

EPIAS

NATURAL GAS MARKET MONTHLY BULLETIN

DECEMBER 2021



SUMMARY DATA (1/2)

Arithmetic Means

	December 2021	November 2021	Monthly Change	December 2020	Annual Change
DRP (TL/'000 Sm ³)	6.764	4.622	46.4%	1.308	417.3%
WRP (TL/'000 Sm ³)	6.924	5.183	33.6%	1.297	433.9%
BGPP (TL/'000 Sm ³)	7.179	4.902	46.4%	1.347	433.0%
BGSP (TL/'000 Sm ³)	6.555	4.483	46.2%	1.268	416.8%
Traded Volume (mio.Sm ³)	2,48	1,65	50.4%	3,61	-31.4%
Transaction Volume (TL)	17.013.032	7.587.283	124.2%	4.715.602	260.8%
Gas Entry Volume (mio.Sm ³)	222,93	178,51	24.9%	205,65	8.4%
Gas Exit Volume (mio.Sm ³)	222,14	178,57	24.4%	205,62	8.0%
Number of Ordered Participants	14	15	-5.2%	19	-28.0%
Number of Orders	39	44	-12.7%	62	-37.3%
Number of Trades	17	22	-22.3%	30	-43.2%

Maximum / Minimum Levels

	December 2021		November 2021		December 2020	
	Max	Min	Max	Min	Max	Min
DRP (TL/'000 Sm ³)	6.924	6.328	4.649	4.556	1.333	1.254
WRP (TL/'000 Sm ³)	6.924	6.924	6.924	4.600	1.311	1.280
BGPP (TL/'000 Sm ³)	10.087	6.530	6.923	4.693	1.373	1.292
BGSP (TL/'000 Sm ³)	6.716	6.138	4.510	4.419	1.293	1.217
Traded Volume (mio.Sm ³)	17,77	0,26	4,17	0,04	6,61	1,84
Transaction Volume (TL)	123.040.448	1.814.088	23.581.723	176.662	8.303.404	2.429.360
Gas Entry Volume (mio.Sm ³)	285,24	153,45	228,86	128,49	244,09	175,23
Gas Exit Volume (mio.Sm ³)	279,02	153,65	229,58	128,67	242,59	176,19
Number of Ordered Participants	17	11	18	10	21	17
Number of Orders	62	19	90	12	76	46
Number of Trades	34	7	38	2	41	22

SUMMARY DATA (2/2)

Totals

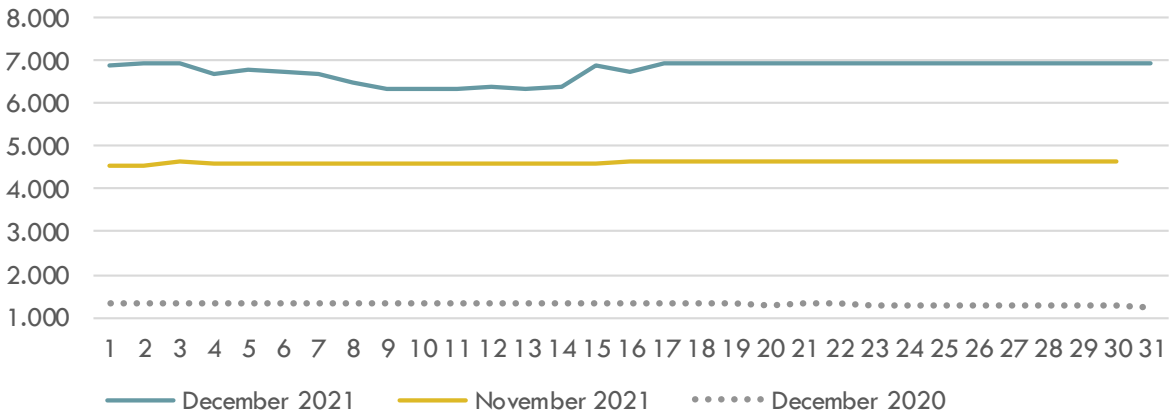
	December 2021	November 2021	Monthly Change	December 2020	Annual Change
Traded Volume (mio.Sm ³)	76,85	49,46	55.4%	111,99	-31.4%
Transaction Volume (TL)	527.403.990	227.618.483	131.7%	146.183.670	260.8%
Gas Entry Volume (mio.Sm ³)	6.910,81	5.355,34	29.0%	6.375,19	8.4%
Gas Exit Volume (mio.Sm ³)	6.886,45	5.357,05	28.5%	6.374,33	8.0%
Number of Orders	1.196	1.326	-9.8%	1.907	-37.3%
Number of Trades	517	583	-11.3%	911	-43.2%
Total Production of Natural Gas Based Power Plants (MWh)	8.280.103	7.948.374	4.2%	8.076.914	2.5%
Total Electricity Generation (MWh)	26.698.715	24.508.936	8.9%	25.073.745	6.5%
Ratio of Natural Gas Based Generation to Total Electricity Generation (%)	31	32	-4.4%	32	-3.7%

