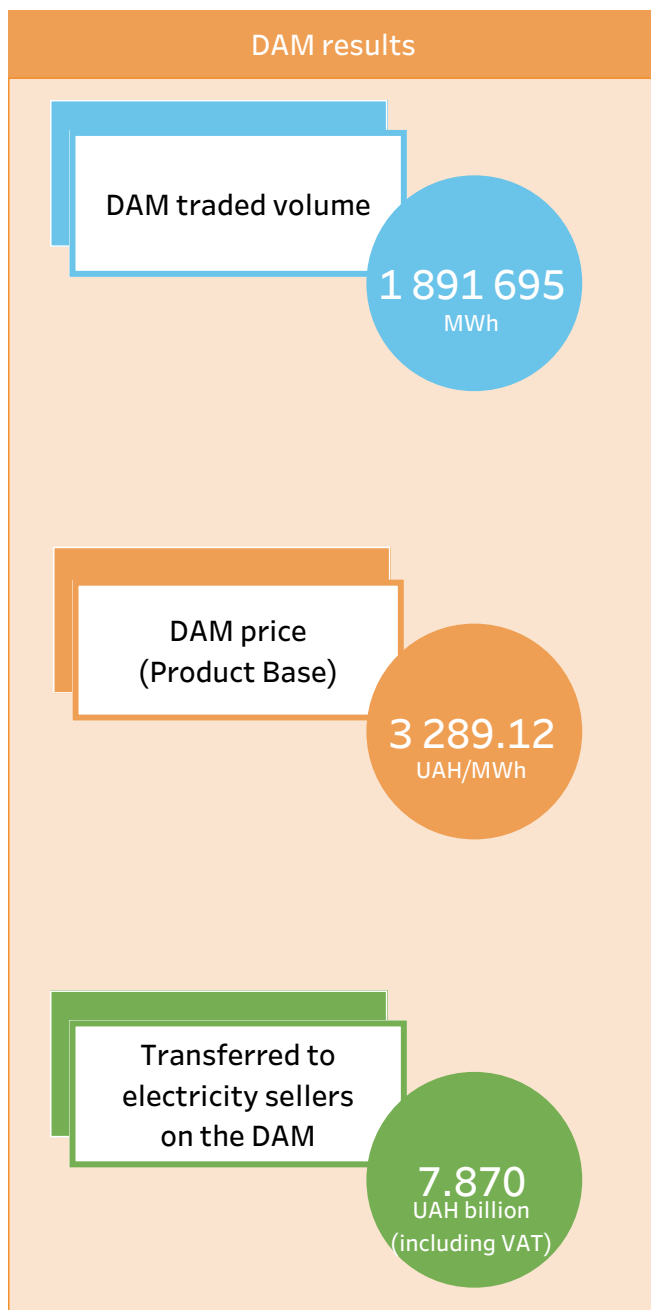




BRAVERY 
TO THINK ABOUT TOMORROW

**EMPHASES
OF DAM AND IDM
JANUARY 2023**



Legislative changes in the electricity market, extended in January:

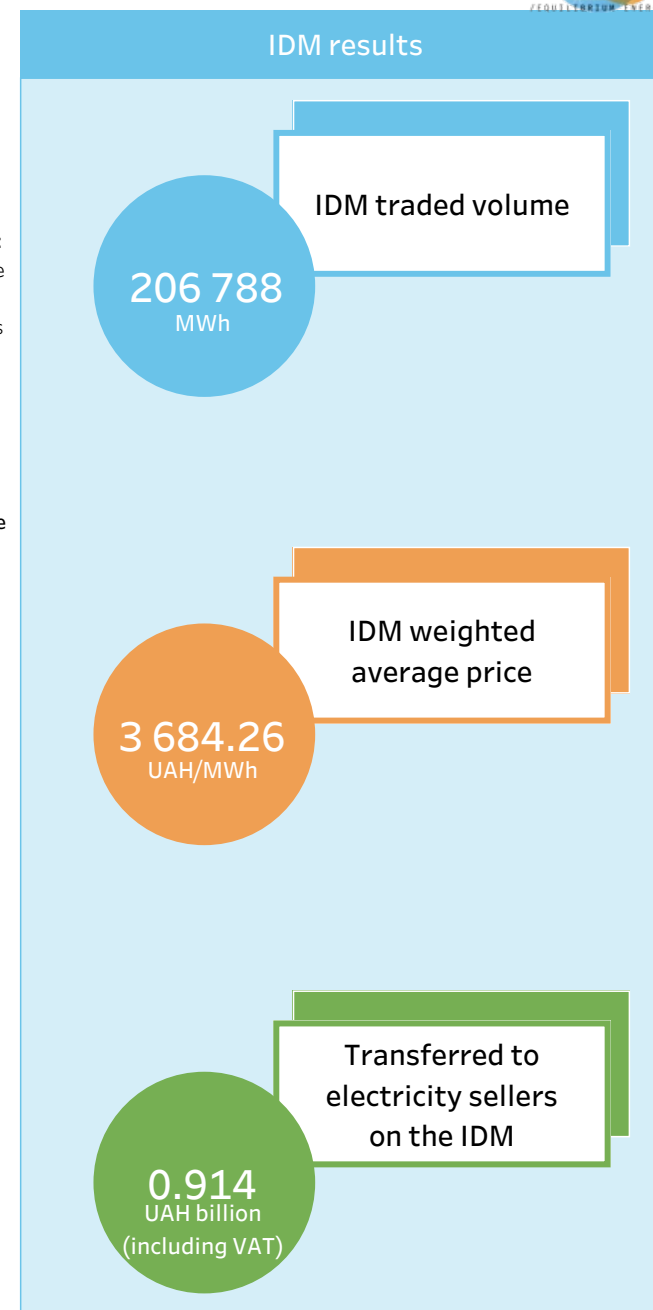
NEURC's Resolution №1690 dated on 19.12.2022
 «On approval of JSC «MARKET OPERATOR» of a fixed payment for the use of the market operator's software and the tariff for the purchase and sale transactions on the DAM and on the IDM for 2023»:
 From January 1, 2023, the tariff for the purchase and sale of 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»:

