EBARS NATURAL GAS MARKET MONTHLY BULLETIN

JANUARY 2023

SUMMARY DATA (1/2)

	January 2023	December 2022	Monthly Change	January 2022	Annual Change
DRP (TL/'000 Sm³)	16.326	19.345	-15.6%	9.972	63.7%
WRP (TL/'000 Sm^3)	0	0	-	0	-
BGPP (TL/'000 Sm³)	16.913	19.945	-15.2%	10.415	62.4%
BGSP (TL/'000 Sm ³)	15.738	18.765	-16.1%	9.569	64.5%
Traded Volume (mio.Sm ³)	4,16	0,95	337.5%	2,14	94.2%
Transaction Volume (TL)	66.425.598	18.402.322	261.0%	21.266.832	212.3%
Gas Entry Volume (mio.Sm ³)	202,53	182,89	10.7%	244,02	-17.0%
Gas Exit Volume (mio.Sm ³)	202,14	182,94	10.5%	244,81	-17.4%
Number of Ordered Participants	10	10	1.3%	12	-16.0%
Number of Orders	24	18	34.5%	21	16.6%
Number of Trades	9	6	59.8%	11	-19.2%

Arithmetic Means

Maximum / Minimum Levels

	January 2023		Decemb	December 2022		January 2022	
	Max	Min	Max	Min	Max	Min	
DRP (TL/'000 Sm ³)	19.600	13.473	20.218	19.005	10.089	6.652	
WRP (TL/'000 Sm ³)	0	0	0	0	0	0	
BGPP (TL/'000 Sm ³)	20.188	14.147	20.825	19.575	11.000	10.089	
BGSP (TL/'000 Sm ³)	19.012	12.799	19.612	18.434	9.786	6.452	
Traded Volume (mio.Sm ³)	12,73	0,35	3,68	0,13	11,17	0,38	
Transaction Volume (TL)	248.847.785	6.850.050	71.627.317	2.494.760	112.683.98 1	3.843.618	
Gas Entry Volume (mio.Sm ³)	252,56	136,96	231,92	124,33	275,76	210,34	
Gas Exit Volume (mio.Sm ³)	250,42	139,58	230,03	124,02	287,62	208,50	
Number of Ordered Participants	12	9	12	7	15	6	
Number of Orders	38	14	31	9	37	8	
Number of Trades	14	4	13	2	18	4	

SUMMARY DATA (2/2)

	January 2023	December 2022	Monthly Change	January 2022	Annual Change
Traded Volume (mio.Sm³)	128,85	29,45	337.5%	66,36	94.2%
Transaction Volume (TL)	2.059.193.549	570.471.982	261.0%	659.271.803	212.3%
Gas Entry Volume (mio.Sm ³)	6.278,37	5.669,65	10.7%	7.564,67	-17.0%
Gas Exit Volume (mio.Sm ³)	6.266,31	5.671,13	10.5%	7.588,97	-17.4%
Number of Orders	744	553	34.5%	638	16.6%
Number of Trades	278	174	59.8%	344	-19.2%
Total Production of Natural Gas Based Power Plants (MWh)	6.523.194	5.988.283	8.9%	7.026.518	-7.2%
Total Electricity Generation (MWh)	24.853.596	24.367.659	2.0%	26.287.284	-5.5%
Ratio of Natural Gas Based Generation to Total Electricity Generation (%)	26	25	6.8%	27	-1.8%

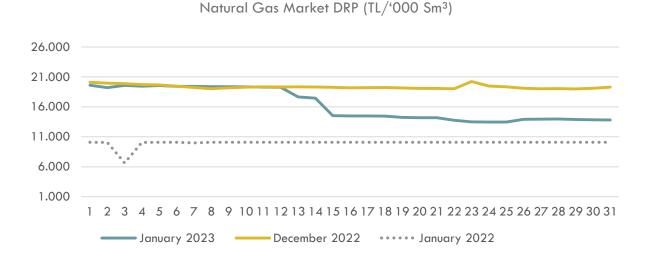
Totals

Brent Oil and TTF Prices

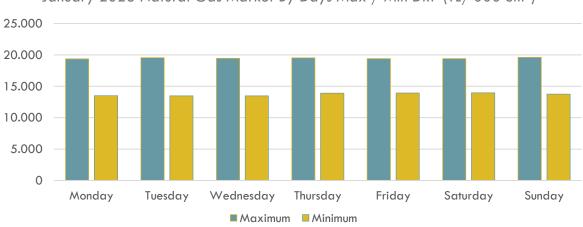
	January 2023	December 2022	Monthly Change	January 2022	Annual Change
Brent Oil(\$/bl)	84,00	81,34	3,27%	85,29	-1,52%
TTF (€/MWh)	62,55	112,73	-44,52%	83,76	-25,33%