Brent Oil and TTF Prices

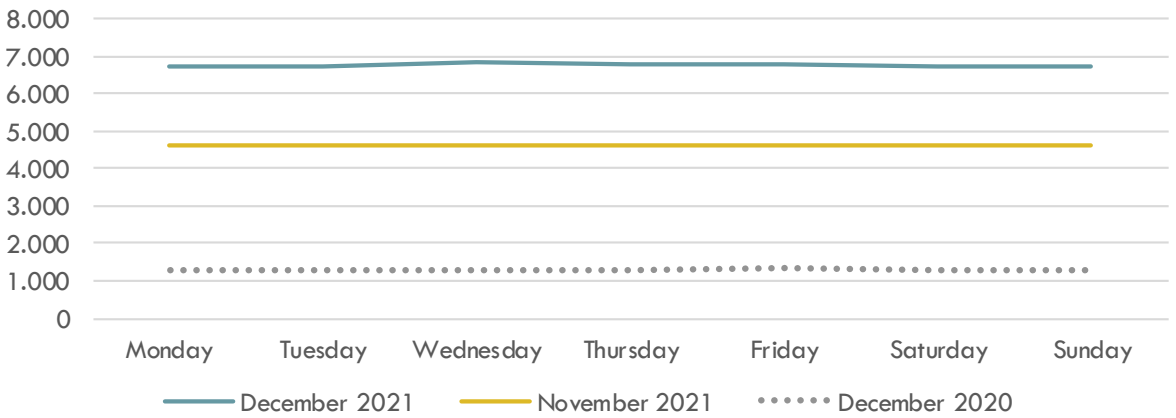
	December 2021	November 2021	Monthly Change	December 2020	Annual Change
Brent Oil(\$/bl)	74,8	80,85	-7,48%	50,22	48,94%
TTF (€/MWh)	112,75	81,3	38,68%	16,21	595,56%

PRICES (1/2)

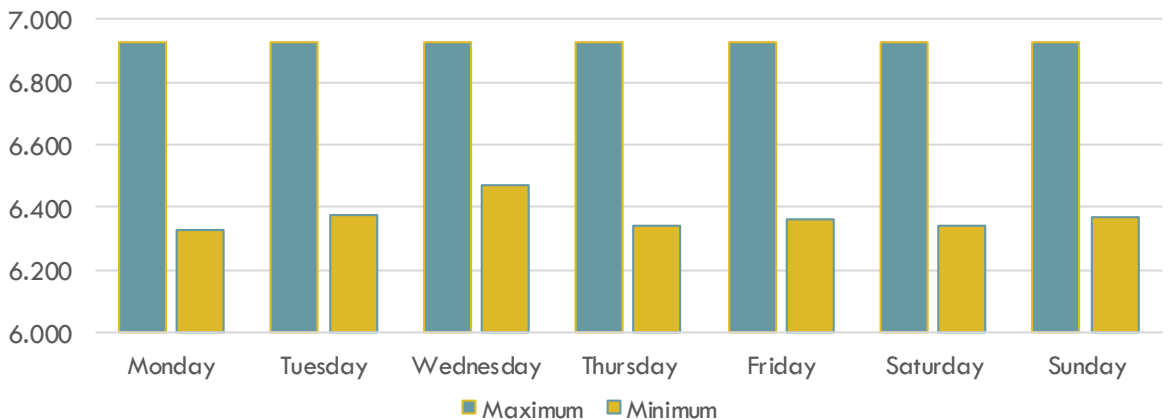
Natural Gas Market DRP (TL/'000 Sm³)



