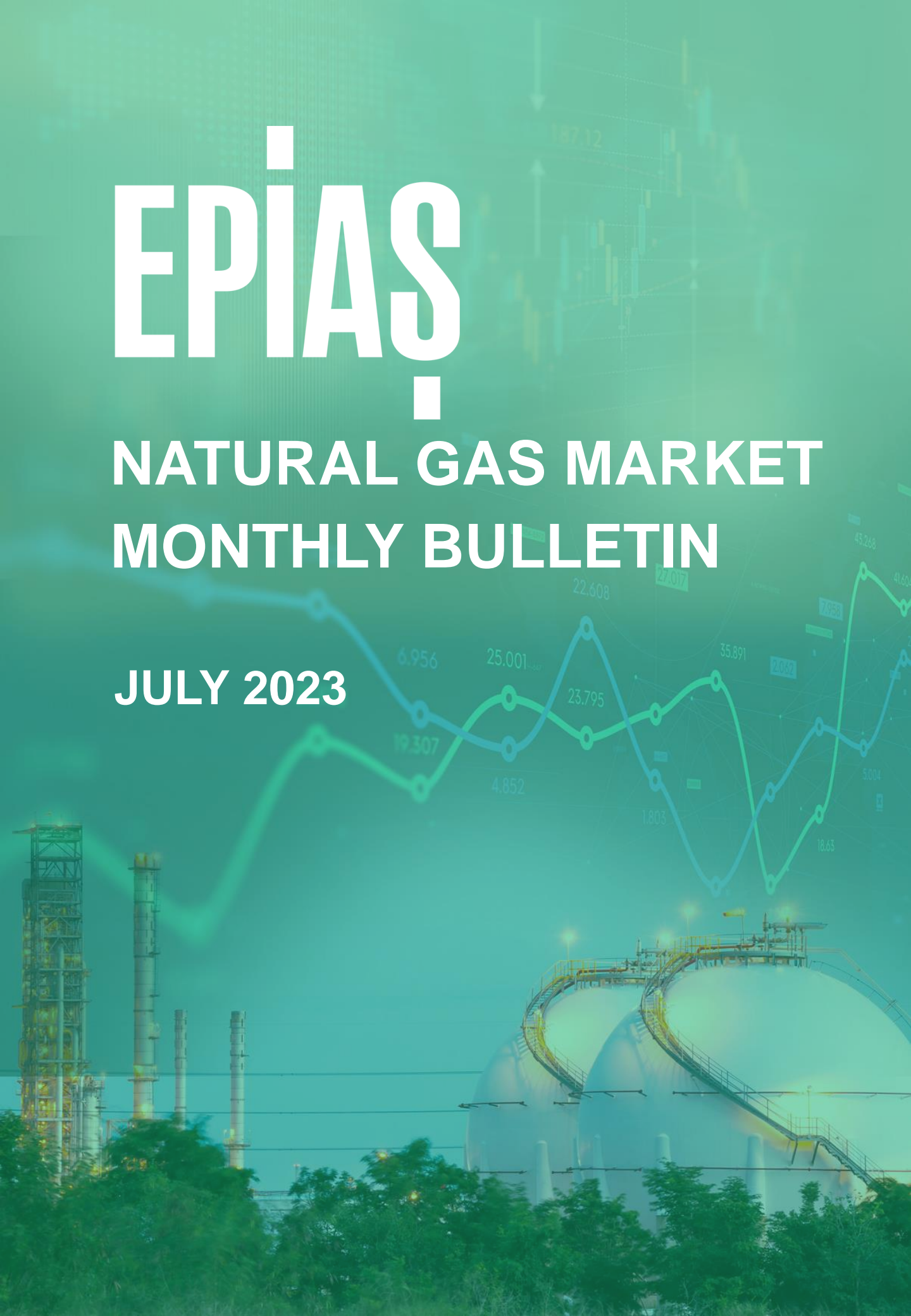


EPIAS

NATURAL GAS MARKET MONTHLY BULLETIN

JULY 2023



SUMMARY DATA (1/2)

Arithmetic Means

	July 2023	June 2023	Monthly Change	July 2022	Annual Change
Number of Ordered Participants	8	8	-7.6%	8	0.9%
Number of Trades	9	10	-11.0%	4	94.1%
Number of Orders	19	21	-8.2%	15	24.1%
BGSP (TL/'000 Sm ³)	9.019	8.118	11.1%	12.606	-28.5%
DRP (TL/'000 Sm ³)	9.494	8.546	11.1%	13.023	-27.1%
BGPP (TL/'000 Sm ³)	9.969	8.973	11.1%	13.414	-25.7%
Traded Volume (mio.Sm ³)	3,50	4,23	-17.2%	3,68	-4.8%
Transaction Volume (TL)	33.100.055	36.905.074	-10.3%	47.155.078	-29.8%
Gas Entry Volume (mio.Sm ³)	98,81	78,04	26.6%	107,06	-7.7%
Gas Exit Volume (mio.Sm ³)	98,46	78,41	25.6%	107,07	-8.0%
WRP (TL/'000 Sm ³)	-	-	-	-	-

Maximum / Minimum Levels

	July 2023		June 2023		July 2022	
	Max	Min	Max	Min	Max	Min
Number of Trades	15	3	17	4	10	1
Number of Ordered Participants	10	5	10	6	10	3
Number of Orders	35	10	38	10	29	5
BGSP (TL/'000 Sm ³)	9.547	8.740	8.716	7.589	17.500	12.147
DRP (TL/'000 Sm ³)	10.049	9.200	9.174	7.989	18.900	12.523
BGPP (TL/'000 Sm ³)	10.552	9.660	9.633	8.388	19.467	12.899
Traded Volume (mio.Sm ³)	8,81	0,75	9,86	0,44	14,25	0,01
Transaction Volume (TL)	81.262.365	7.090.346	87.445.400	3.520.589	183.799.389	189.000
Gas Exit Volume (mio.Sm ³)	115,06	52,83	108,09	40,26	142,31	59,01
Gas Entry Volume (mio.Sm ³)	113,72	52,72	113,72	39,56	146,98	55,44
WRP (TL/'000 Sm ³)	-	-	-	-	-	-

SUMMARY DATA (2/2)

