.44	+2 351.44
25	1 164.92	2 292.90	+1 127.98	2 329.84	2 234.36	-95.48	0.00	2 351.44	+2 351.44
26	689.79	2 292.90	+1 603.11	1 379.58	2 234.36	+854.78	0.00	2 351.44	+2 351.44
27	494.38	2 292.90	+1 798.52	988.76	2 234.36	+1 245.60	0.00	2 351.44	+2 351.44
28	1 111.91	2 292.90	+1 180.99	2 223.82	2 234.36	+10.54	0.00	2 351.44	+2 351.44
Average indicator	2 248,55	2 324,96	+76,41	1 973,54	2 397,49	+423,95	2 523,55	2 252,44	-271,11

In February 2022:

DAM price (Product Base) was **2 248,55 UAH/MWh**
(IPS: 1 973,54 UAH/MWh; BEI: 2 523,55 UAH/MWh);

BCM price (Product Base) was **2 375,78 UAH/MWh**
(IPS: 2 325,42 UAH/MWh; BEI: 2 450,00 UAH/MWh).

The BCM price was **76,41 UAH/MWh** higher than the DAM price.

In February 2023:

DAM price (Product Base) was **2 952,40 UAH/MWh**;
BCM price (Product Base) was **3 238,50 UAH/MWh**.

The BCM price was **286,10 UAH/MWh** higher than the DAM price.

*The BCM price was calculated according to the results of UEB auctions for the sale of electricity under bilateral contracts held in the previous month (January) and the month of supply (February), for the purchase and sale of base load electricity for the month of supply (February 2022 and February 2023, respectively)

**all prices are net of VAT