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

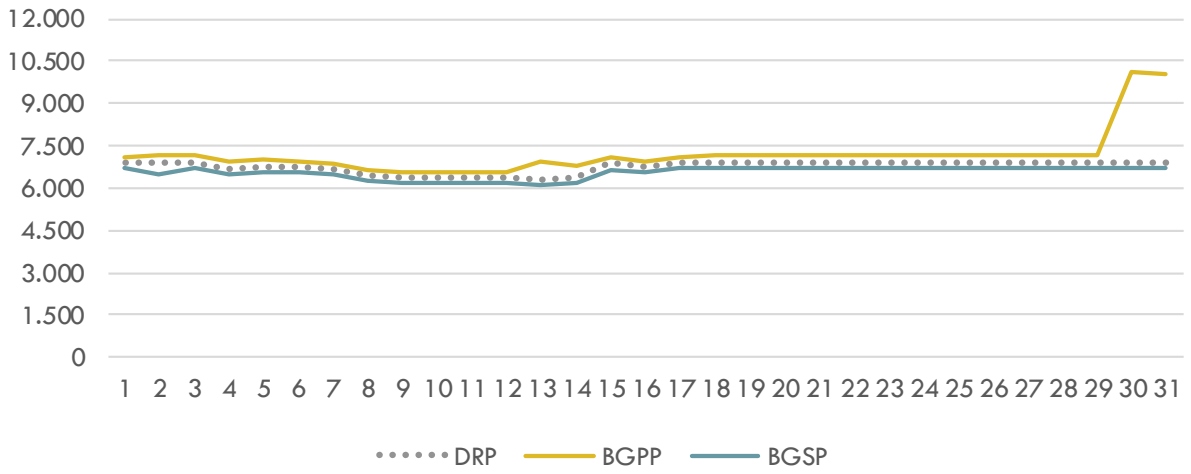


December 2021 Natural Gas Market By Days Max / Min DRP (TL/'000 Sm³)



PRICES (2/2)

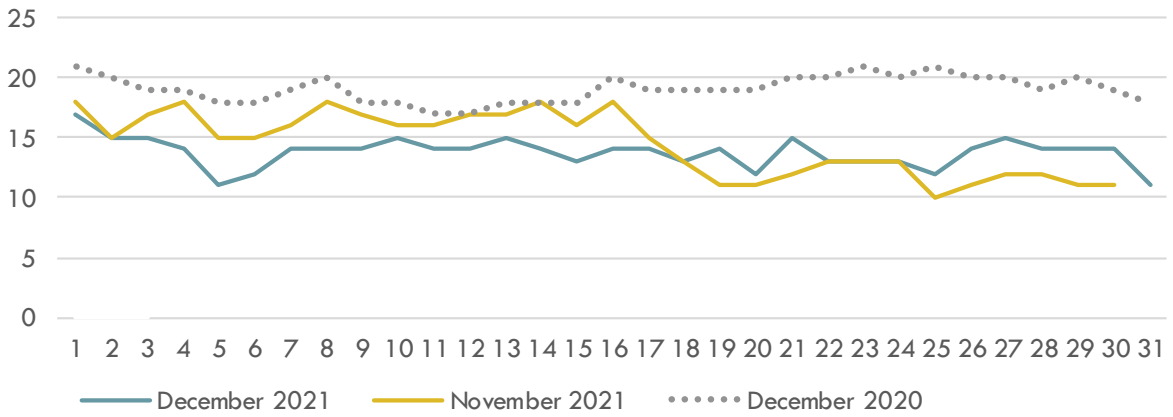
December 2021 DRP - BGPP - BGSP (TL/'000 Sm³)



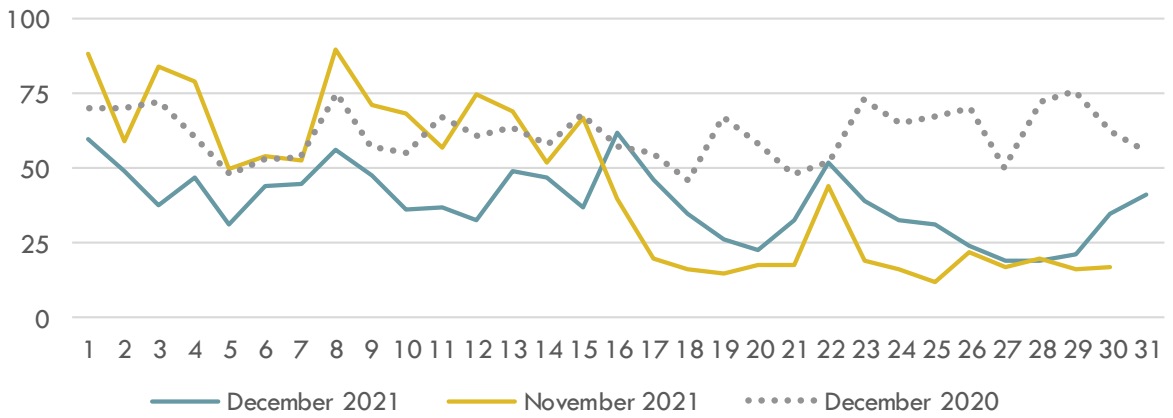
- ✓ The maximum DRP was 6.924 TL on 23 December 2021 Thu; the minimum DRP was realized at the level of 6.328 TL on 13 December 2021 Mon.
- ✓ The Maximum BGPP was 10.087 on 30 December 2021 Thu; the minimum BGPP was realized at the level of 6.530 TL on 09 December 2021 Thu.
- ✓ The maximum BGSP was 6.716 on 23 December 2021 Thu; the minimum BGSP was realized at the level of 6.138 TL on 13 December 2021 Mon.