PRICES (1/2)



Natural Gas Market By Days DRP (TL/'000 Sm³) 25.000 20.000 15.000 10.000 5.000 0 Monday Tuesday Wednesday Thursday Friday Saturday Sunday January 2023 —— December 2022 •••••• January 2022

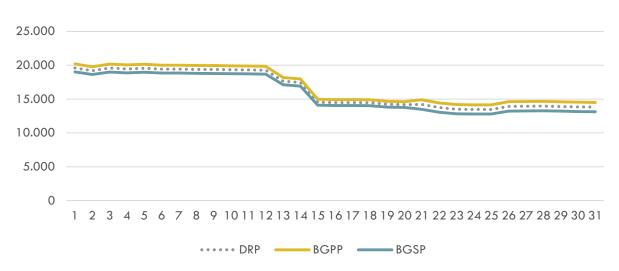


January 2023 Natural Gas Market By Days Max / Min DRP (TL/'000 Sm³)



PRICES (2/2)

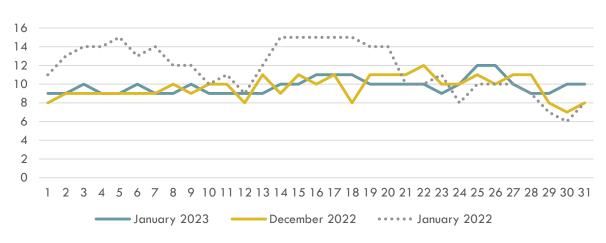




- ✓ The maximum DRP was 19.600 TL on 01 January 2023 Sun; the minimum DRP was realized at the level of 13.473 TL on 25 January 2023 Wed.
- ✓ The Maximum BGPP was 20.188 on 01 January 2023 Sun; the minimum BGPP was realized at the level of 14.147 TL on 25 January 2023 Wed.
- ✓ The maximum BGSP was 19.012 on 01 January 2023 Sun; the minimum BGSP was realized at the level of 12.799 TL on 25 January 2023 Wed.

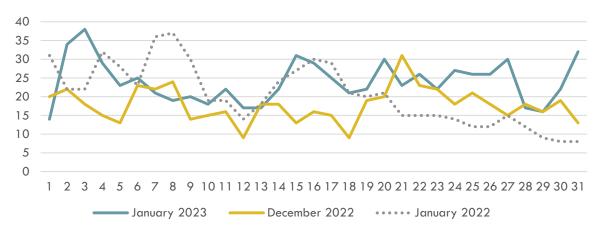


ORDERS, TRADES, VOLUMES (1/3)



Natural Gas Market Number of Ordered Participants

Natural Gas Market Number of Orders

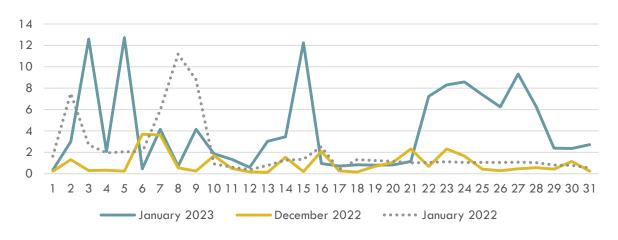




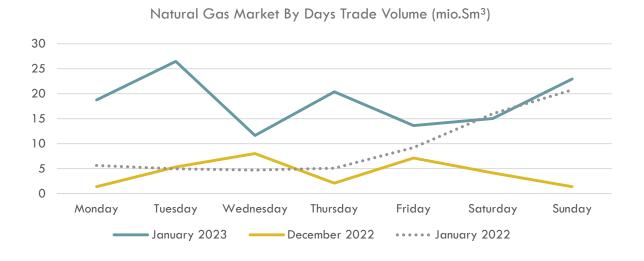
January 2023 Natural Gas Market Number of Orders and Trades



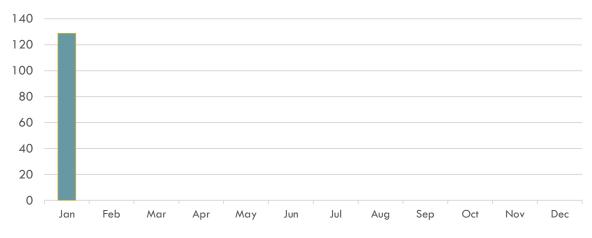
ORDERS, TRADES, VOLUMES (2/3)