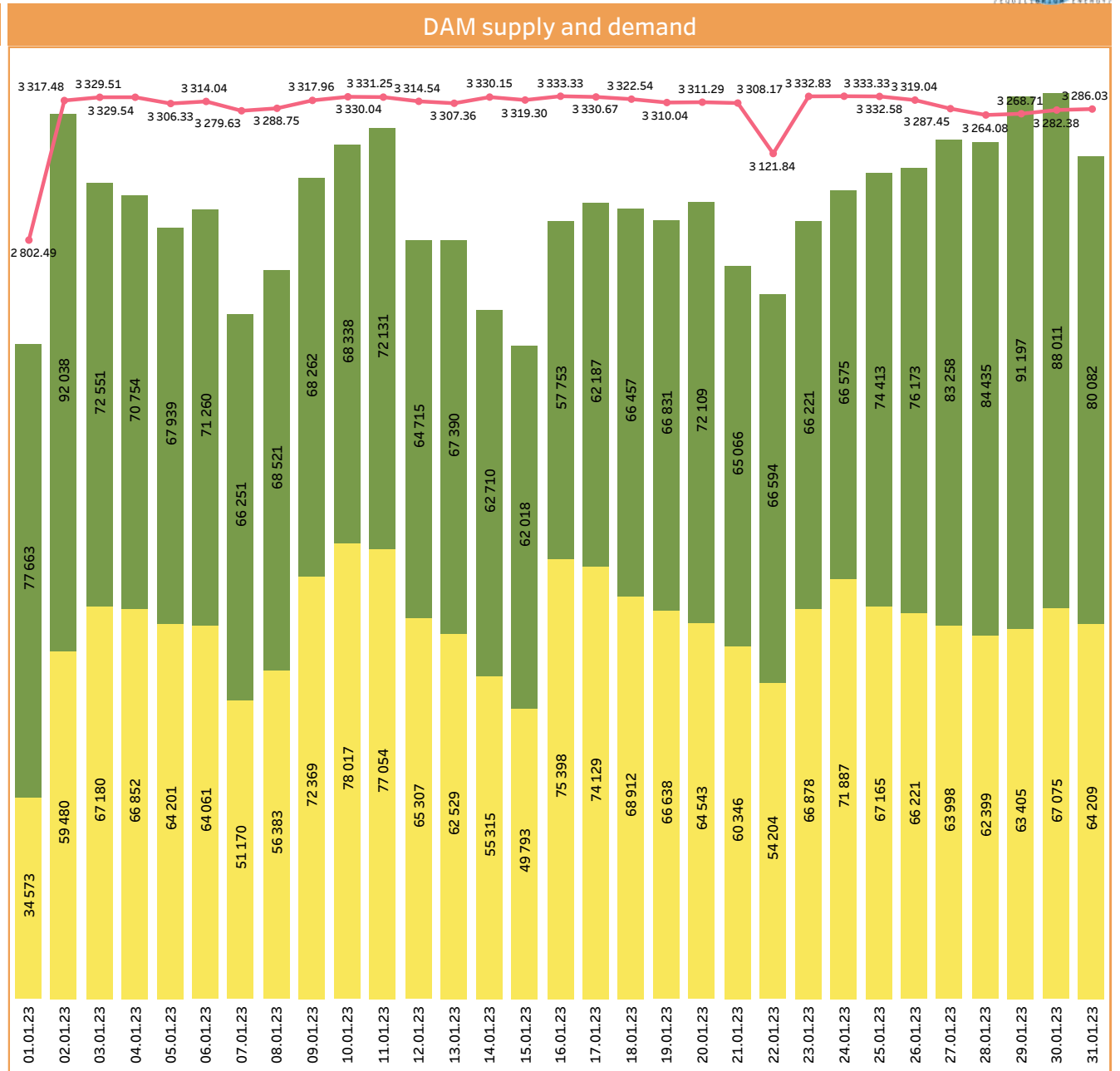
There are minimum price caps on the DAM:
 2 646,25 UAH/MWh (net of VAT)
 for hours of max. load (from 07:00 to 23:00),
 1 378,97 UAH/MWh (net of VAT)
 for hours of min. load (from 00:00 to 07:00 and from 23:00 to 24:00).

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 January 25, 2023, the available cross-border transmission capacity of electricity between Slovakia and Ukraine has increased to 600 MW (at the beginning of January 2023, the capacity of the Slovakia-Ukraine crossing was 200 MW).



DAM emphases	
DAM price (Product Base)	3 289.12 UAH/MWh
DAM price (Product Base) change	-0.04%
	-1.47 UAH/MWh
DAM traded volume	1 891 695 MWh
DAM traded volume change	+37.0%
	+511 112 MWh
Demand	1 981 689 MWh
Demand change	37.8%
	+543 982 MWh
Supply	2 219 902 MWh
Supply change	19.3%
	+358 710 MWh



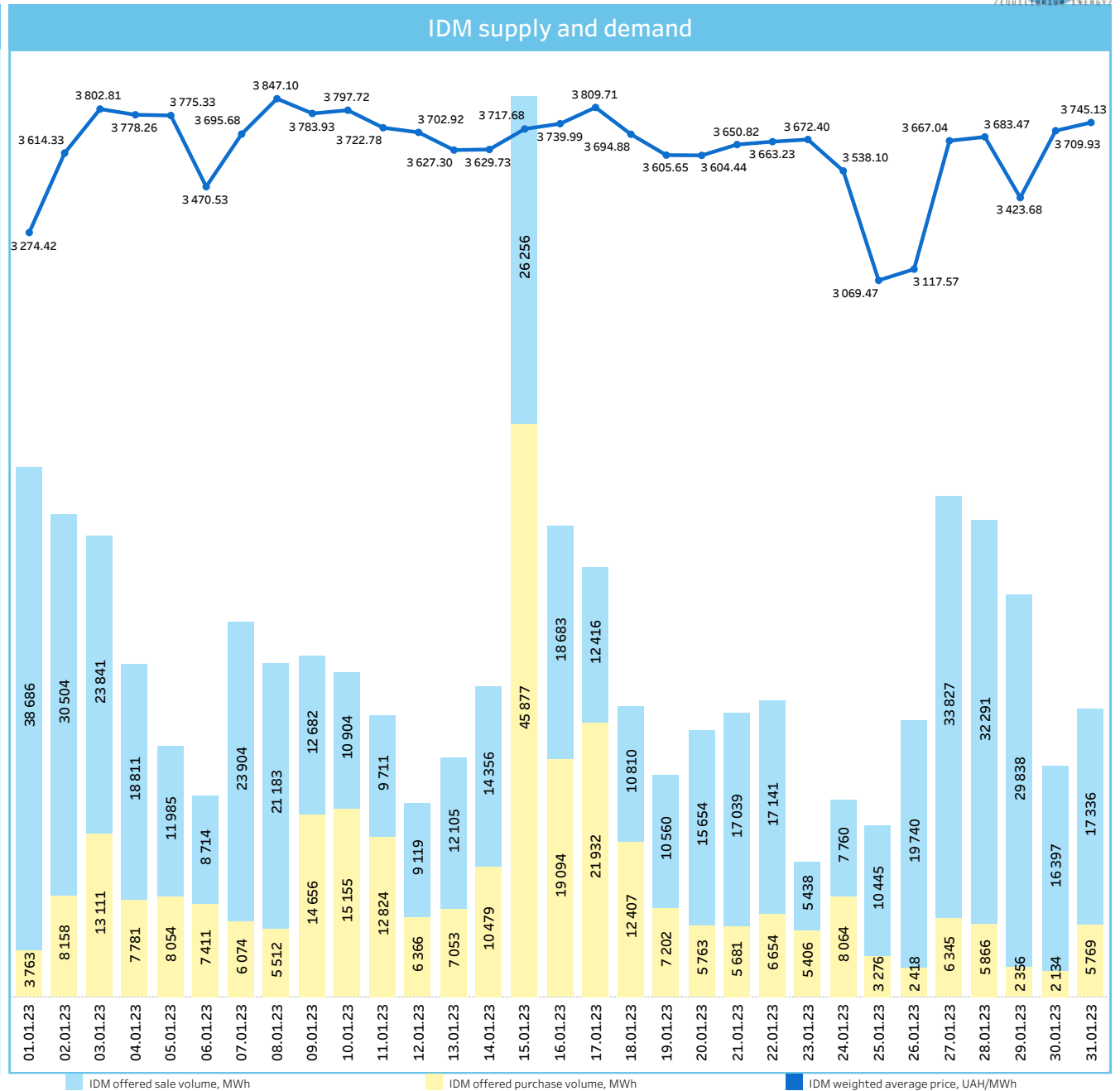
*Compared with December 2022 **all prices are net of VAT ***Ukraine's IPS data

