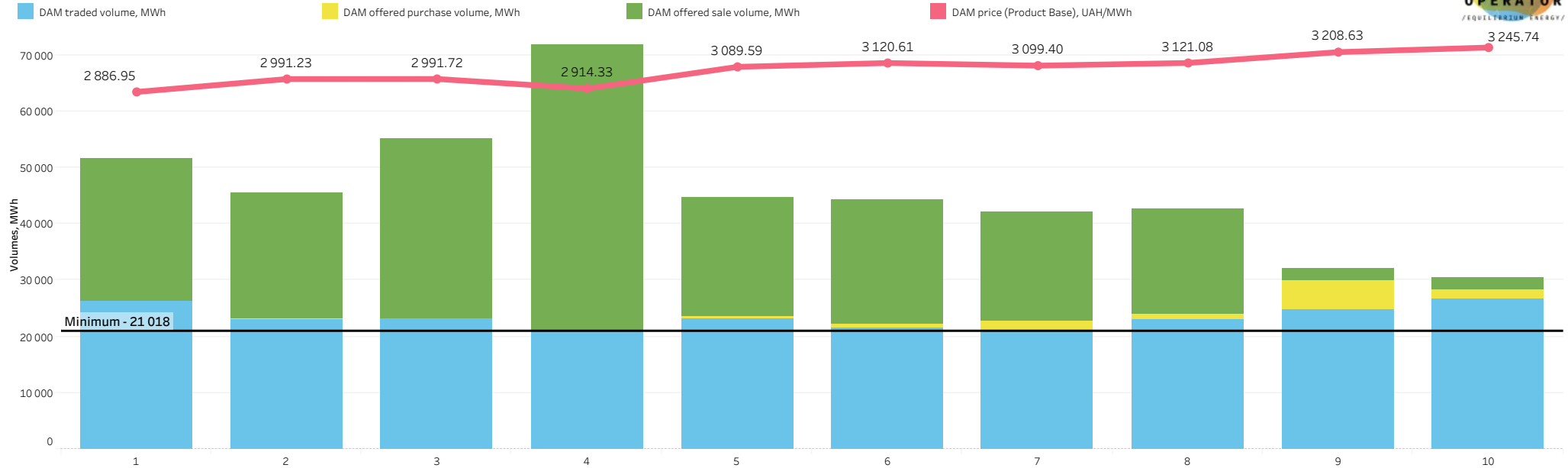




Comparative analysis of the market for 10 days of September 2022:

1. Analysis of the day-ahead market (DAM) operation;
2. Analysis of the intraday market (IDM) operation;
3. Comparative analysis of DAM prices in Ukraine, Romania, Slovak Republic and Hungary;
4. Comparative analysis of DAM and bilateral contracts market (BCM) prices.

Prices, traded and offered volumes on the DAM for the period: September 1-10, 2022



233 193 MWh were traded on the DAM in the first decade of September.

The largest traded volume of DAM was fixed in amount of 26 627 MWh on September 10 (Saturday),

and the smallest one - in amount of 21 018 MWh on September 7 (Wednesday).

The traded **sold** volume on the DAM was 49,4% less than offered one for the first 10 days of September 2022.

The traded **purchased** volume on the DAM was 4,6% less than offered one for the same period.

Date	DAM price (Product Base), UAH/MWh	DAM traded volume, MWh	DAM offered purchase volume, MWh	DAM offered sale volume, MWh	The difference between the DAM traded and offered purchase volume	The difference between the DAM traded and offered sale volume
September 1, 2022	2 886.95	26 148	26 148	51 536	0.0%	-49.3%
September 2, 2022	2 991.23	22 914	23 205	45 554	-1.3%	-49.7%
September 3, 2022	2 991.72	23 185	23 238	55 172	-0.2%	-58.0%
September 4, 2022	2 914.33	21 078	21 091	71 815	-0.1%	-70.6%
September 5, 2022	3 089.59	23 072	23 553	44 710	-2.0%	-48.4%
September 6, 2022	3 120.61	21 455	22 244	44 331	-3.5%	-51.6%
September 7, 2022	3 099.40	21 018	22 748	42 069	-7.6%	-50.0%
September 8, 2022	3 121.08	22 991	24 072	42 602	-4.5%	-46.0%
September 9, 2022	3 208.63	24 705	29 870	32 211	-17.3%	-23.3%
September 10, 2022	3 245.74	26 627	28 164	30 521	-5.5%	-12.8%
Total	3 066.93	233 193	244 333	460 522	-4.6%	-49.4%