Totals

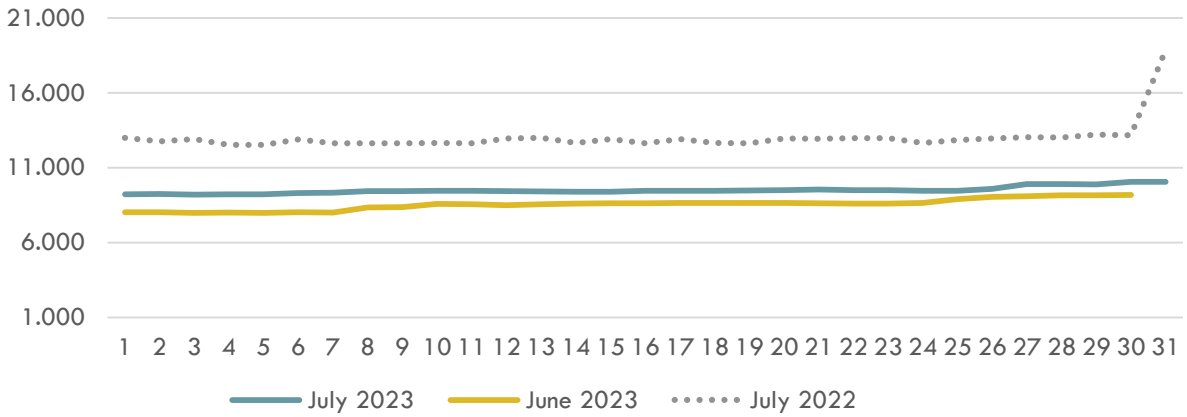
	July 2023	June 2023	Monthly Change	July 2022	Annual Change
Ratio of Natural Gas Based Generation to Total Electricity Generation (%)	21	8	146.8%	19	7.5%
Total Production of Natural Gas Based Power Plants (MWh)	6.164.595	1.959.497	214.6%	5.216.599	18.2%
Total Electricity Generation (MWh)	29.516.049	23.155.801	27.5%	26.859.232	9.9%
Number of Trades	264	287	-8.0%	136	94.1%
Number of Orders	593	625	-5.1%	478	24.1%
Traded Volume (mio.Sm ³)	108,57	126,96	-14.5%	114,06	-4.8%
Transaction Volume (TL)	1.026.101.711	1.107.152.226	-7.3%	1.461.807.407	-29.8%
Gas Entry Volume (mio.Sm ³)	3.063,10	2.341,10	30.8%	3.318,89	-7.7%
Gas Exit Volume (mio.Sm ³)	3.052,16	2.352,25	29.8%	3.319,11	-8.0%

Brent Oil and TTF Prices

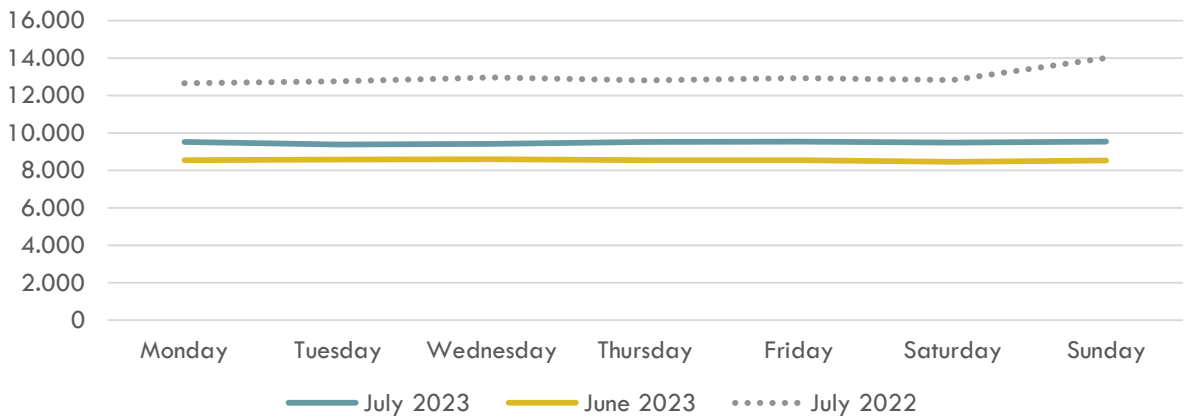
	July 2023	June 2023	Aylık Değişim	July 2022	Yıllık Değişim
Brent Oil (\$/bl)	80,38	74,98	7.2%	104,89	-23.4%
TTF (€/MWh)	29,06	31,94	-9.0%	168,12	-82.7%

PRICES (1/2)

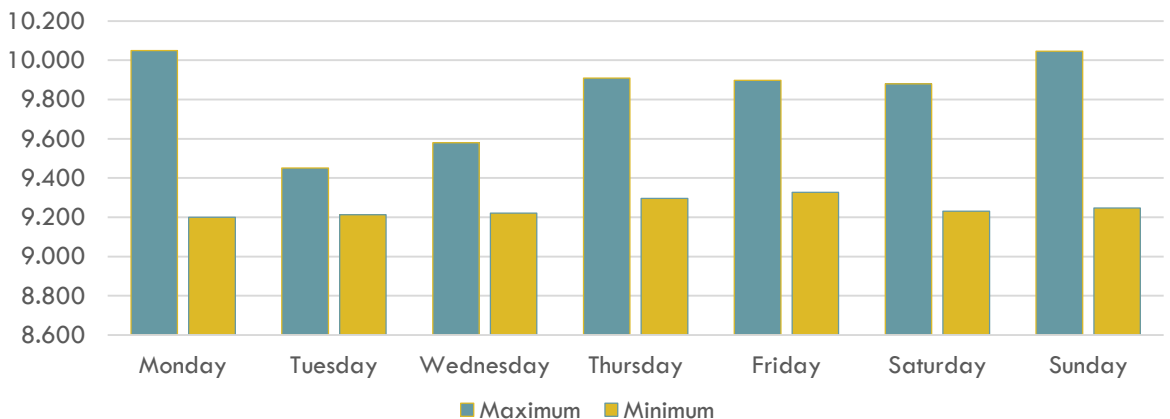
Natural Gas Market DRP (TL/'000 Sm³)



Natural Gas Market By Days DRP (TL/'000 Sm³)