ORDERS, TRADES, VOLUMES (1/3)

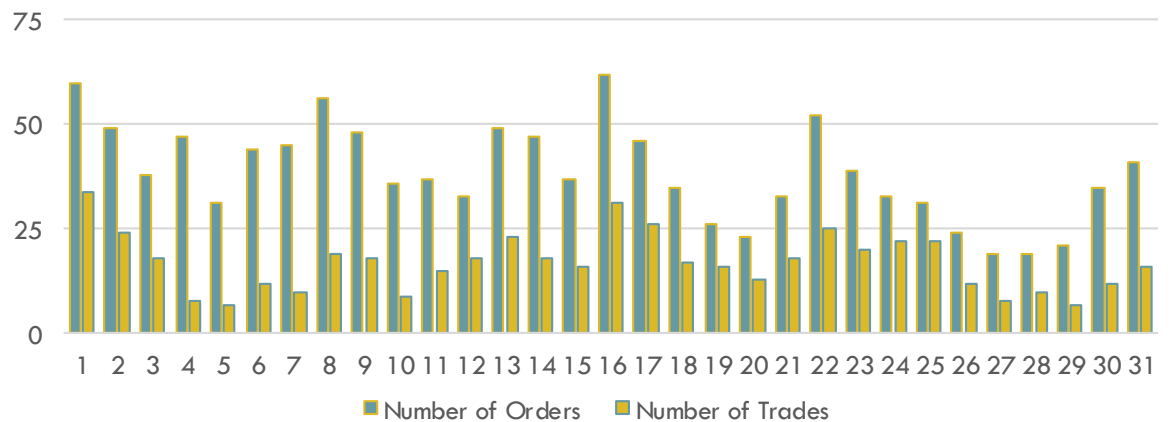
Natural Gas Market Number of Ordered Participants