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

Prices, traded and offered volumes on the IDM for the period: September 1-10, 2022

Date	IDM weighted average price, UAH/MWh	IDM traded volume, MWh	IDM offered purchase volume, MWh	IDM offered sale volume, MWh	The difference between the IDM traded and offered purchase volume	The difference between the IDM traded and offered sale volume
September 1, 2022	3 532.83	4 611	4 847	23 201	-4.9%	-80.1%
September 2, 2022	3 328.99	2 272	2 373	18 669	-4.3%	-87.8%
September 3, 2022	3 200.55	1 230	1 230	28 133	0.0%	-95.6%
September 4, 2022	3 274.13	574	574	33 809	0.0%	-98.3%
September 5, 2022	3 345.19	943	944	12 879	-0.1%	-92.7%
September 6, 2022	2 864.99	1 302	1 325	18 033	-1.8%	-92.8%
September 7, 2022	3 103.66	2 810	2 895	18 431	-2.9%	-84.8%
September 8, 2022	3 240.41	1 376	1 499	16 899	-8.2%	-91.9%
September 9, 2022	3 756.00	4 574	5 812	8 331	-21.3%	-45.1%
September 10, 2022	3 552.14	1 956	2 108	3 425	-7.2%	-42.9%
Total	3 411.97	21 646	23 608	181 810	-8.3%	-88.1%

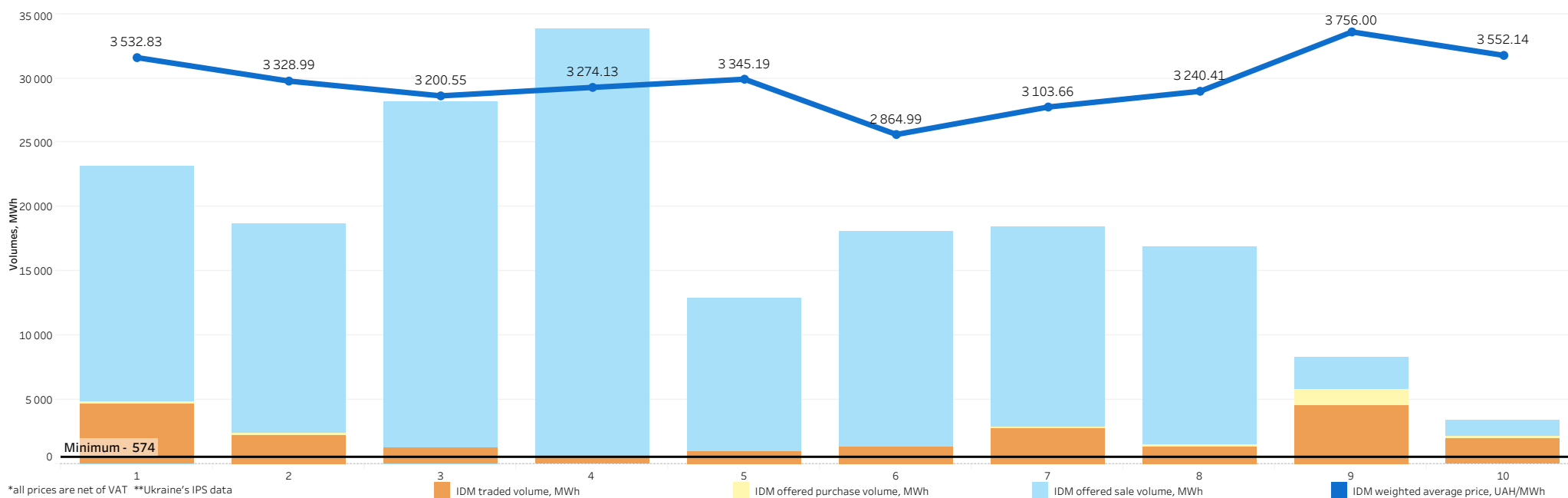
21 646 MWh were traded on the IDM in the first decade of September.