DAM offered sale volume, MWh

DAM offered purchase volume, MWh

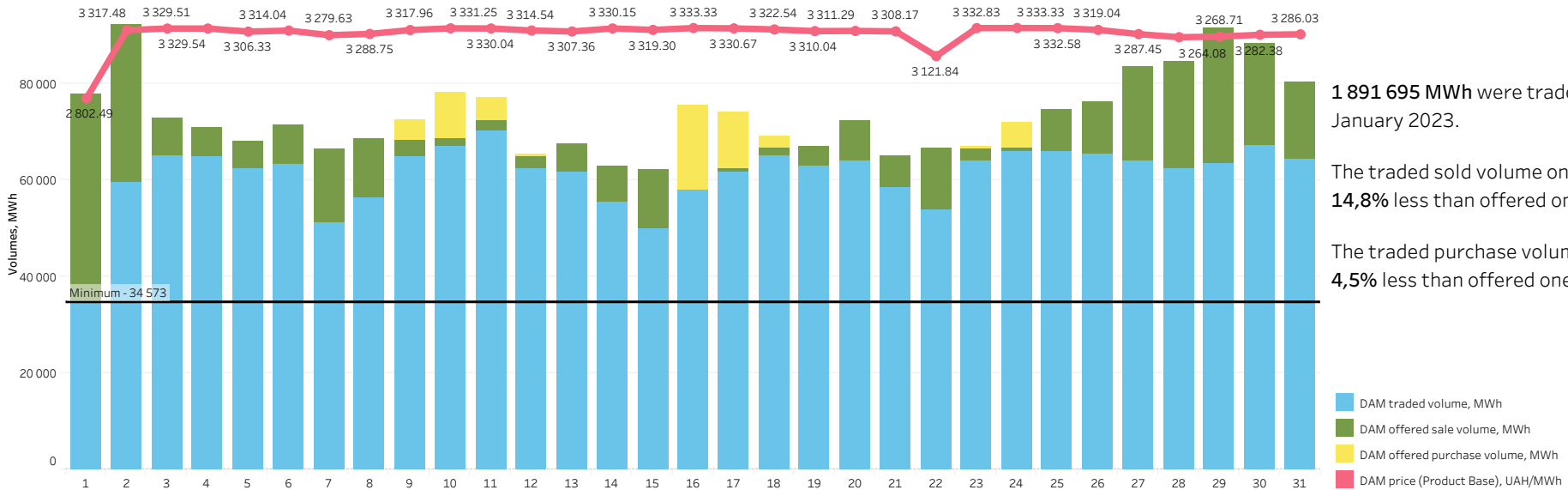
DAM price (Product Base), UAH/MWh

IDM emphases	
IDM weighted average price	3 684.26 UAH/MWh
IDM weighted average price change	5.8%
	+202.40 UAH/MWh
IDM traded volume	206 788 MWh
IDM traded volume change	-23.2%
	-62 531 MWh
Demand	292 641 MWh
Demand change	-6.3%
	-19 692 MWh
Supply	548 135 MWh
Supply change	-21.9%
	-153 319 MWh



*Compared with December 2022 **all prices are net of VAT ***Ukraine's IPS data

Prices, traded and offered volumes on the DAM

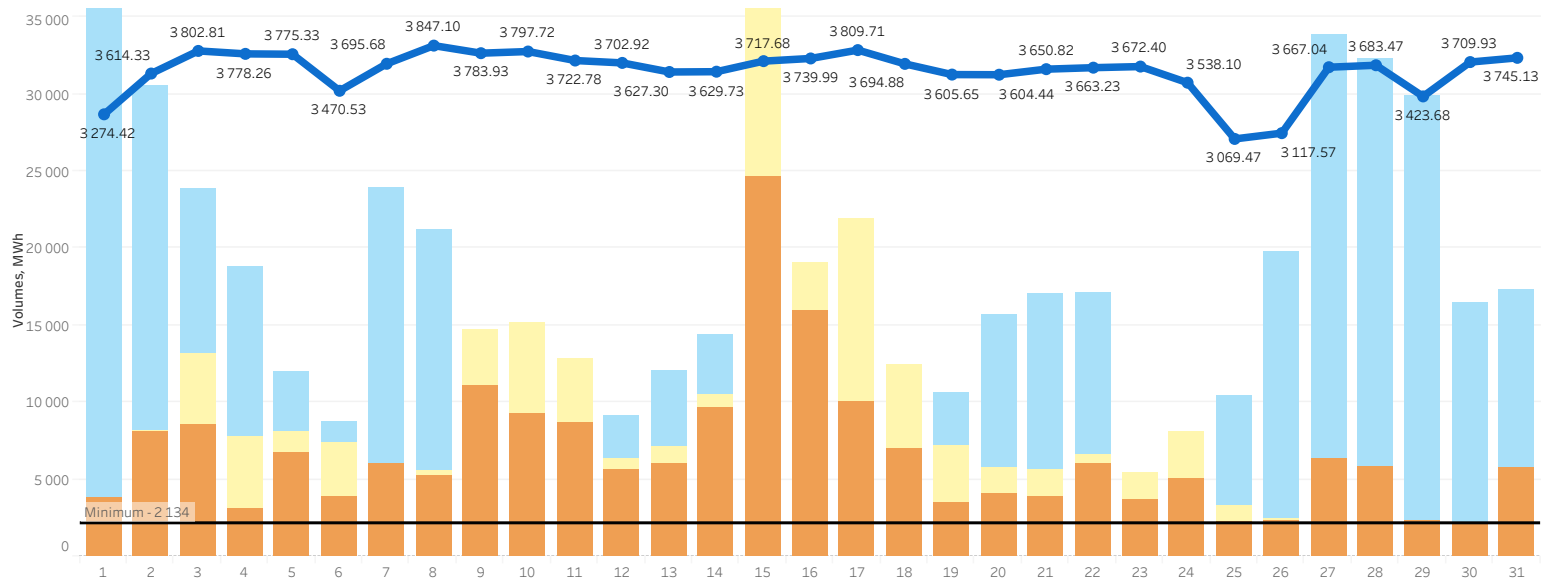


1 891 695 MWh were traded on the DAM in January 2023.