Natural Gas Market Number of Orders

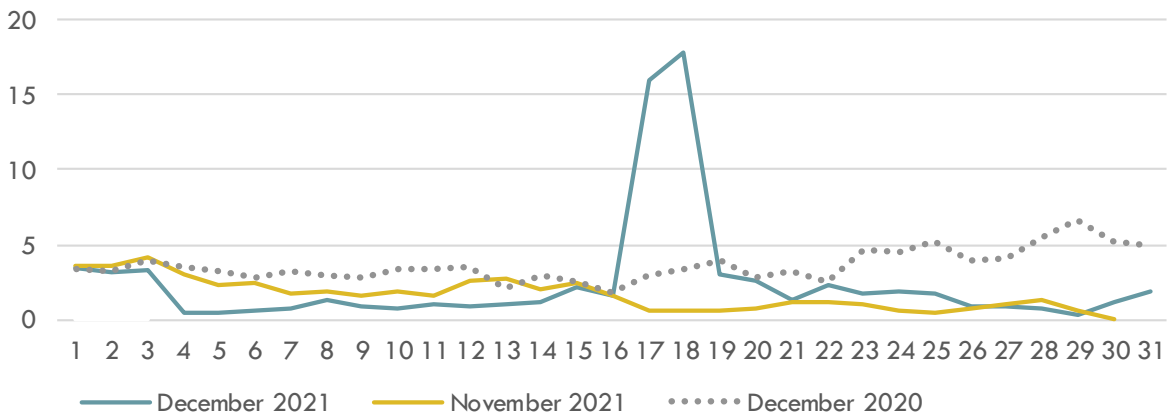


December 2021 Natural Gas Market Number of Orders and Trades

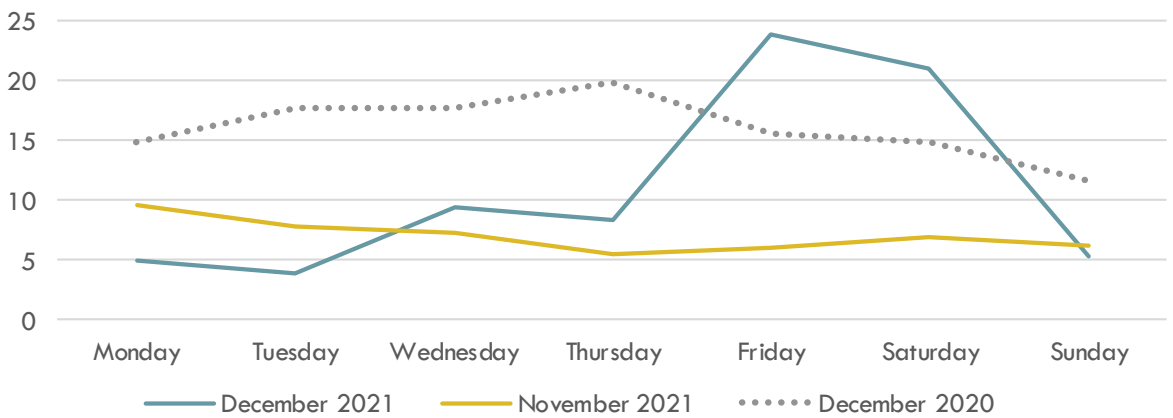


ORDERS, TRADES, VOLUMES (2/3)

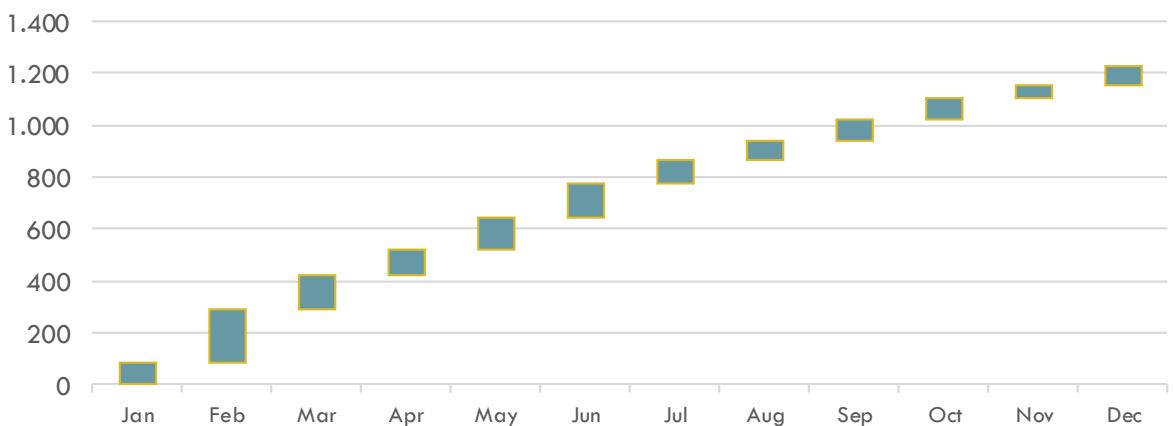
Natural Gas Market Trade Volume (mio.Sm³)



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

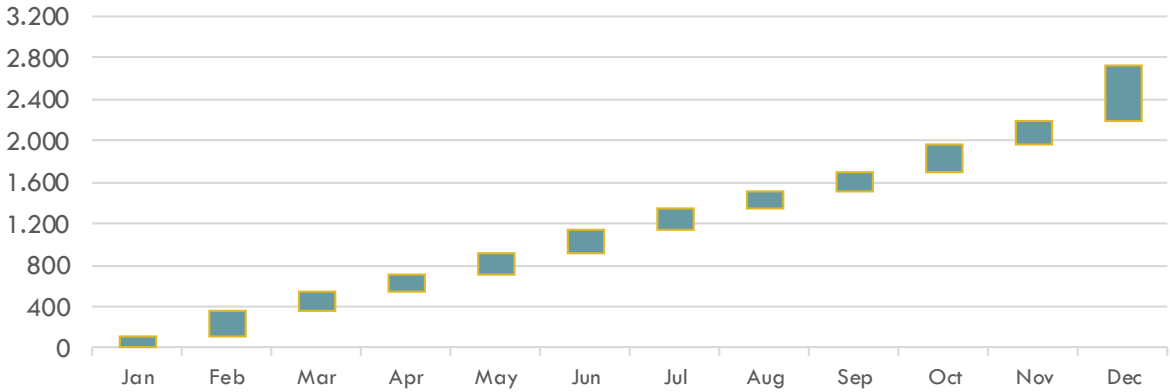


Natural Gas Market Annual Accumulated Trade Volume for 2021 (mio.Sm³)