The largest traded volume of IDM was fixed in amount of 4 611 MWh on September 1 (Thursday),

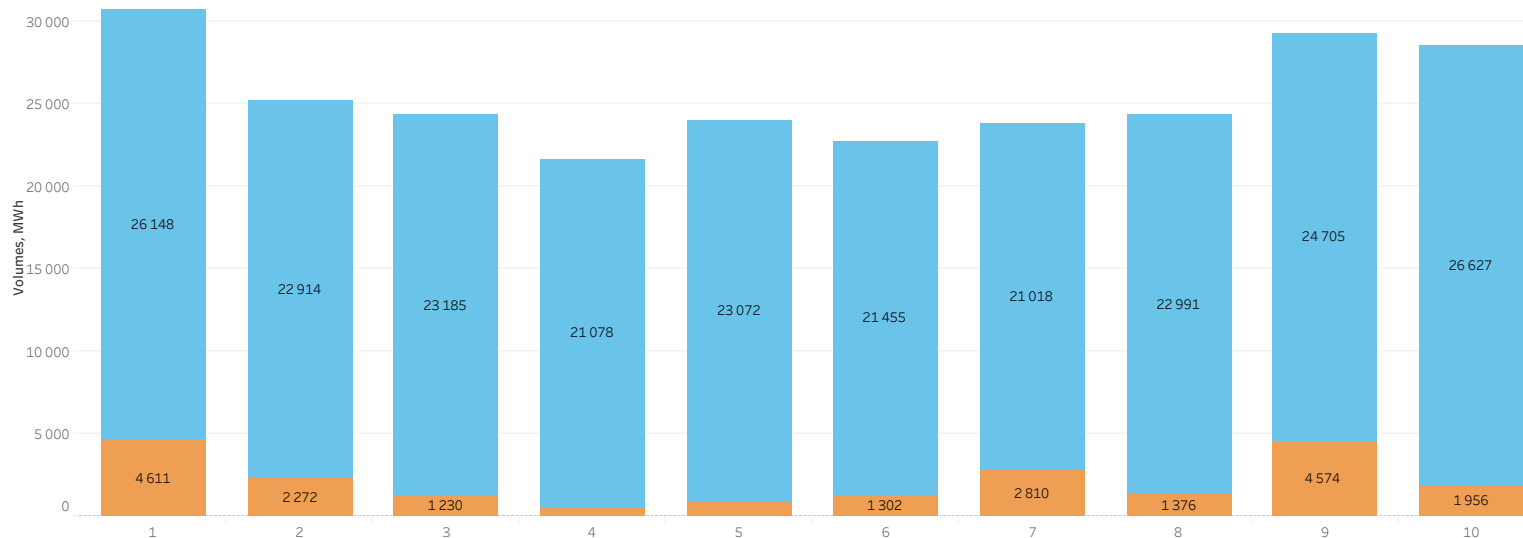
and the smallest one - in amount of 574 MWh on September 4 (Sunday).

The traded sold volume on the IDM was 88,1% less than offered one for the first 10 days of September 2022.

The traded purchased volume on the IDM was 8,3% less than offered one for the same period.



Distribution of traded volumes on the DAM and on the IDM



The total traded amount of electricity within the two market segments amounted to **254 839 MWh** in the first decade of September 2022.

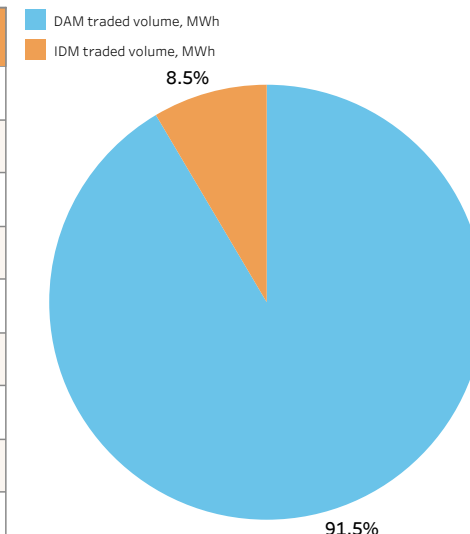
The share of the **DAM** was **91,5 %** or **233 193 MWh** in the total volume,

while the share of the **IDM** was almost **8,5%** or **21 646 MWh**.