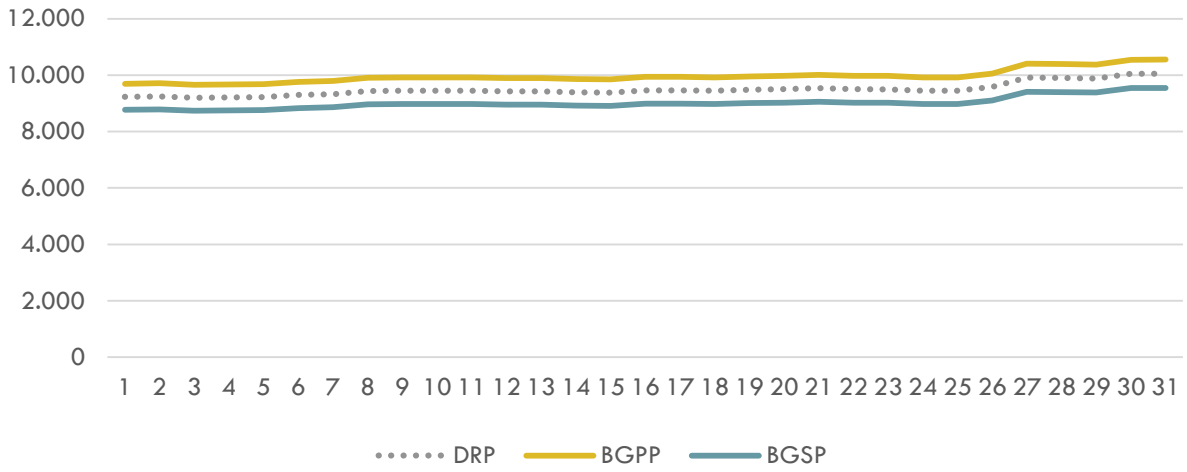


July 2023 Natural Gas Market By Days Max / Min DRP (TL/'000 Sm³)



PRICES (2/2)

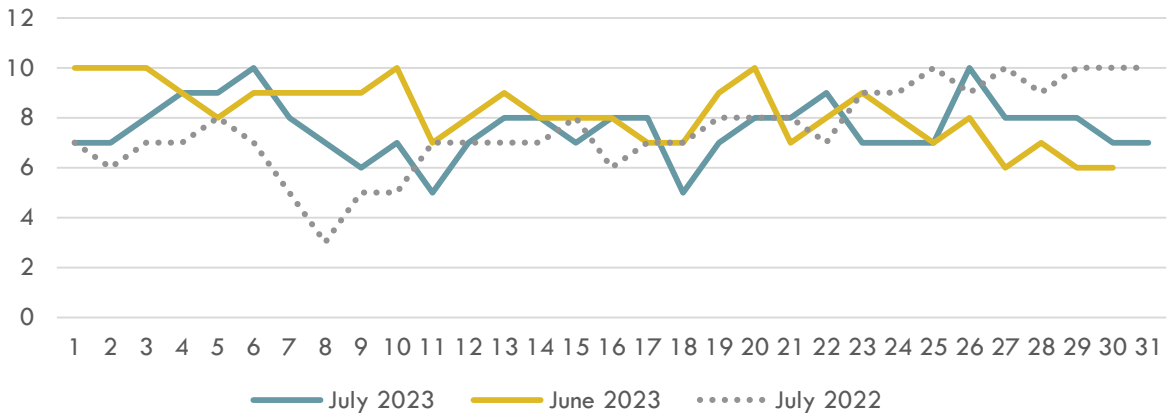
July 2023 DRP - BGPP - BGSP (TL/‘000 Sm³)



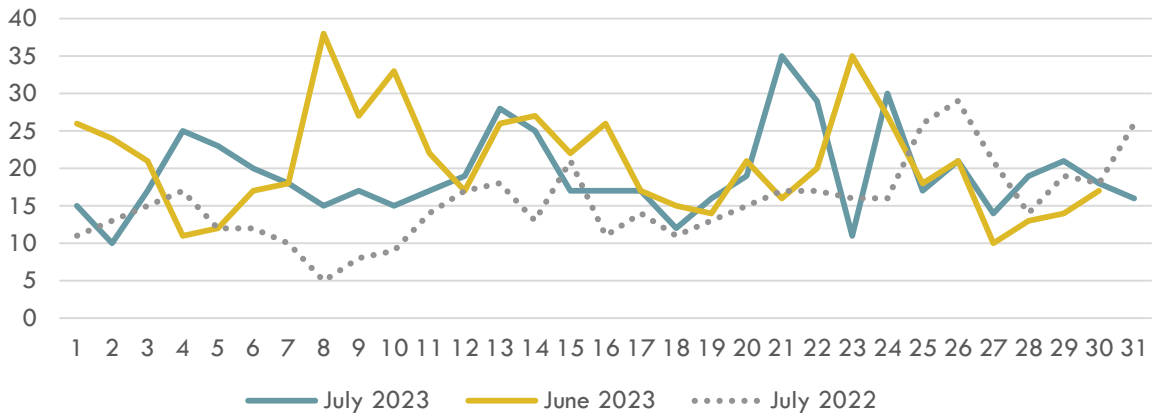
- ✓ The maximum DRP was 10.049 TL on 31 July 2023 Mon; the minimum DRP was realized at the level of 9.200 TL on 03 July 2023 Mon.
- ✓ The Maximum BGPP was 10.552 on 31 July 2023 Mon; the minimum BGPP was realized at the level of 9.660 TL on 03 July 2023 Mon.
- ✓ The maximum BGSP was 9.547 on 31 July 2023 Mon; the minimum BGSP was realized at the level of 8.740 TL on 03 July 2023 Mon.

ORDERS, TRADES, VOLUMES (1/3)

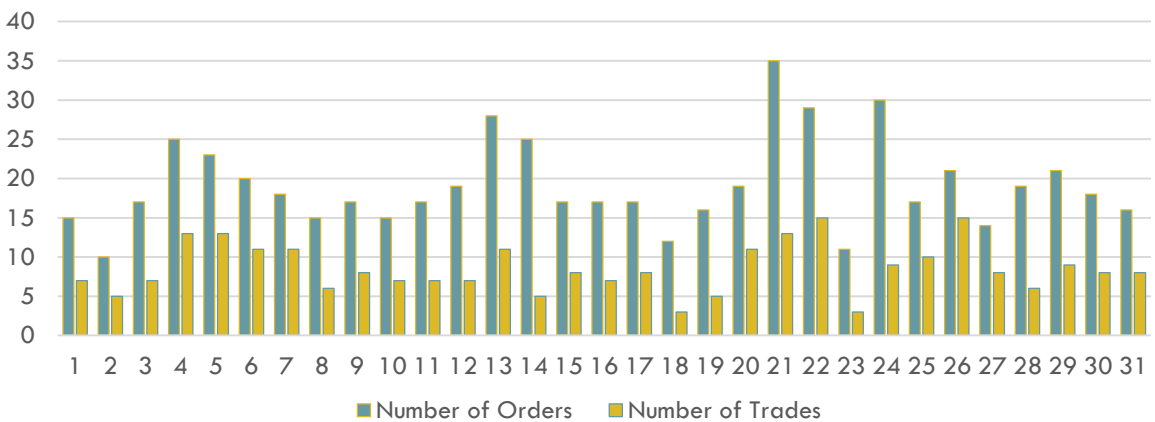
Natural Gas Market Number of Ordered Participants