The traded sold volume on the DAM was 14,8% less than offered one for the January.

The traded purchase volume on the DAM was 4,5% less than offered one.

Prices, traded and offered volumes on the IDM



206 788 MWh were traded on the IDM in January 2023.

The traded sold volume on the IDM was 62,3% less than offered one for January.

The traded purchase volume on the IDM was 29,3% less than offered one.

- IDM traded volume, MWh
- IDM offered purchase volume, MWh
- IDM offered sale volume, MWh
- IDM weighted average price, UAH/MWh

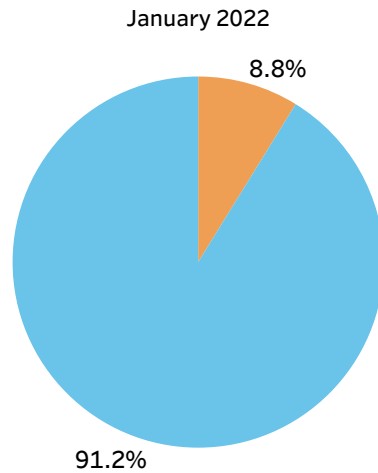
*all prices are net of VAT **IPS Ukraine data

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

The total traded volume of electricity within the two market segments amounted to **5 509 968 MWh** (IPS: 4 885 172 MWh, BEI: 624 796 MWh) in **January 2022**.

The share of the DAM was **91,2%** or **5 023 363 MWh** (IPS: 4 404 797 MWh, BEI: 620 566 MWh) in the total volume.

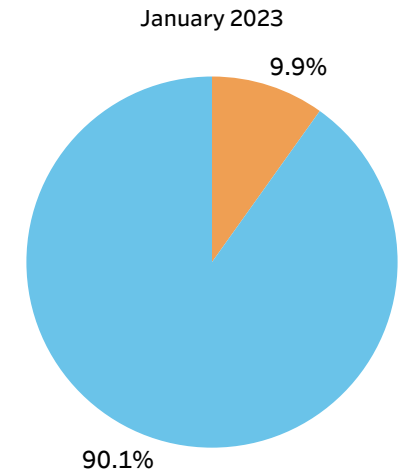
The share of the IDM was **8,8%** or **484 605 MWh** (IPS: 480 375 MWh, BEI: 4 230 MWh) in the total volume.



The total traded volume of electricity within the two market segments amounted to **2 098 483 MWh** in **January 2023**.

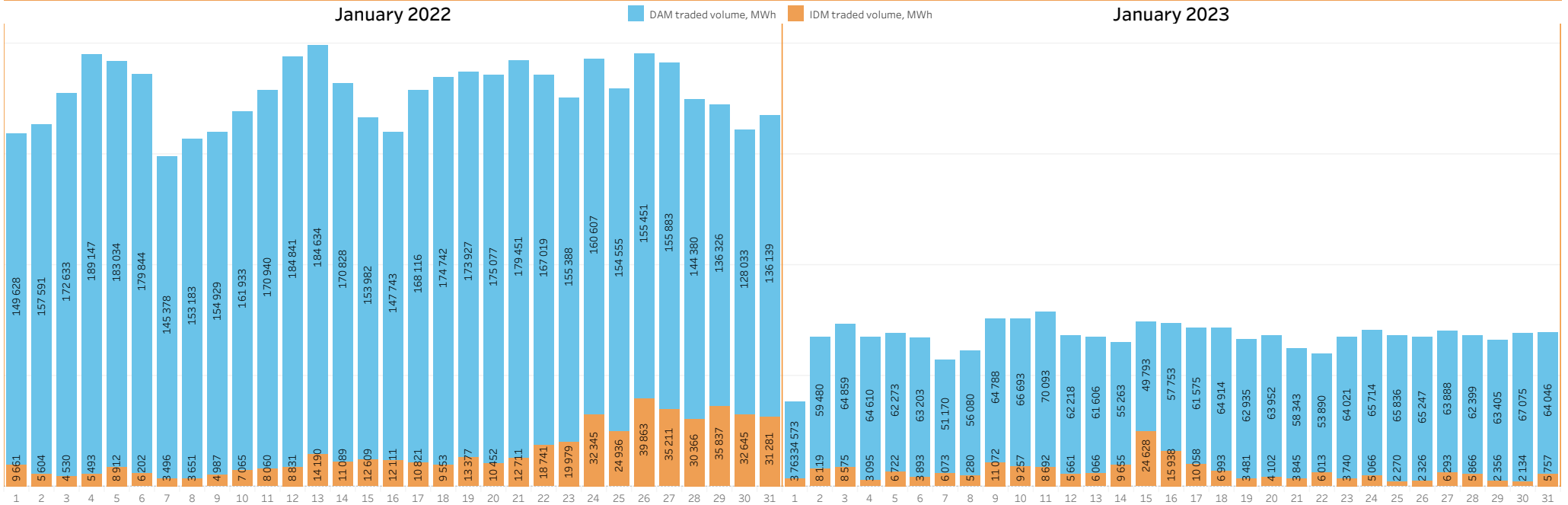
The share of the DAM was **90,1%** or **1 891 695 MWh** in the total volume.

The share of the IDM was **9,9%** or **206 788 MWh** in the total volume.



In January 2023 the total traded volume was **61,9%** or **3 411 485 MWh** less than the total traded volume in January 2022: on the DAM traded volume was **62,4%** or **3 133 668 MWh** lower, on the IDM traded volume was **57,3 %** or **277 817 MWh** higher.

Distribution of traded volumes



The difference between offered purchase and sales volumes on the DAM, MWh

Table with 31 columns (hour 01.01.23 to 31.01.23) and 24 rows (hour 1 to 24) showing the difference between offered purchase and sales volumes on the DAM in MWh. Values range from -380 to 236.

On the DAM the largest deficit of supply was recorded during the second decade of January.

The largest difference between the supply and demand on the DAM was recorded at 01 p.m. on January 1 and was fixed in amount of 3 011 MWh.