The largest traded volume within the two market segments was fixed in amount of **30 759 MWh** on **September 1 (Thursday)**, as well as the smallest one - in amount of **21 652 MWh** on **September 4 (Sunday)**.

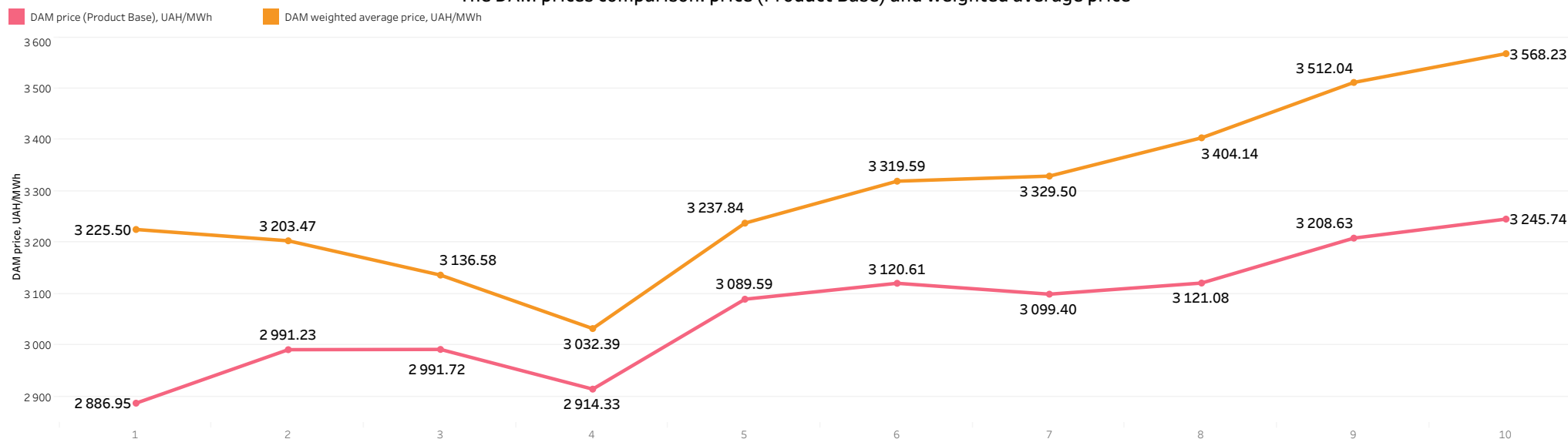
Volumes on the DAM and on the IDM

Date	Total volume, MWh	DAM traded volume, MWh	The share of the DAM volume in the total volume	IDM traded volume, MWh	The share of the IDM volume in the total volume
September 1, 2022	30 759	26 148	85.0%	4 611	15.0%
September 2, 2022	25 185	22 914	91.0%	2 272	9.0%
September 3, 2022	24 415	23 185	95.0%	1 230	5.0%
September 4, 2022	21 652	21 078	97.3%	574	2.7%
September 5, 2022	24 015	23 072	96.1%	943	3.9%
September 6, 2022	22 757	21 455	94.3%	1 302	5.7%
September 7, 2022	23 828	21 018	88.2%	2 810	11.8%
September 8, 2022	24 366	22 991	94.4%	1 376	5.6%
September 9, 2022	29 279	24 705	84.4%	4 574	15.6%
September 10, 2022	28 582	26 627	93.2%	1 956	6.8%
Total	254 839	233 193	91.5%	21 646	8.5%



The DAM prices for the period: September 1-10, 2022

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



The DAM prices

Date	DAM price (Product Base), UAH/MWh	Comparison of the DAM price with the previous day	DAM weighted average price, UAH/MWh	The difference between the DAM weighted average price and the DAM price (Product Base), UAH/MWh	DAM price (Product Peak), UAH/MWh	DAM price (Product OffPeak), UAH/MWh
September 1, 2022	2 886.95	-7.7%	3 225.50	+338.55	3 487.33	2 286.57
September 2, 2022	2 991.23	3.6%	3 203.47	+212.24	3 502.45	2 480.00
September 3, 2022	2 991.72	0.0%	3 136.58	+144.86	3 496.00	2 487.44
September 4, 2022	2 914.33	-2.6%	3 032.39	+118.06	3 307.77	2 520.89
September 5, 2022	3 089.59	6.0%	3 237.84	+148.25	3 564.67	2 614.52
September 6, 2022	3 120.61	1.0%	3 319.59	+198.98	3 628.06	2 613.16
September 7, 2022	3 099.40	-0.7%	3 329.50	+230.10	3 547.67	2 651.12
September 8, 2022	3 121.08	0.7%	3 404.14	+283.06	3 610.92	2 631.24
September 9, 2022	3 208.63	2.8%	3 512.04	+303.41	3 755.83	2 661.44
September 10, 2022	3 245.74	1.2%	3 568.23	+322.49	3 842.29	2 649.18
Average indicator	3 066.93		3 303.40	+236.47	3 574.30	2 559.56