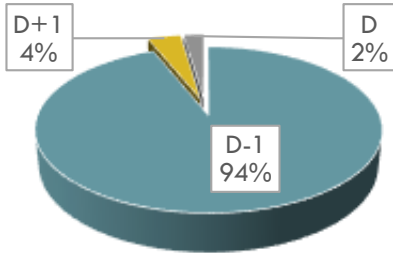


ORDERS, TRADES, VOLUMES (3/3)

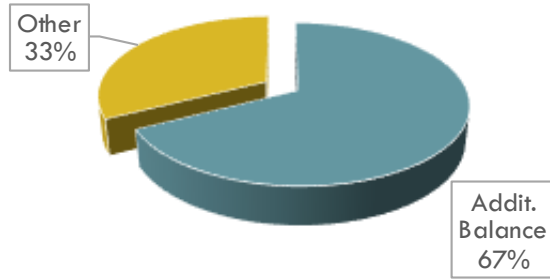
Natural Gas Market Annual Accumulated Transaction Volume for 2021 (Million TL)



Traded Volume of Daily Contracts for December 2021 Period by Sessions



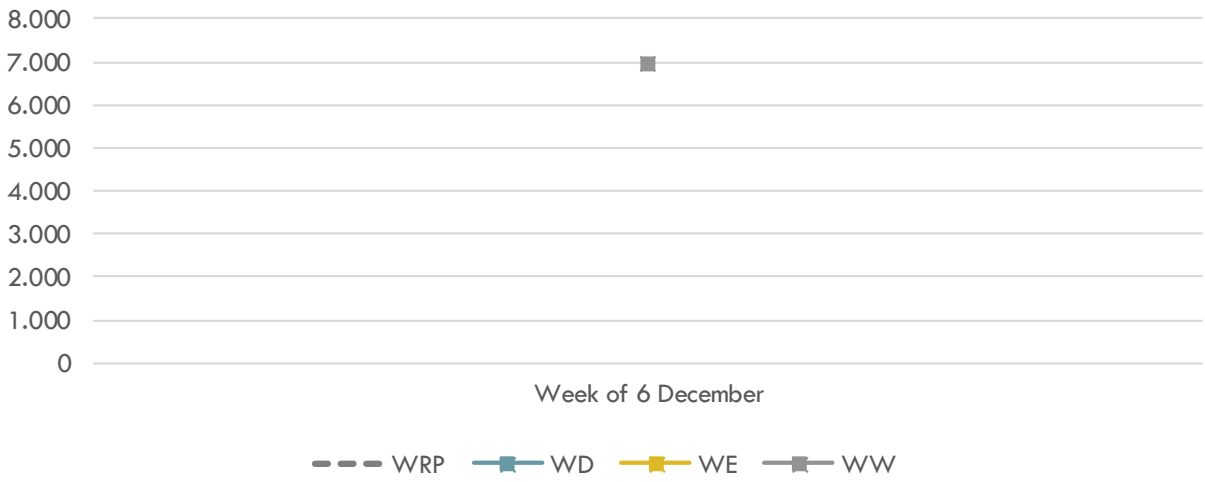
Additional Balancing Traded Volume for December 2021 Period