The difference between offered purchase and sales volumes on the IDM, MWh

Table with 31 columns (hour 01.01.23 to 31.01.23) and 24 rows (hour 1 to 24) showing the difference between offered purchase and sales volumes on the IDM in MWh. Values range from -1425 to 1034.

On the IDM the largest deficit of supply was recorded during the second decade of January.

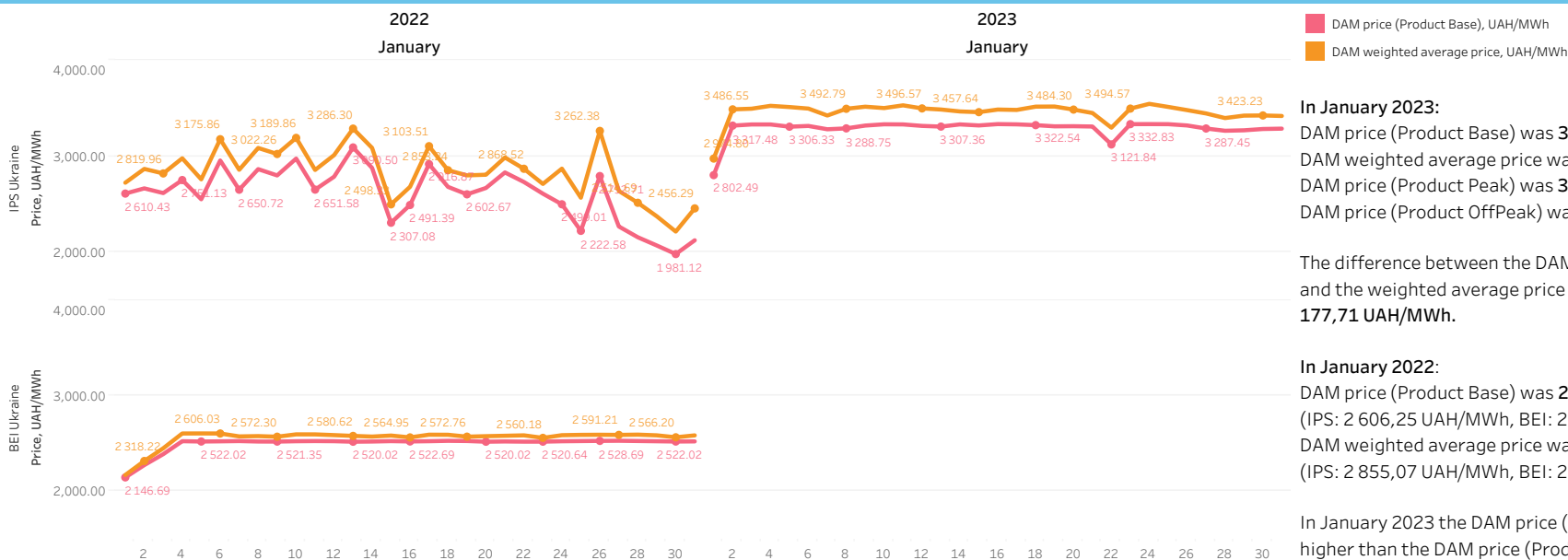
The largest difference between the supply and demand on the IDM was recorded at 5 p.m. on January 27 and was fixed in amount of 2 884 MWh.

*IPS Ukraine data

Red - an excess of the offered purchase volume over the offered sales volume. Green - an excess of the offered sales volume over the offered purchase volume.

Prices comparison for January 2022 and 2023

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



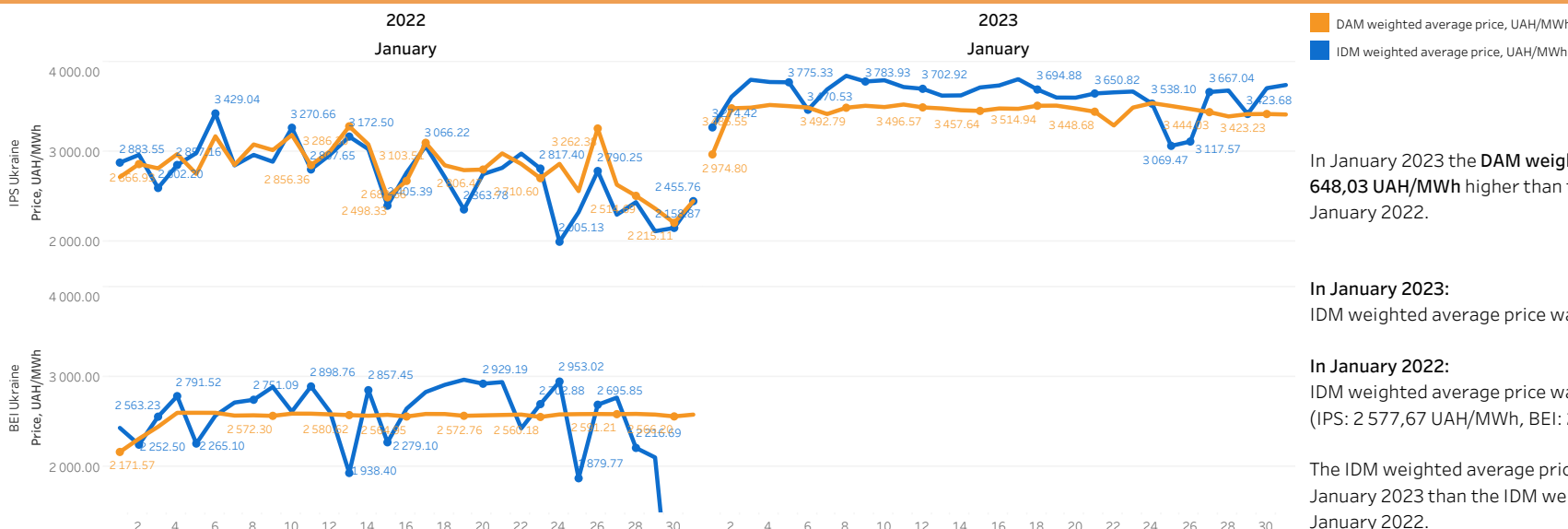
In January 2023:
 DAM price (Product Base) was **3 289,12 UAH/MWh**;
 DAM weighted average price was **3 466,83 UAH/MWh**;
 DAM price (Product Peak) was **3 956,76 UAH/MWh**;
 DAM price (Product OffPeak) was **2 621,48 UAH/MWh**.

The difference between the DAM price (Product Base) and the weighted average price on the DAM was **177,71 UAH/MWh**.

In January 2022:
 DAM price (Product Base) was **2 553,04 UAH/MWh** (IPS: 2 606,25 UAH/MWh, BEI: 2 499,84 UAH/MWh);
 DAM weighted average price was **2 818,80 UAH/MWh** (IPS: 2 855,07 UAH/MWh, BEI: 2 561,40 UAH/MWh).