For the period of September 1-10, 2022:

DAM price (Product Base) was **3 066,93 UAH/MWh**,
 DAM weighted average price was **3 303,40 UAH/MWh**,
 DAM price (Product Peak) was **3 574,30 UAH/MWh**,
 DAM price (Product OffPeak) was **2 559,56 UAH/MWh**,

The highest price of the DAM (Product Base) was fixed in amount of **3 245,74 UAH/MWh** on **September 10 (Saturday)**, and the lowest one - in amount of **2 886,95 UAH/MWh** on **September 1 (Thursday)**.

The highest weighted average price on the DAM was fixed in amount of **3 568,23 UAH/MWh** on **September 6 (Saturday)**, and the lowest one - in amount of **3 032,39 UAH/MWh** on **September 8 (Sunday)**.

The difference between the weighted average price on the DAM and the DAM (Product Base) was **236,47 UAH/MWh** in the first decade of **September 2022**.

The DAM and IDM prices comparison for the period: September 1-10, 2022



The largest difference in the hour between weighted average price on the IDM and on the DAM price (Product Base) was recorded on 4 p.m. **September 10** and amounted to **295,12 UAH/MWh**.

The difference between hourly prices: the DAM price (Product Base) and weighted average price of the IDM, UAH/MWh

Date	Timeline (hour)																							
	1	2	3	4	5	6	7	8	9	10	11	12	13	14	15	16	17	18	19	20	21	22	23	24
01.09.2022	-2.22	-37.00	-27.58	-27.58	-27.58	-27.58	-2.13	-52.93	-69.00	-67.60	-67.60	-67.60	-67.60	-67.60	-67.60	-67.60	-81.59	-73.80	-75.68	-50.00	-50.00	-79.52	-71.99	0.00
02.09.2022		-2.53	-3.69	-3.92	-3.43	-27.58	-0.75	-52.93	-67.00	-68.00	-68.00	-68.00	-68.00	-68.00	-68.00	-68.00	-69.00	-71.90	-77.66	-48.60	-43.89	-49.69	-76.92	0.00
03.09.2022	-3.76	-3.26	-3.86	-3.51	-3.87	-5.00	-5.00	-52.93	-68.00	-68.00	-68.00	-68.60	-68.60	-68.60	-68.60	-68.60	-68.60	-69.60	-76.92	-76.92	-76.92	-76.92	-70.80	-0.69
04.09.2022	-10.00	-2.54	-10.00	-3.93	-3.78	-2.66	-10.00	-52.93	-52.93	-67.00	-67.00	-64.00	-64.00	-64.00	-64.00	-64.00	-66.50	-67.00	-75.92	-77.52	-45.96	-45.22	-74.78	-0.49
05.09.2022	-3.74	-3.70	-3.88	-3.66	-3.79	0.00	0.00	-69.00	-69.00	-69.00	-69.00	-69.00	-69.00	-69.00	-69.00	-69.00	-69.00	-75.60	-27.00	-27.00	0.00	-27.00	-30.00	0.00
06.09.2022	-2.78	-2.87	-3.16	-3.25	-2.88	0.00	0.00	-69.60	-71.00	-68.11	-68.60	-71.00	-71.00	-71.00	-71.00	-72.40	-72.66	-75.60	-40.80	-40.56	-20.00	-42.44	-44.72	0.00
07.09.2022	-3.52	0.00	0.00	0.00	0.00	0.00	0.00	-106.27	-68.02	-68.02	-68.02	-68.02	-68.02	-68.02	-68.02	-68.02	-70.00	-77.60	-13.00	-3.00	0.00	-1.00	-21.00	0.00
08.09.2022	-3.55	0.00	-3.60	-3.99	-3.98	0.00		-72.80	-72.80	-71.00	-70.78	-70.14	-70.14	-70.14	-70.78	-70.78	-69.74	-71.00	-31.00	-3.00	0.00	-1.00	-49.00	0.00
09.09.2022	0.00	-3.72	-3.09	-3.66	-3.30	0.00	0.00	0.00	0.00	-77.27	-72.60	-72.60	-72.60	-72.60	-72.34	-72.34	-202.78	-98.05	0.00	0.00	0.00	0.00	-49.00	0.00
10.09.2022	0.00	-3.16	-5.00	-3.65	-39.00	0.00	-3.47	-78.01	0.00	0.00	0.00	-284.86	-72.00	-74.46	-221.06	-295.12	0.00	-43.18	-13.00	0.00	0.00	0.00	-45.00	0.00