Natural Gas Market Number of Orders

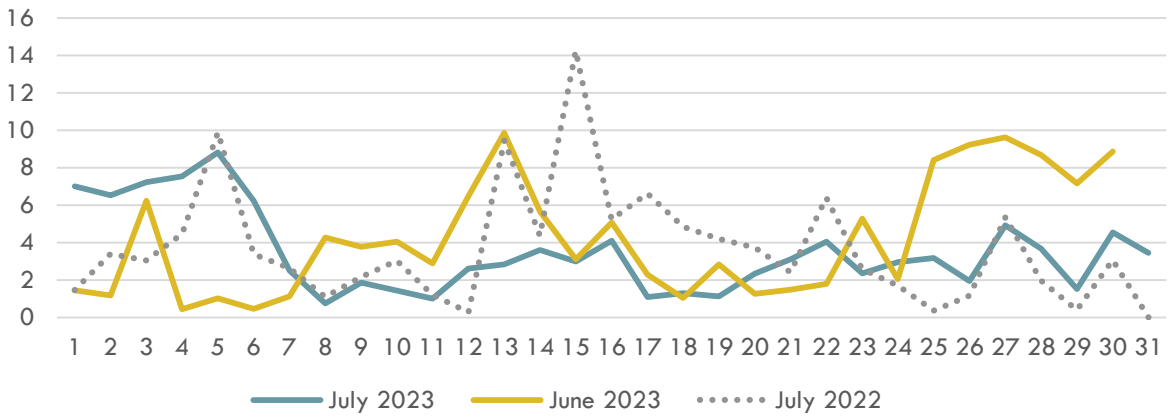


July 2023 Natural Gas Market Number of Orders and Trades

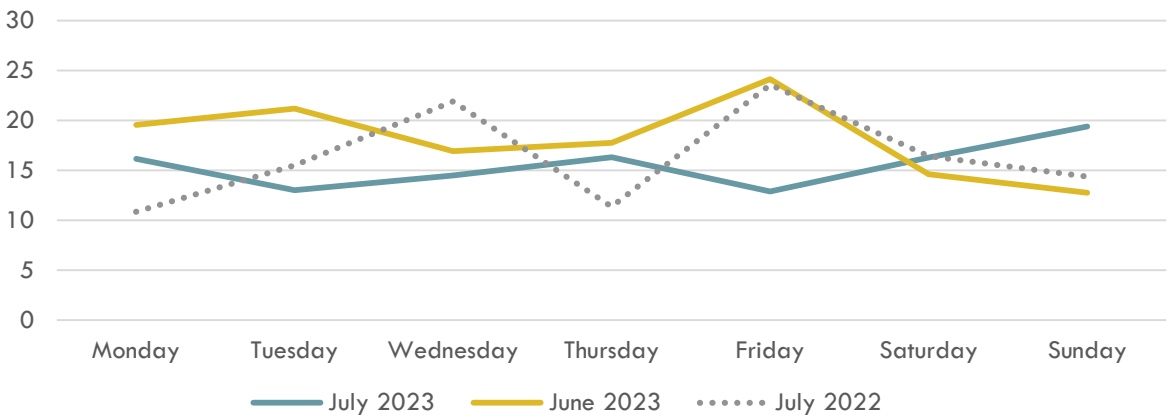


ORDERS, TRADES, VOLUMES (2/3)

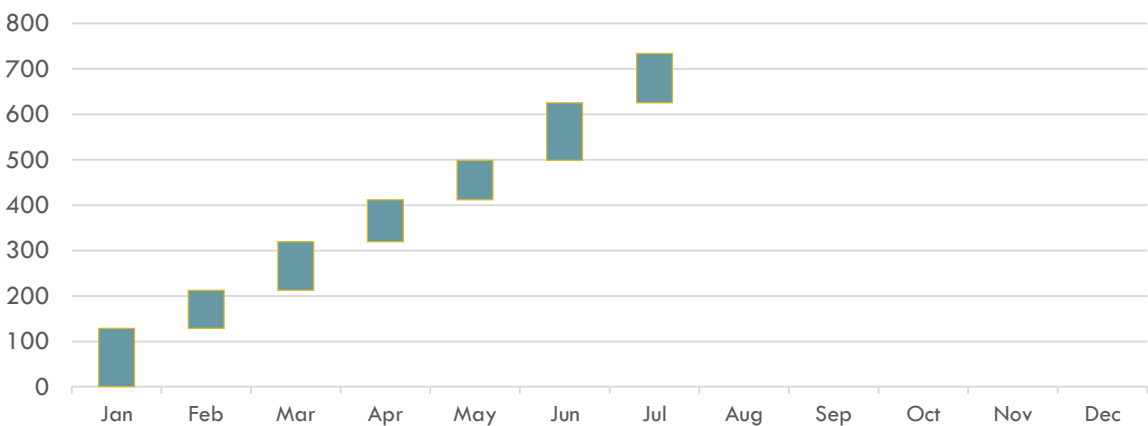
Natural Gas Market Trade Volume (mio.Sm³)



Natural Gas Market By Days Trade Volume (mio.Sm³)