Natural Gas Market Trade Volume (mio.Sm³)

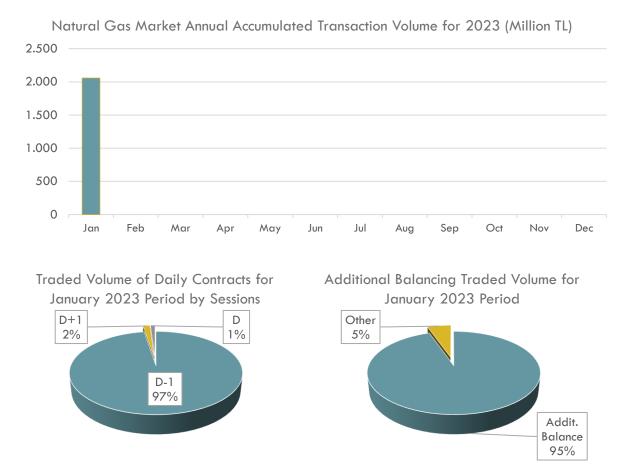








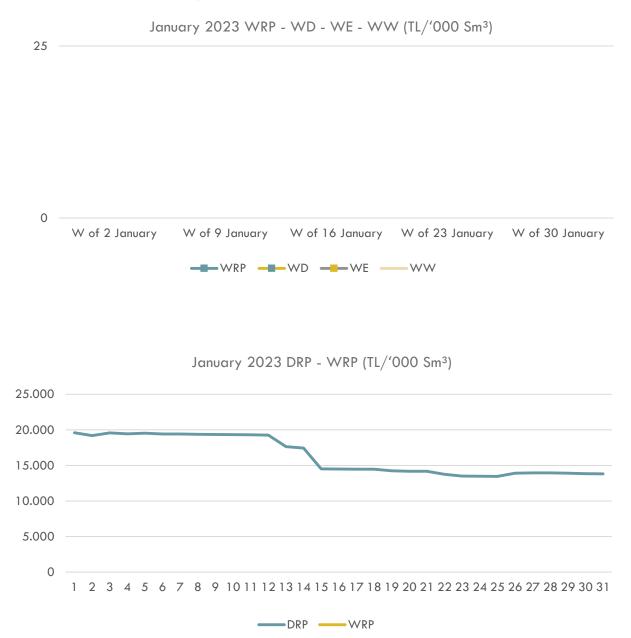
ORDERS, TRADES, VOLUMES (3/3)



- ✓ The maximum total traded volume was 12.731 sm³ on 05 January 2023 Thu; the minimum total traded volume was realized at the level of 354 sm³ on 01 January 2023 Sun.
- ✓ The maximum total transaction volume was 248.847.785 TL on 05 January 2023 Thu; the minimum total transaction volume was realized at the level of 6.850.050 TL on 01 January 2023 Sun.
- ✓ The maximum d-1 traded volume was 12.623.000 sm³ on 05 January 2023 Thu; the minimum d-1 traded amount was realized at the level of 223.000 sm³ on 01 January 2023 Sun.
- ✓ The maximum d-1 traded volume was 246.741.485 TL on 05 January 2023 Thu; the minimum d-1 traded amount was realized at the level of 4.370.800 TL on 01 January 2023 Sun.
- ✓ The maximum d traded volume was 213.000 sm³ on 20 January 2023 Fri; the minimum d traded amount was realized at the level of 0 sm³ on 01 January 2023 Sun.
- ✓ The maximum d traded volume was 3.009.147 TL on 20 January 2023 Fri; the minimum d traded amount was realized at the level of 0 TL on 01 January 2023 Sun.
- ✓ The maximum d+1 traded volume was 289.000 sm³ on 20 January 2023 Fri; the minimum d+1 traded amount was realized at the level of 0 sm³ on 12 January 2023 Thu.
- ✓ The maximum d+1 traded volume was 4.155.580 TL on 03 January 2023 Tue; the minimum d+1 traded amount was realized at the level of 0 TL on 12 January 2023 Thu.
- \checkmark The ratio of sgm compared to total consumption was realized at the level of 2,0% in January 2023.
- ✓ Sgm share in virtual trade was realized at 16,8% in January 2023.