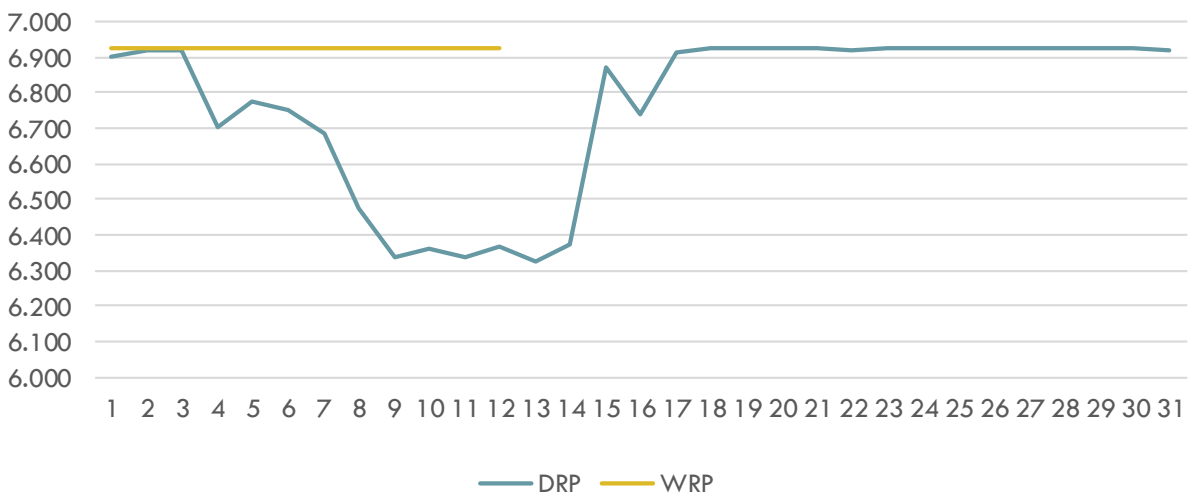
- ✓ The maximum total traded volume was 17.771 sm³ on 18 December 2021 Sat; the minimum total traded volume was realized at the level of 262 sm³ on 29 December 2021 Wed.
- ✓ The maximum total transaction volume was 123.040.448 TL on 18 December 2021 Sat; the minimum total transaction volume was realized at the level of 1.814.088 TL on 29 December 2021 Wed.
- ✓ The maximum d-1 traded volume was 17.717.000 sm³ on 18 December 2021 Sat; the minimum d-1 traded amount was realized at the level of 167.000 sm³ on 05 December 2021 Sun.
- ✓ The maximum d-1 traded volume was 122.671.699 TL on 18 December 2021 Sat; the minimum d-1 traded amount was realized at the level of 1.142.948 TL on 05 December 2021 Sun.
- ✓ The maximum d traded volume was 402.000 sm³ on 28 December 2021 Tue; the minimum d traded amount was realized at the level of 0 sm³ on 03 December 2021 Fri.
- ✓ The maximum d traded volume was 2.783.448 TL on 28 December 2021 Tue; the minimum d traded amount was realized at the level of 0 TL on 03 December 2021 Fri.
- ✓ The maximum d+1 traded volume was 330.000 sm³ on 16 December 2021 Thu; the minimum d+1 traded amount was realized at the level of 0 sm³ on 31 December 2021 Fri.
- ✓ The maximum d+1 traded volume was 2.235.125 TL on 16 December 2021 Thu; the minimum d+1 traded amount was realized at the level of 0 TL on 31 December 2021 Fri.
- ✓ The ratio of ctp compared to total consumption was realized at the level of 1,1% in December 2021.
- ✓ Ctp share in virtual trade was realized at 8,4% in December 2021.

WEEKLY PRODUCTS (1/2)

December 2021 WRP - WD - WE - WW (TL/'000 Sm³)

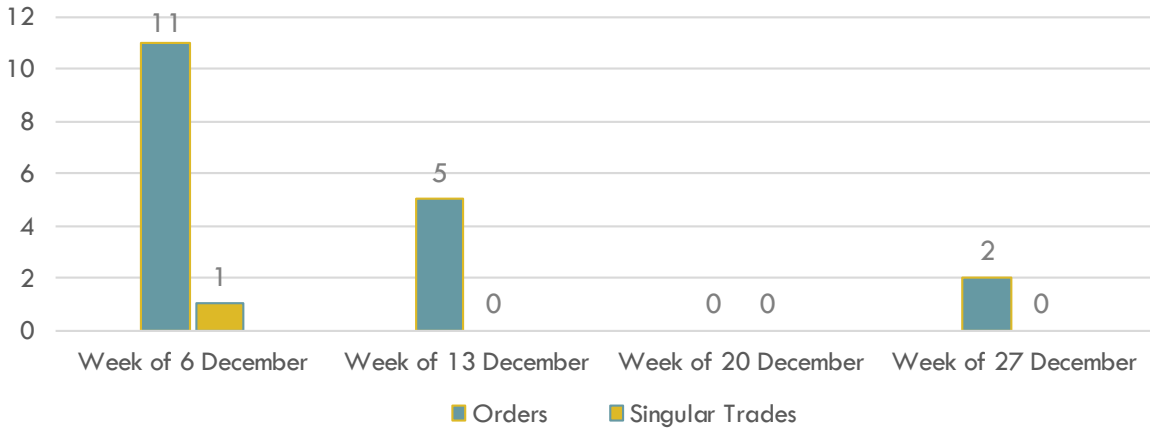


December 2021 DRP - WRP (TL/'000 Sm³)