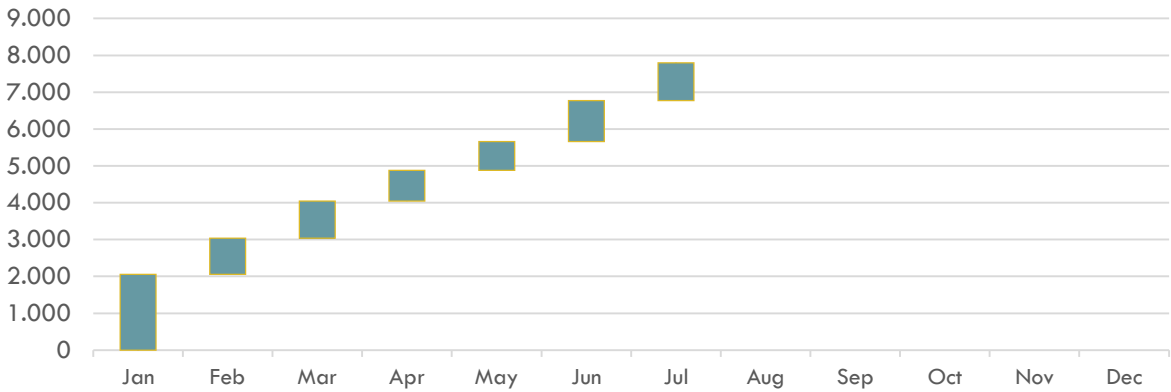


Natural Gas Market Annual Accumulated Trade Volume for 2023 (mio.Sm³)

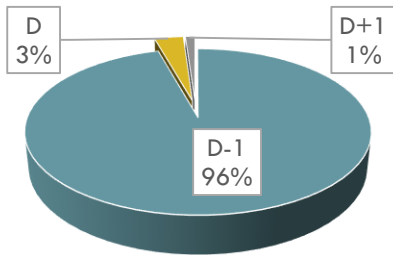


ORDERS, TRADES, VOLUMES (3/3)

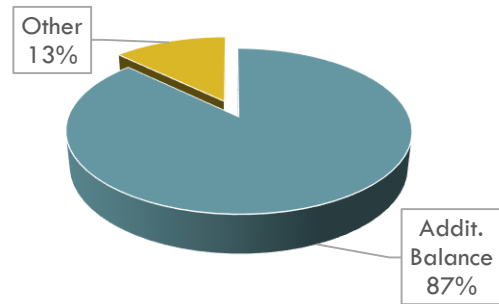
Natural Gas Market Annual Accumulated Transaction Volume for 2023 (Million TL)



Traded Volume of Daily Contracts for July 2023 Period by Sessions



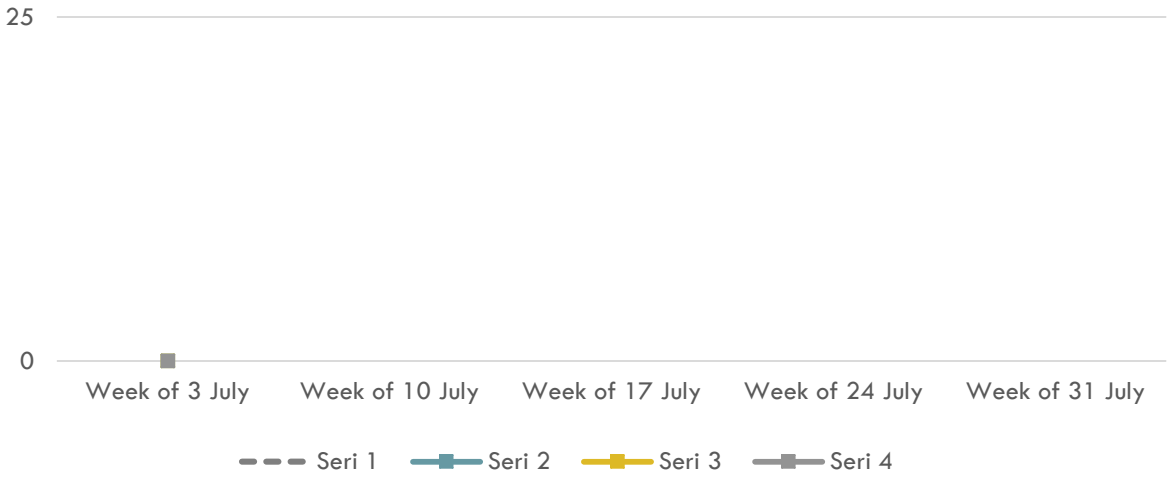
Additional Balancing Traded Volume for July 2023 Period



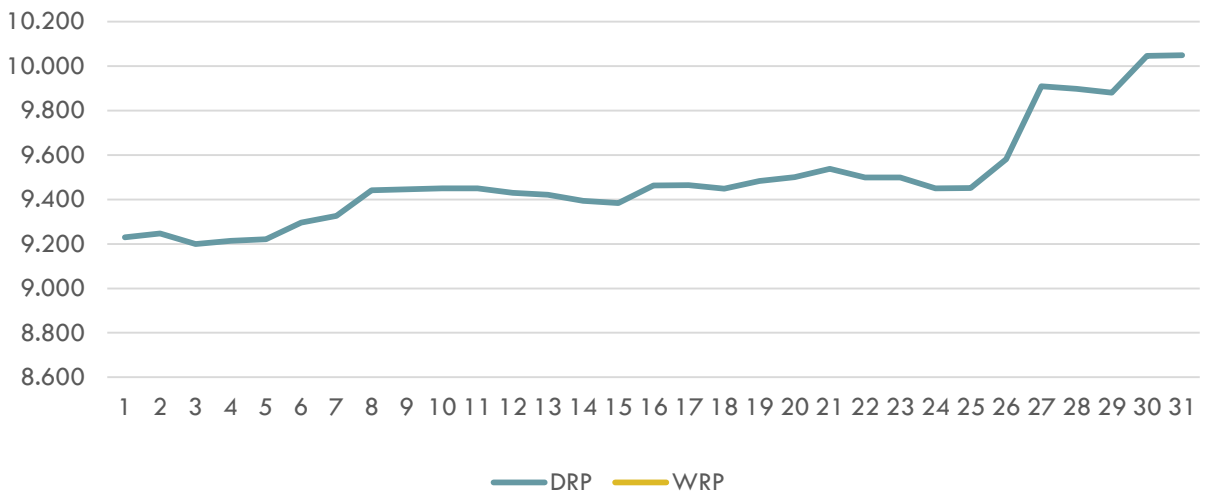
- ✓ The maximum total traded volume was 8.812 sm³ on 05 July 2023 Wed; the minimum total traded volume was realized at the level of 751 sm³ on 08 July 2023 Sat.
- ✓ The maximum total transaction volume was 81.262.365 TL on 05 July 2023 Wed; the minimum total transaction volume was realized at the level of 7.090.346 TL on 08 July 2023 Sat.
- ✓ The maximum d-1 traded volume was 8.679.000 sm³ on 05 July 2023 Wed; the minimum d-1 traded amount was realized at the level of 680.000 sm³ on 08 July 2023 Sat.
- ✓ The maximum d-1 traded volume was 80.021.540 TL on 05 July 2023 Wed; the minimum d-1 traded amount was realized at the level of 6.419.756 TL on 08 July 2023 Sat.
- ✓ The maximum d traded volume was 736.000 sm³ on 26 July 2023 Wed; the minimum d traded amount was realized at the level of 0 sm³ on 02 July 2023 Sun.
- ✓ The maximum d traded volume was 7.117.939 TL on 26 July 2023 Wed; the minimum d traded amount was realized at the level of 0 TL on 02 July 2023 Sun.
- ✓ The maximum d+1 traded volume was 229.000 sm³ on 22 July 2023 Sat; the minimum d+1 traded amount was realized at the level of 0 sm³ on 18 July 2023 Tue.
- ✓ The maximum d+1 traded volume was 2.175.493 TL on 22 July 2023 Sat; the minimum d+1 traded amount was realized at the level of 0 TL on 18 July 2023 Tue.
- ✓ The ratio of sgm compared to total consumption was realized at the level of 3,5% in July 2023.
- ✓ Sgm share in virtual trade was realized at 33,4% in July 2023.