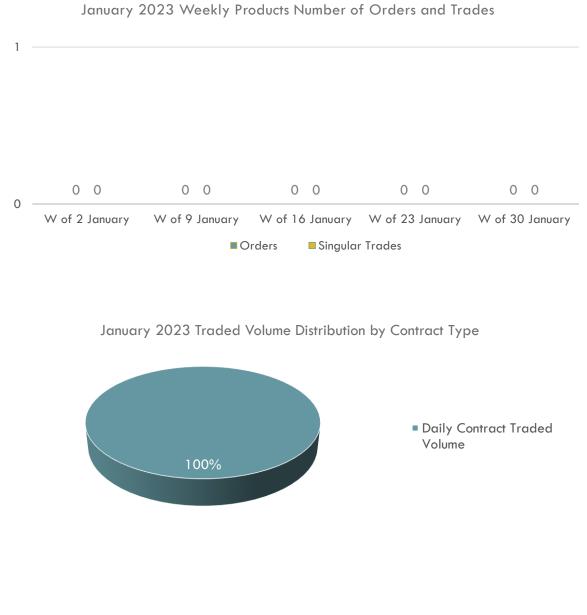
WEEKLY PRODUCTS (1/2)



7



WEEKLY PRODUCTS (2/2)



SGM

Last1Year Trades

Period	Traded Volume (mio.Sm ³)	Traded Amount (TL)
Jan 2022	66,36	559.271.803
Feb 2022	458,09	1.044.258.193
Mar 2022	515,31	1.692.333.624
Apr 2022	216,42	1.565.597.680
May 2022	144,42	1.116.289.688
Jun 2022	136,23	1.412.791.812
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

SGM''s share in Total Cons. and Virtual Trade

Period	Total Consumption (%)	Virtual Trade (%)
Jan 2022	0,9%	7,2%
Feb 2022	7,2%	31,9%
Mar 2022	7,3%	38,6%
Apr 2022	5,1%	40,5%
May 2022	3,9%	29,9%
Jun 2022	3,7%	28,2%
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%

GAS FUTURES MARKET (1/1)

Daily Indicator Price For Contracts (TL)

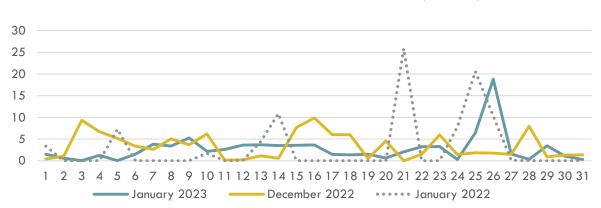
Contract Name	Average Daily Indicator Price (TL)	Minimum Daily Indicator Price (TL)	Maximum Daily Indicator Price (TL)
GM2302	23.328	23.328	23.328
GM2303	23.918	23.918	23.918
GM2304	21.131	21.131	21.131
GM2305	21.688	21.688	21.688
GM2306	22.266	22.266	22.266
GM2307	21.600	21.600	21.600
GM2308	21.875	21.875	21.875
GM2309	22.975	22.975	22.975
GM2310	23.071	23.071	23.071
GM2311	29.524	29.524	29.524
GM2312	18.606	18.606	18.606
GM2401	22.167	22.167	22.167
GM2402	20.223	20.223	20.223
GQ2302	21.695	21.695	21.695
GQ2303	22.141	22.141	22.141
GQ2304	23.671	23.671	23.671
GQ2401	22.385	22.385	22.385
GY24	23.779	23.779	23.779

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

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

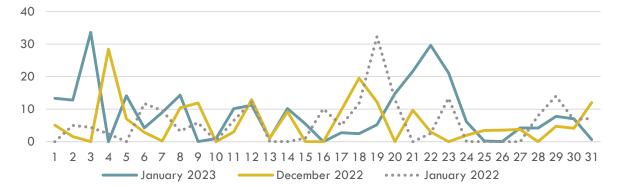


TRANSMISSION SYSTEM DATA (1/2)

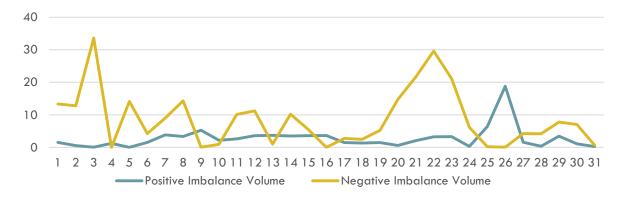


Natural Gas Market Positive Imbalance Volume (mio.Sm³)





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



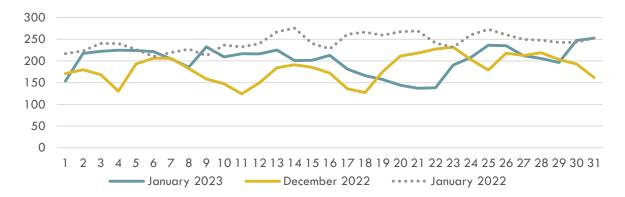
✓ The maximum positive imbalance volume was 18.783.168 sm³ on 26 January 2023 Thu; the minimum positive imbalance volume was realized at the level of 34.984 sm³ on 05 January 2023 Thu.