In January 2023 the DAM price (Product Base) was **736,08 UAH/MWh** higher than the DAM price (Product Base) in January..

Weighted average prices comparison : on the DAM and IDM



In January 2023 the **DAM weighted average price** was **648,03 UAH/MWh** higher than the DAM weighted average price in January 2022.

In January 2023:
 IDM weighted average price was **3 684,26 UAH/MWh**.

In January 2022:
 IDM weighted average price was **2 577,42 UAH/MWh** (IPS: 2 577,67 UAH/MWh, BEI: 2 548,93 UAH/MWh).

The IDM weighted average price was **1 106,84 UAH/MWh** higher in January 2023 than the IDM weighted average price in January 2022.

*all prices are net of VAT

Hourly prices difference between the DAM and IDM prices, UAH/MWh

Table with 32 columns (hours 01.01.23 to 31.01.23) and 24 rows (days 1 to 24). Values range from -38.98 to 80.19.

The largest hourly price difference in January 2023 between the DAM and IDM prices was recorded at 11 p.m. on January 22 and amounted to 80 UAH/MWh.

The largest difference between price in the hour during this month was recorded at 4 a.m., 1 p.m. and 11 p.m. and avegely amounted to 24 UAH/MWh.

Hourly prices difference between the DAM and IDM prices, UAH/MWh

Table with 32 columns (hours 01.01.22 to 31.01.22) and 24 rows (days 1 to 24). Values range from -528.67 to 654.99.

The largest hourly price difference in January 2022 between the DAM and IDM prices was recorded at 6 p.m. on January 1 and amounted to 654,89 UAH/MWh.

The largest difference between price in the hour during this month was recorded at 4 a.m. and avegely amounted to 401 UAH/MWh.

*all prices are net of VAT

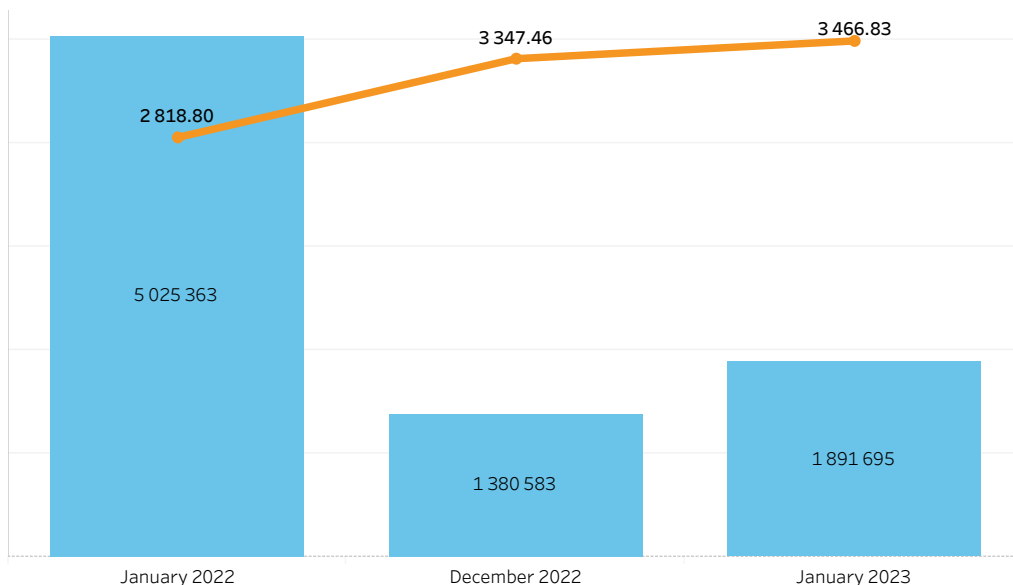
Weighted average prices and traded volumes on the DAM and on the IDM compared with the previous periods



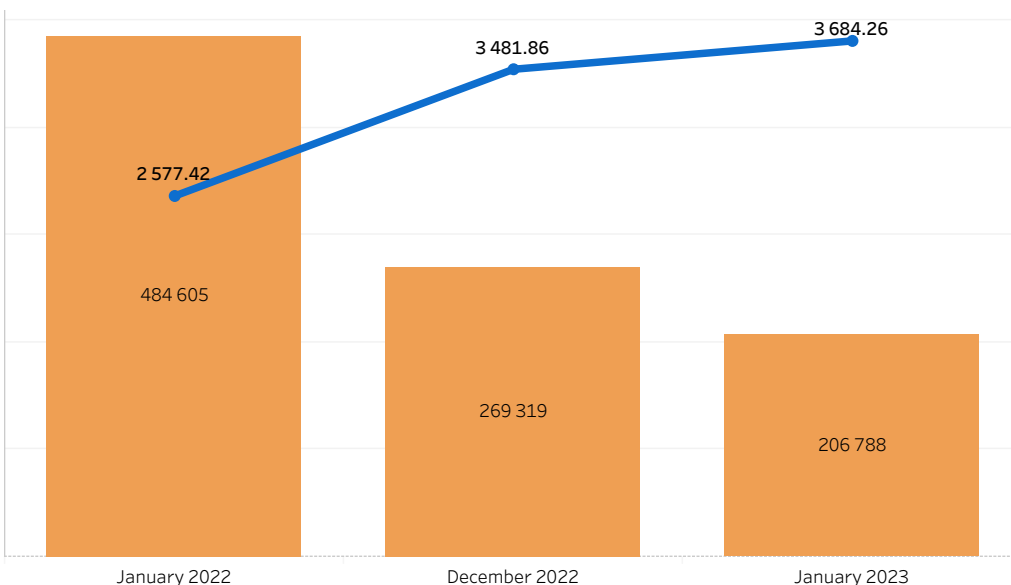
Indicator		January 2022	December 2022	January 2023
IPS Ukraine	DAM weighted average price, UAH/MWh	2 855.07	3 347.46	3 466.83
	DAM traded volume, MWh	4 404 797	1 380 583	1 891 695
	IDM weighted average price, UAH/MWh	2 577.67	3 481.86	3 684.26
	IDM traded volume, MWh	480 375	269 319	206 788
BEI Ukraine	DAM weighted average price, UAH/MWh	2 561.40	0	0
	DAM traded volume, MWh	620 566	0	0
	IDM weighted average price, UAH/MWh	2 548.93	0	0
	IDM traded volume, MWh	4 230	0	0
Total	DAM weighted average price, UAH/MWh	2 818.80	3 347.46	3 466.83
	DAM traded volume, MWh	5 025 363	1 380 583	1 891 695
	IDM weighted average price, UAH/MWh	2 577.42	3 481.86	3 684.26
	IDM traded volume, MWh	484 605	269 319	206 788