WEEKLY PRODUCTS (1/2)

July 2023 WRP - WD - WE - WW (TL/'000 Sm³)

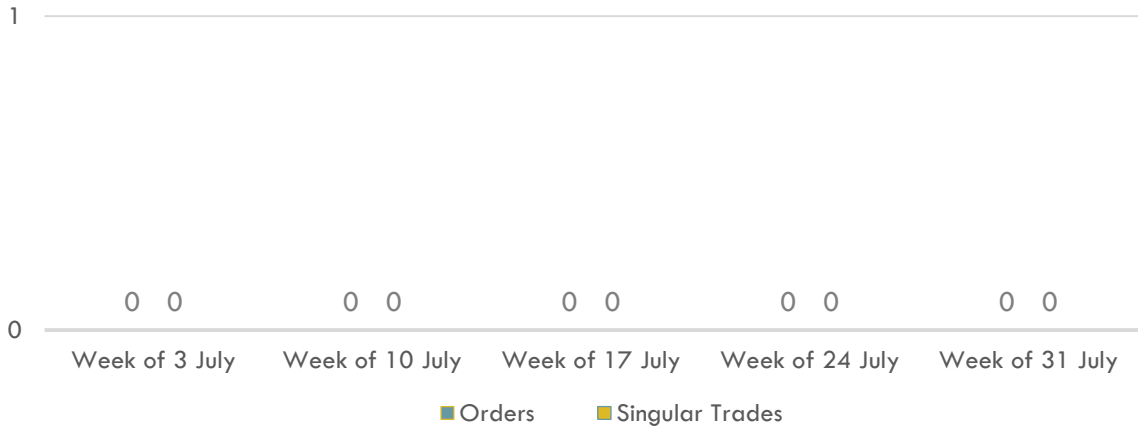


July 2023 DRP - WRP (TL/'000 Sm³)

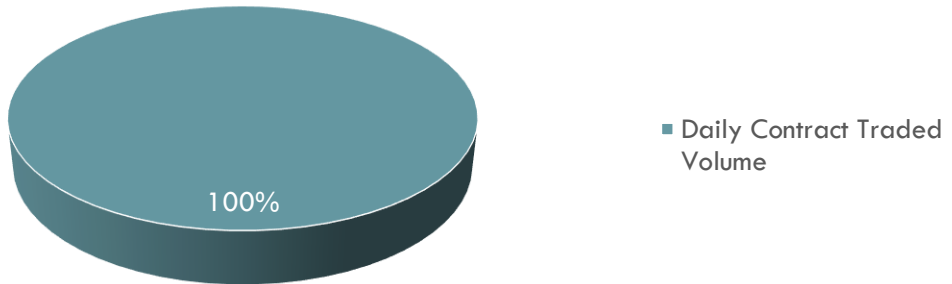


WEEKLY PRODUCTS (2/2)

July 2023 Weekly Products Number of Orders and Trades



July 2023 Traded Volume Distribution by Contract Type



SGM

Last 1 Year Trades

Period	Traded Volume (mio.Sm ³)	Traded Amount (TL)
Jul 2022	114,06	1.161.807.407
Aug 2022	137,21	1.642.536.310
Sep 2022	61,47	812.459.966
Oct 2022	136,33	1.370.215.904
Nov 2022	80,68	840.078.378
Dec 2022	29,45	570.471.982
Jan 2023	128,85	1.259.193.549
Feb 2023	83,64	976.852.724
Mar 2023	107,25	1.007.828.484
Apr 2023	92,20	837.217.599
May 2023	86,47	781.158.942
Jun 2023	126,96	1.107.152.226
Jul 2023	108,57	1.026.101.711

SGM's share in Total Cons. and Virtual Trade

Period	Total Consumption (%)	Virtual Trade (%)
Jul 2022	3,4%	22,0%
Aug 2022	3,4%	29,6%
Sep 2022	1,9%	19,7%
Oct 2022	4,2%	27,9%
Nov 2022	1,9%	20,9%
Dec 2022	0,5%	5,1%
Jan 2023	2,0%	16,8%
Feb 2023	1,3%	11,3%
Mar 2023	2,0%	30,3%
Apr 2023	2,2%	27,1%
May 2023	2,3%	27,4%
Jun 2023	4,7%	48,3%
Jul 2023	3,5%	33,4%

GAS FUTURES MARKET (1/1)

Daily Indicator Price For Contracts (TL)