✓ The maximum negative imbalance volume was 33.610.032 sm³ on 03 January 2023 Tue; the minimum negative imbalance volume was realized at the level of 16.481 sm³ on 04 January 2023 Wed.

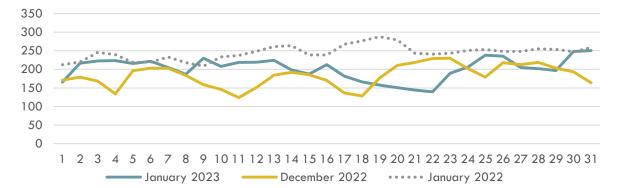


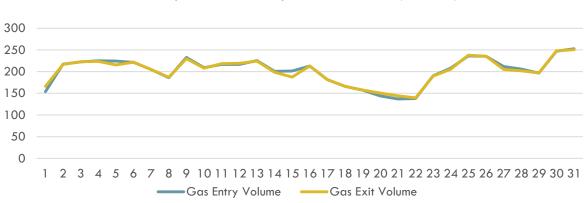
TRANSMISSION SYSTEM DATA (2/2)





Natural Gas Market Gas Exit Volume (mio.Sm³)





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

- ✓ Maximum gas entry volume realized on 31 January 2023 Tue was 252.561.285 sm³; minimum gas entry volume on 21 January 2023 Sat was 136.961.626 sm³ levels.
- ✓ Maximum gas exit volume realized on 31 January 2023 Tue was 250.423.503 sm³; minimum gas exit volume 22 January 2023 Sun was 139.578.179 sm³ levels.
- ✓ Maximum gas volume in stocks realized on 16 January 2023 Mon was 419.186.247 sm³; minimum stok gas volume 01 January 2023 Sun was 395.054.421 sm³ levels.

ADDITIONAL BALANCING TRANSACTIONS

Transactions with 1 Code

Contract Day	Transaction Volume ('000 Sm³)	WAP (TL/ '000 Sm ³)	Direction
01.01.2023	223	19.600	Purchase
02.01.2023	2.569	19.269	Purchase
03.01.2023	12.377	19.579	Purchase
04.01.2023	1.872	19.472	Purchase
05.01.2023	12.623	19.547	Purchase
06.01.2023	253	19.427	Purchase
07.01.2023	4.031	19.419	Purchase
08.01.2023	602	19.397	Purchase
09.01.2023	3.991	19.368	Purchase
10.01.2023	1.750	19.337	Purchase
11.01.2023	1.104	19.329	Purchase
12.01.2023	398	19.325	Purchase
13.01.2023	2.895	17.650	Purchase
14.01.2023	3.190	17.460	Purchase
15.01.2023	2.134	15.750	Purchase
16.01.2023	684	14.489	Purchase
17.01.2023	318	14.489	Purchase
18.01.2023	496	14.484	Purchase
19.01.2023	519	14.250	Purchase
20.01.2023	314	14.222	Purchase
21.01.2023	927	14.212	Purchase
22.01.2023	7.020	13.750	Purchase
23.01.2023	8.073	13.500	Purchase
24.01.2023	8.505	13.479	Purchase
25.01.2023	7.239	13.472	Purchase
26.01.2023	6.047	13.913	Purchase
27.01.2023	9.034	13.948	Purchase
28.01.2023	6.079	13.963	Purchase
29.01.2023	2.173	13.900	Purchase
30.01.2023	2.019	13.839	Purchase
31.01.2023	2.490	13.808	Purchase

Transactions with 2 Code

Contract Day	Transaction Volume ('000 Sm ³)	WAP (TL/ '000 Sm³)	Direction
15.01.2023	10.000	14.250	Purchase

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 Sm³)	Direction
-	-	-	-

✓ Additional balancing transactions with a maximum code of 1 were 12.623.000 sm³ on 05 January 2023 Thu; additional balancing transactions with a minimum code of 1 were realized at the level of 223.000 sm³ on 01 January 2023 Sun.

 $\checkmark~$ In January, additional balancing transaction code of 2 was realized 10.000.000 $\rm sm^3$ in total.

 \checkmark In January, no additional balancing transaction code of 3 was realized.

 \checkmark In January, no additional balancing transaction code of 4 was realized.