Indicator		1 decade of January 2023	2 decade of January 2023	3 decade of January 2023
DAM weighted average price, UAH/MWh		3 464.32	3 492.97	3 445.98
DAM traded volume, MWh		587 728	610 102	693 865
IDM weighted average price, UAH/MWh		3 715.55	3 705.41	3 595.02
IDM traded volume, MWh		65 850	95 274	45 665

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

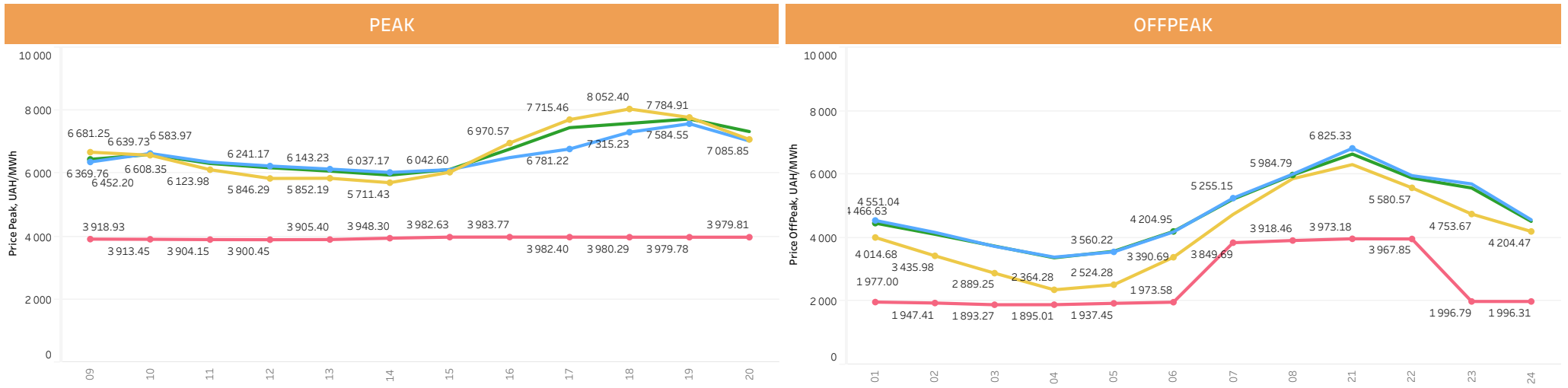


Weighted average prices and traded volumes on the IDM for the periods: January 2022, December 2022 and January 2023



*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: 3 289,12 UAH/MWh;
- Romania: 5 438,81 UAH/MWh;
- Slovak Republic: 5 764,68 UAH/MWh;
- Hungary: 5 850,53 UAH/MWh.

DAM prices (Product Peak) were amounted to*:

- Ukraine: 3 961,02 UAH/MWh;
- Romania: 6 648,68 UAH/MWh;
- Slovak Republic: 6 690,79 UAH/MWh;
- Hungary: 6 870,75 UAH/MWh.

DAM prices (Product OffPeak) were amounted to*:

- Ukraine: 2 617,23 UAH/MWh;
- Romania: 4 060,22 UAH/MWh;
- Slovak Republic: 4 838,57 UAH/MWh;
- Hungary: 4 830,31 UAH/MWh.

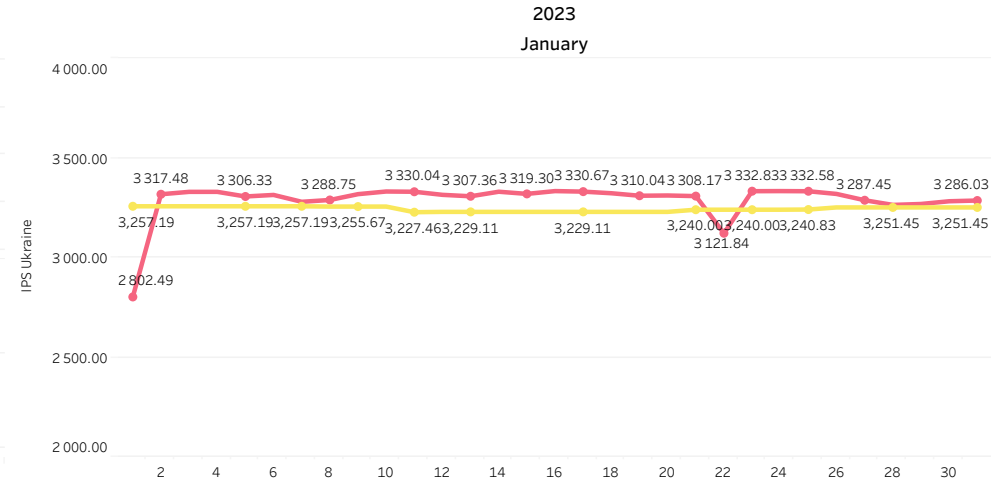
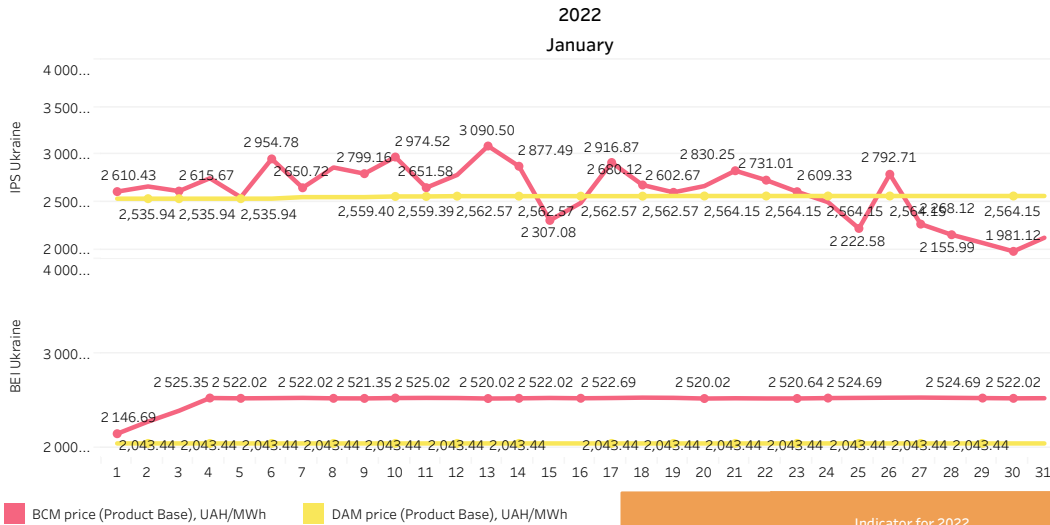
The DAM prices (Product Base) of Ukraine, Romania, Slovak Republic and Hungary