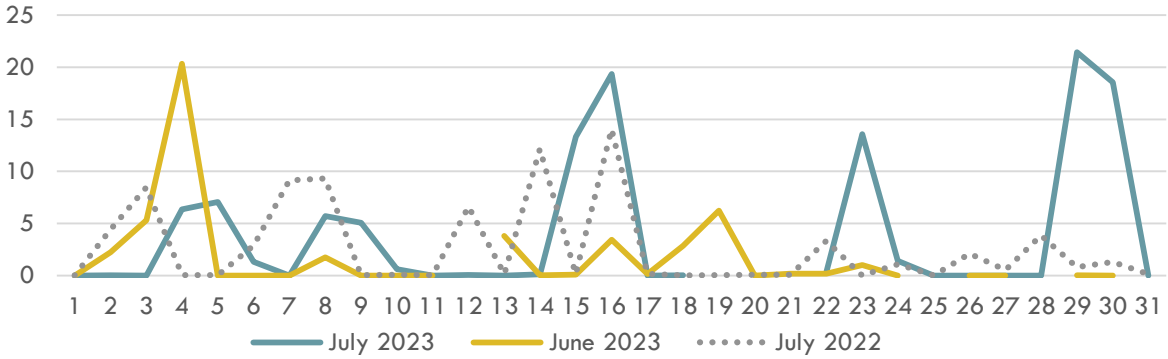
Contract Name	Average Daily Indicator Price (TL)	Minimum Daily Indicator Price (TL)	Maximum Daily Indicator Price (TL)
GM2308	19.257	19.257	19.257
GM2309	20.225	20.225	20.225
GM2310	20.371	20.371	20.371
GM2311	26.069	26.069	26.069
GM2312	16.429	16.429	16.429
GM2401	21.094	21.094	21.094
GM2402	19.244	19.244	19.244
GM2403	23.432	23.432	23.432
GM2404	13.823	13.823	13.823
GM2405	12.804	12.804	12.804
GM2406	15.829	15.829	15.829
GM2407	14.022	14.022	14.022
GM2408	14.478	14.478	14.478
GQ2304	20.901	20.901	20.901
GQ2401	21.301	21.301	21.301
GQ2402	14.137	14.137	14.137
GQ2403	14.362	14.362	14.362
GY24	22.591	22.591	22.591

Traded Volumes (mio.Sm3) and Traded Amounts (TL) For Contracts

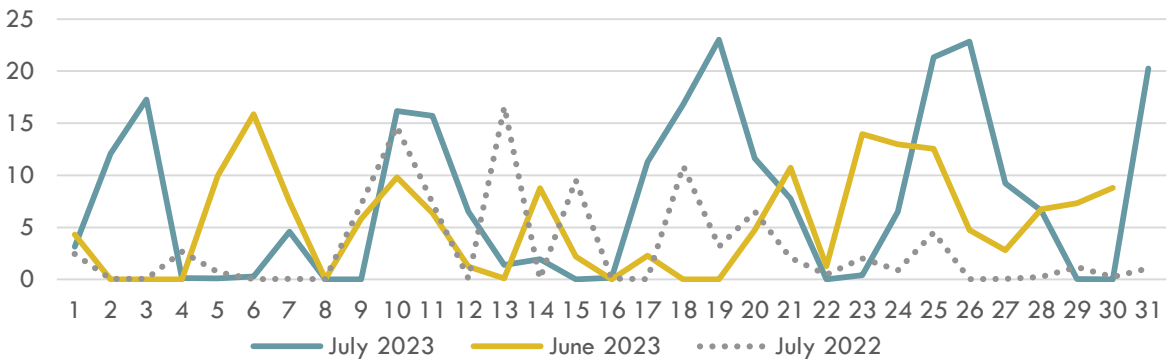
Contract Name	Traded Volume (mio.Sm3)	Traded Amount (TL)	Average Price (TL)
-	-	-	-

TRANSMISSION SYSTEM DATA (1/2)

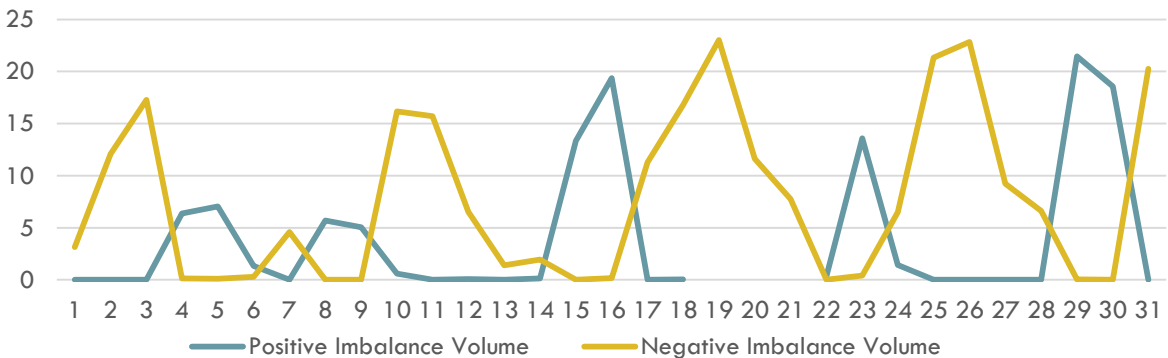
Natural Gas Market Positive Imbalance Volume (mio.Sm³)



Natural Gas Market Negative Imbalance Volume (mio.Sm³)



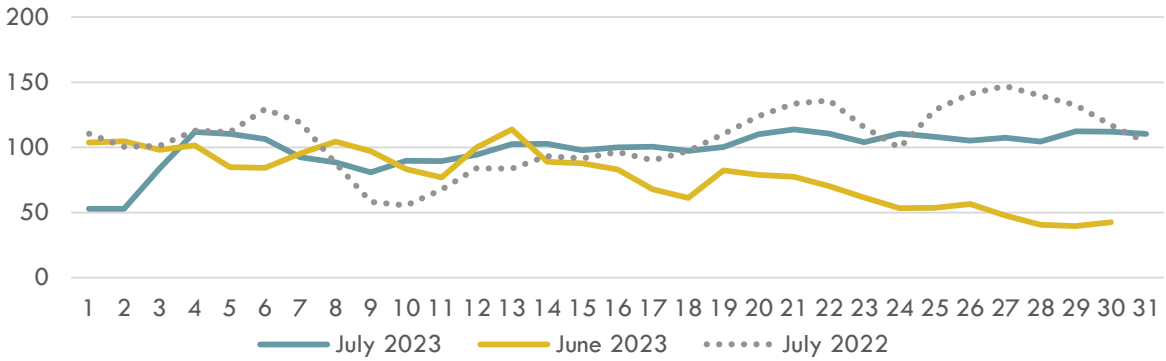
July 2023 Period Negative and Positive Imbalance Volume (mio.Sm³)