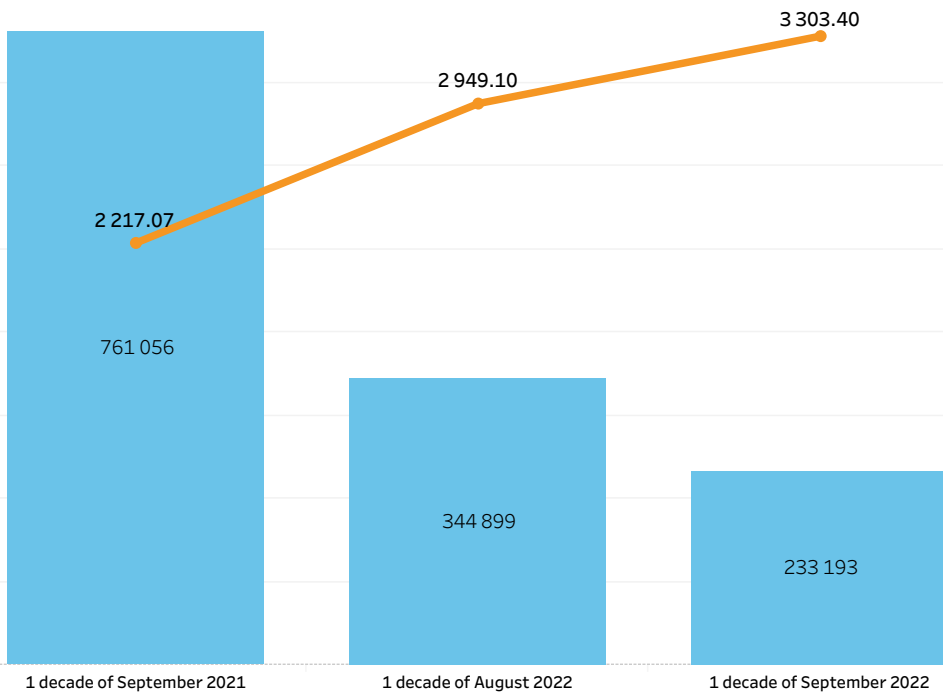
*all prices are net of VAT **Ukraine's IPS data