*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 January 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			2022			2023		
	DAM price (Product Base), UAH/MWh	BCM price (Product Base), UAH/MWh	Price difference, UAH/MWh	DAM price (Product Base), UAH/MWh	IPS Ukraine (Product Base), UAH/MWh	Price difference, UAH/MWh	DAM price (Product Base), UAH/MWh	BEI Ukraine (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	2 378.56	2 289.69	-88.87	2 610.43	2 535.94	-74.49	2 146.69	2 043.44	-103.25	2 802.49	3 257.19	+454.70
2	2 469.92	2 289.69	-180.23	2 664.49	2 535.94	-128.55	2 275.35	2 043.44	-231.91	3 317.48	3 257.19	-60.29
3	2 502.85	2 289.69	-213.16	2 615.67	2 535.94	-79.73	2 390.02	2 043.44	-346.58	3 329.51	3 257.19	-72.32
4	2 638.24	2 289.69	-348.55	2 751.13	2 535.94	-215.19	2 525.35	2 043.44	-481.91	3 329.54	3 257.19	-72.35
5	2 536.55	2 289.69	-246.86	2 551.07	2 535.94	-15.13	2 522.02	2 043.44	-478.58	3 306.33	3 257.19	-49.14
6	2 739.40	2 289.87	-449.53	2 954.78	2 536.31	-418.47	2 524.02	2 043.44	-480.58	3 314.04	3 257.19	-56.85
7	2 588.70	2 297.82	-290.89	2 650.72	2 552.20	-98.52	2 526.69	2 043.44	-483.25	3 279.63	3 257.19	-22.44
8	2 693.29	2 297.82	-395.48	2 864.57	2 552.20	-312.37	2 522.02	2 043.44	-478.58	3 288.75	3 255.67	-33.08
9	2 660.26	2 297.82	-362.44	2 799.16	2 552.20	-246.96	2 521.35	2 043.44	-477.91	3 317.96	3 255.67	-62.29
10	2 749.77	2 301.42	-448.35	2 974.52	2 559.40	-415.12	2 525.02	2 043.44	-481.58	3 331.25	3 255.67	-75.58
11	2 589.14	2 301.41	-287.72	2 651.58	2 559.39	-92.19	2 526.69	2 043.44	-483.25	3 330.04	3 227.46	-102.58
12	2 655.62	2 303.00	-352.62	2 785.89	2 562.57	-223.32	2 525.35	2 043.44	-481.91	3 314.54	3 229.11	-85.43
13	2 805.26	2 303.00	-502.26	3 090.50	2 562.57	-527.93	2 520.02	2 043.44	-476.58	3 307.36	3 229.11	-78.25
14	2 699.76	2 303.00	-396.75	2 877.49	2 562.57	-314.92	2 522.02	2 043.44	-478.58	3 330.15	3 229.11	-101.04
15	2 416.55	2 303.00	-113.55	2 307.08	2 562.57	+255.49	2 526.02	2 043.44	-482.58	3 319.30	3 229.11	-90.19
16	2 507.04	2 303.00	-204.04	2 491.39	2 562.57	+71.18	2 522.69	2 043.44	-479.25	3 333.33	3 229.11	-104.22
17	2 721.11	2 303.00	-418.11	2 916.87	2 562.57	-354.30	2 525.35	2 043.44	-481.91	3 330.67	3 229.11	-101.56
18	2 604.74	2 303.00	-301.73	2 680.12	2 562.57	-117.55	2 529.35	2 043.44	-485.91	3 322.54	3 229.11	-93.43
19	2 565.01	2 303.79	-261.22	2 602.67	2 564.15	-38.52	2 527.35	2 043.44	-483.91	3 310.04	3 229.11	-80.93
20	2 594.38	2 303.79	-290.59	2 668.74	2 564.15	-104.59	2 520.02	2 043.44	-476.58	3 311.29	3 229.11	-82.18
21	2 676.47	2 303.79	-372.68	2 830.25	2 564.15	-266.10	2 522.69	2 043.44	-479.25	3 308.17	3 240.00	-68.17
22	2 625.85	2 303.79	-322.05	2 731.01	2 564.15	-166.85	2 520.69	2 043.44	-477.25	3 121.84	3 240.00	+118.16
23	2 564.99	2 303.79	-261.19	2 609.33	2 564.15	-45.18	2 520.64	2 043.44	-477.20	3 332.83	3 240.00	-92.83
24	2 511.85	2 303.79	-208.06	2 499.01	2 564.15	+65.14	2 524.69	2 043.44	-481.25	3 333.33	3 240.00	-93.33
25	2 374.63	2 303.79	-70.84	2 222.58	2 564.15	+341.57	2 526.69	2 043.44	-483.25	3 332.58	3 240.83	-91.75
26	2 660.70	2 303.79	-356.91	2 792.71	2 564.15	-228.56	2 528.69	2 043.44	-485.25	3 319.04	3 251.45	-67.59
27	2 399.07	2 303.79	-95.27	2 268.12	2 564.15	+296.03	2 530.02	2 043.44	-486.58	3 287.45	3 251.45	-36.00
28	2 341.67	2 303.79	-37.87	2 155.99	2 564.15	+408.16	2 527.35	2 043.44	-483.91	3 264.08	3 251.45	-12.63
29	2 297.42	2 303.79	+6.38	2 070.15	2 564.15	+494.00	2 524.69	2 043.44	-481.25	3 268.71	3 251.45	-17.26
30	2 251.57	2 303.79	+52.23	1 981.12	2 564.15	+583.03	2 522.02	2 043.44	-478.58	3 282.38	3 251.45	-30.93
31	2 323.94	2 303.79	-20.15	2 124.53	2 564.15	+439.62	2 523.35	2 043.44	-479.91	3 286.03	3 251.45	-34.58
Average indicator	2 553.04	2 300.16	-252.88	2 606.25	2 556.88	-49.37	2 499.84	2 043.44	-456.40	3 289.12	3 244.08	-45.04

In January 2022:

DAM price (Product Base) was **2 553,04 UAH/MWh**
(IPS: 2 606,25 UAH/MWh; BEI: 2 499,84 UAH/MWh);

BCM price (Product Base) was **2 300,16 UAH/MWh**
(IPS: 2 556,88 UAH/MWh; BEI: 2 043,44 UAH/MWh).

The DAM price was **252,88 UAH/MWh** higher than the BCM price.

In January 2023:

DAM price (Product Base) was **3 289,12 UAH/MWh**;
BCM price (Product Base) was **3 244,08 UAH/MWh**.

The DAM price was **45,04 UAH/MWh** higher than the BCM 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(December) and the month of supply (January), for the purchase and sale of base load electricity for the month of supply (January 2022 and January 2023, respectively)

**all prices are net of VAT