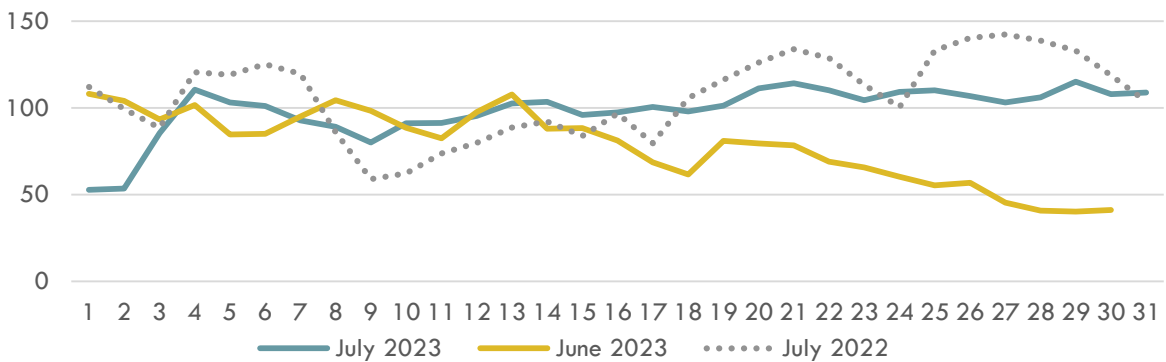
- ✓ The maximum positive imbalance volume was 21.457.978 sm³ on 29 July 2023 Sat; the minimum positive imbalance volume was realized at the level of 0 sm³ on 19 July 2023 Wed.
- ✓ The maximum negative imbalance volume was 23.010.711 sm³ on 19 July 2023 Wed; the minimum negative imbalance volume was realized at the level of 1.227 sm³ on 22 July 2023 Sat.

TRANSMISSION SYSTEM DATA (2/2)

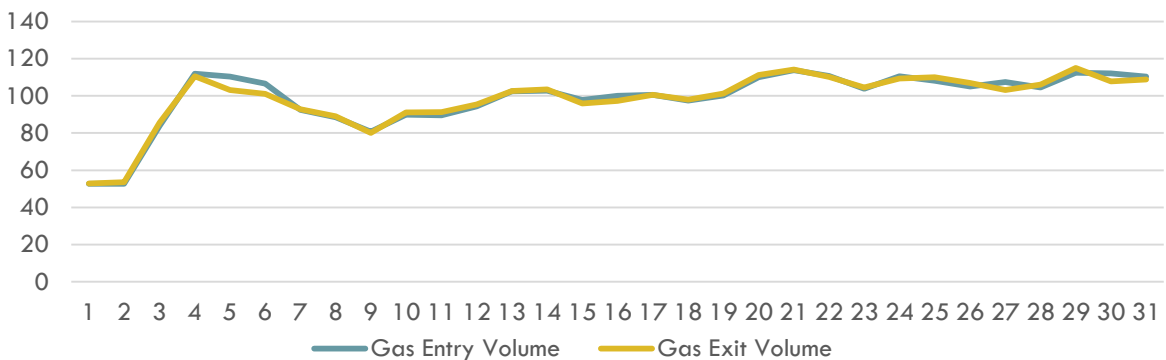
Natural Gas Market Gas Entry Volume (mio.Sm³)



Natural Gas Market Gas Exit Volume (mio.Sm³)



February 2021 Gas Entry and Exit Volume (mio.Sm³)



- ✓ Maximum gas entry volume realized on 21 July 2023 Fri was 113.720.103 sm³; minimum gas entry volume on 02 July 2023 Sun was 52.720.507 sm³ levels.
- ✓ Maximum gas exit volume realized on 29 July 2023 Sat was 115.058.863 sm³; minimum gas exit volume 01 July 2023 Sat was 52.832.675 sm³ levels.
- ✓ Maximum gas volume in stocks realized on 06 July 2023 Thu was 418.607.044 sm³; minimum stok gas volume 03 July 2023 Mon was 404.556.243 sm³ levels.

ADDITIONAL BALANCING TRANSACTIONS

Transactions with 1 Code

Contract Day	Transaction Volume ('000 Sm ³)	WAP (TL/'000 Sm ³)	Direction
01.07.2023	6.722	9.230	Purchase
02.07.2023	6.215	9.247	Purchase
03.07.2023	6.783	9.200	Purchase
04.07.2023	7.076	9.205	Purchase
05.07.2023	8.368	9.218	Purchase
06.07.2023	5.754	9.303	Purchase
07.07.2023	1.039	9.376	Purchase
08.07.2023	354	9.399	Purchase
09.07.2023	1.449	9.438	Purchase
10.07.2023	993	9.450	Purchase
11.07.2023	700	9.453	Purchase
12.07.2023	2.313	9.430	Purchase
13.07.2023	2.530	9.422	Purchase
14.07.2023	3.265	9.393	Purchase
15.07.2023	2.726	9.383	Purchase
16.07.2023	3.921	9.462	Purchase
17.07.2023	869	9.449	Purchase
18.07.2023	1.171	9.438	Purchase
19.07.2023	920	9.475	Purchase
20.07.2023	1.749	9.490	Purchase
21.07.2023	1.874	9.535	Purchase
22.07.2023	2.895	9.497	Purchase
23.07.2023	2.301	9.498	Purchase
24.07.2023	2.462	9.450	Purchase
25.07.2023	2.946	9.451	Purchase
26.07.2023	1.185	9.525	Purchase
27.07.2023	4.913	9.909	Purchase
28.07.2023	2.934	9.897	Purchase
29.07.2023	552	9.887	Purchase
30.07.2023	4.451	10.046	Purchase
31.07.2023	3.215	10.051	Purchase

Transactions with 2 Code

Contract Day	Transaction Volume ('000 Sm ³)	WAP (TL/'000 Sm ³)	Direction
-	-	-	-

Transactions with 3 Code

Contract Day	Transaction Volume ('000 Sm ³)	WAP (TL/'000 Sm ³)	Direction
-	-	-	-

Transactions with 4 Code

Contract Day	Transaction Volume ('000 Sm ³)	WAP (TL/'000 Sm ³)	Direction
-	-	-	-

- ✓ Additional balancing transactions with a maximum code of 1 were 8.368.000 sm³ on 05 July 2023 Wed; additional balancing transactions with a minimum code of 1 were realized at the level of 354.000 sm³ on 08 July 2023 Sat.
- ✓ In July, no additional balancing transaction code of 2 was realized.
- ✓ In July, no additional balancing transaction code of 3 was realized.
- ✓ In July, no additional balancing transaction code of 4 was realized.