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

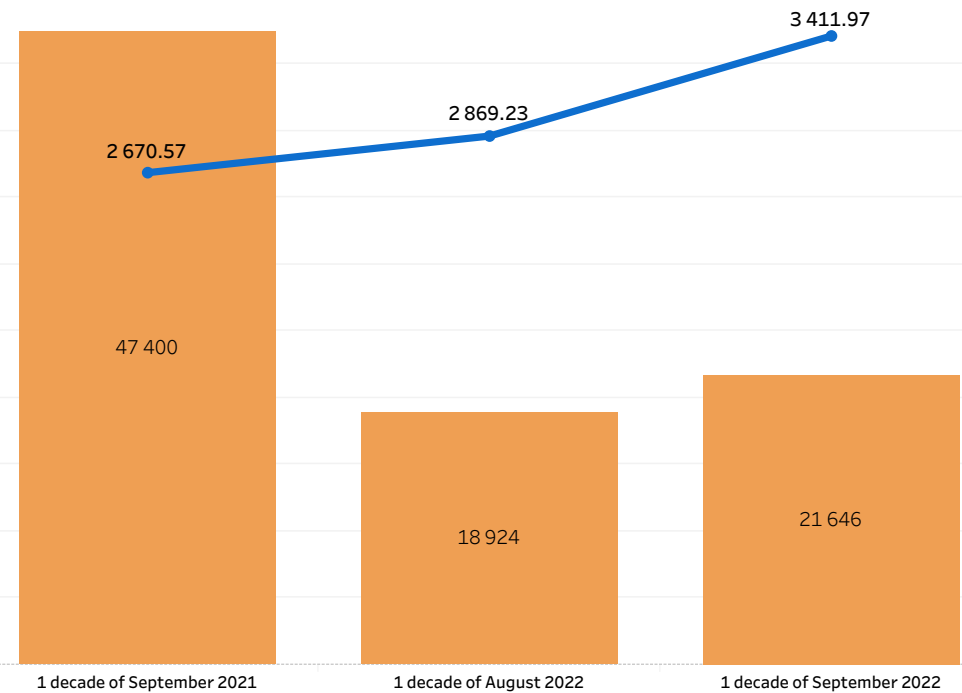


Indicator	1 decade of September 2021	1 decade of August 2022	1 decade of September 2022
DAM weighted average price, UAH/MWh	2 217.07	2 949.10	3 303.40
DAM traded volume, MWh	761 056	344 899	233 193
IDM weighted average price, UAH/MWh	2 670.57	2 869.23	3 411.97
IDM traded volume, MWh	47 400	18 924	21 646

Weighted average prices and traded volumes on the DAM for the periods:
September 2021, 1-10; August 2022, 1-10; September 2022, 1-10



Weighted average prices and traded volumes on the IDM for the periods:
September 2021, 1-10; August 2022, 1-10; September 2022, 1-10



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

The DAM prices of Ukraine, Romania, Slovak Republic and Hungary for the period: September 1-10, 2022



The DAM prices (Product Base)*

Date	Ukraine DAM price (Product Base), UAH/MWh	Romania DAM price (Product Base), UAH/MWh	Slovak Republic DAM price (Product Base), UAH/MWh	Hungary DAM price (Product Base), UAH/MWh
September 1, 2022	2 886.91	21 685.36	22 484.70	22 655.47
September 2, 2022	2 991.21	16 837.72	17 701.52	18 064.09
September 3, 2022	2 991.46	13 211.95	12 821.97	13 097.24
September 4, 2022	2 914.59	11 470.37	11 163.65	11 356.31
September 5, 2022	3 089.63	16 368.80	16 346.03	16 437.91
September 6, 2022	3 120.58	19 346.26	19 393.57	19 409.34
September 7, 2022	3 099.39	15 711.02	17 528.60	17 551.46
September 8, 2022	3 121.23	13 725.92	17 508.56	17 465.85
September 9, 2022	3 208.63	11 064.68	13 878.01	13 912.39
September 10, 2022	3 245.74	14 817.85	14 817.85	14 817.85
Average indicator	3 066.94	15 423.99	16 364.45	16 476.79

The DAM prices comparison to the previous day*

Date	DAM price comparison to the previous day, Ukraine	DAM price comparison to the previous day, Romania	DAM price comparison to the previous day, Slovak Republic	DAM price comparison to the previous day, Hungary
September 1, 2022	-7.7%	-13.2%	-8.6%	-10.3%
September 2, 2022	3.6%	-22.4%	-21.3%	-20.3%
September 3, 2022	0.0%	-21.5%	-27.6%	-27.5%
September 4, 2022	-2.6%	-13.2%	-12.9%	-13.3%
September 5, 2022	6.0%	42.7%	46.4%	44.7%
September 6, 2022	1.0%	18.2%	18.6%	18.1%
September 7, 2022	-0.7%	-18.8%	-9.6%	-9.6%
September 8, 2022	0.7%	-12.6%	-0.1%	-0.5%
September 9, 2022	2.8%	-19.4%	-20.7%	-20.3%
September 10, 2022	1.2%	33.9%	6.8%	6.5%

For the period of September 1-10, 2022:

the DAM of **Ukraine**: the highest price was fixed in amount of **3 245,74 UAH/MWh** on **September 10**, the lowest one - in amount of **2 886,91 UAH/MWh** on **September 1**;

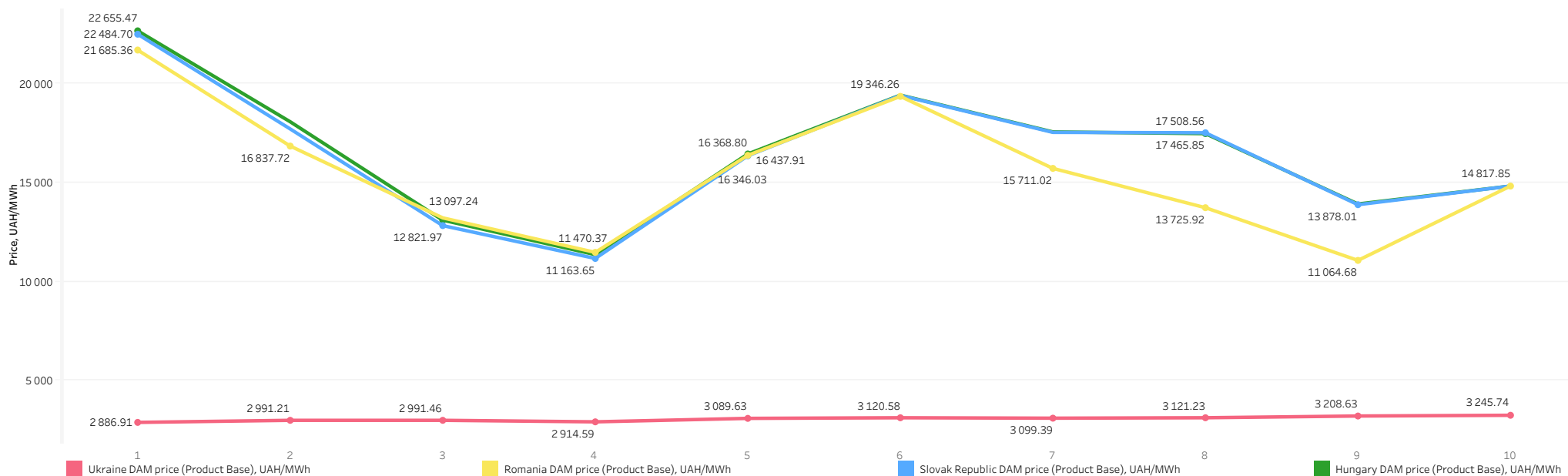
the DAM of **Romania**: the highest price was fixed in amount of **21 685,36 UAH/MWh** on **September 1**, the lowest one - in amount of **11 064,68 UAH/MWh** on **September 9**;

the DAM of **Slovak Republic**: the highest price was fixed in amount of **22 484,70 UAH/MWh** on **September 1**, the lowest one - in amount of **11 163,65 UAH/MWh** on **September 4**;

the DAM of **Hungary**: the highest price was fixed in amount of **22 655,47 UAH/MWh** on **September 1**, the lowest one - in amount of **11 356,31 UAH/MWh** on **September 4**.

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

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



The DAM and the BCM prices for the period: September 1-10, 2022



The DAM and the BCM prices

Date	DAM price (Product Base), UAH/MWh	BCM price (Product Base), UAH/MWh	Price difference, UAH/MWh
September 1, 2022	2 886.95	2 568.75	-318.20
September 2, 2022	2 991.23	2 568.75	-422.48
September 3, 2022	2 991.72	2 568.75	-422.97
September 4, 2022	2 914.33	2 568.75	-345.58
September 5, 2022	3 089.59	2 568.75	-520.84
September 6, 2022	3 120.61	2 568.75	-551.86
September 7, 2022	3 099.40	2 568.75	-530.64
September 8, 2022	3 121.08	2 568.75	-552.33
September 9, 2022	3 208.63	2 568.75	-639.88
September 10, 2022	3 245.74	2 568.75	-676.99
Average indicator	3 066.93	2 568.75	-498.18

For the period of September 1-10, 2022 the DAM price was **498,18 UAH/MWh** higher than the BCM price.

The highest price difference was fixed in amount of **676,99 UAH/MWh** on **September 10**,

the lowest one - in amount of **318,20 UAH/MWh** on **September 1**.

*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 (August) and the month of supply (September), for the purchase and sale of base load electricity for the month of supply (September 2022, respectively)

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