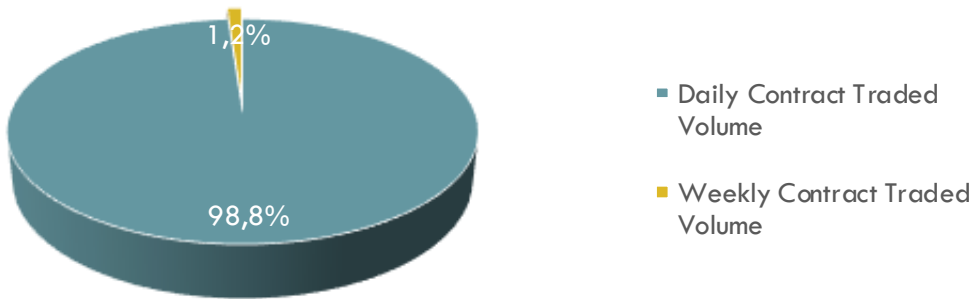


WEEKLY PRODUCTS (2/2)

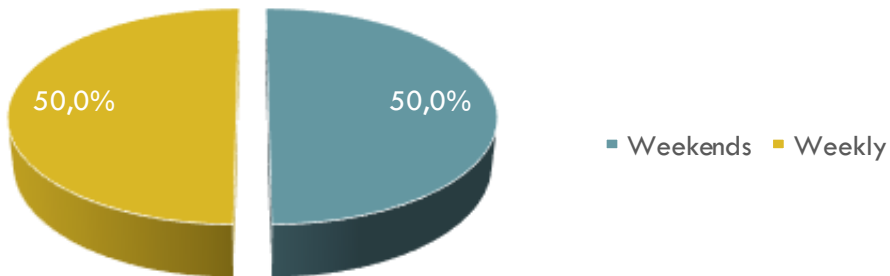
December 2021 Weekly Products Number of Orders and Trades



December 2021 Traded Volume Distribution by Contract Type



December 2021 Distribution of Single Number of Trades by Weekly Product Types



STP

Last 1 Year Trades

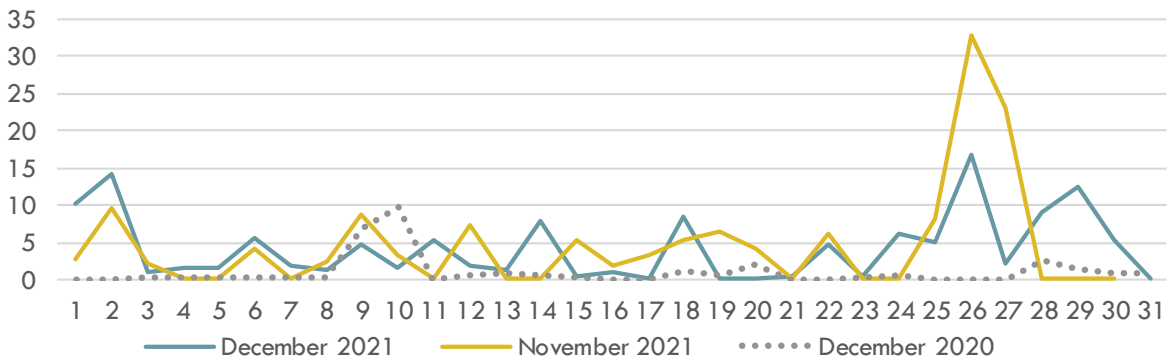
Period	Traded Volume (mio.Sm ³)	Traded Amount (TL)
Dec 2020	111,99	146.183.670
Jan 2021	87,85	114.407.452
Feb 2021	199,29	243.462.785
Mar 2021	134,06	176.783.157
Apr 2021	99,70	165.534.142
May 2021	123,50	213.116.614
Jun 2021	127,49	234.315.489
Jul 2021	95,74	198.270.544
Aug 2021	73,09	159.786.734
Sep 2021	77,88	192.348.772
Oct 2021	86,87	272.972.795
Nov 2021	49,46	227.618.483
Dec 2021	76,85	327.403.990

CTP's share in Total Cons. and Virtual Trade

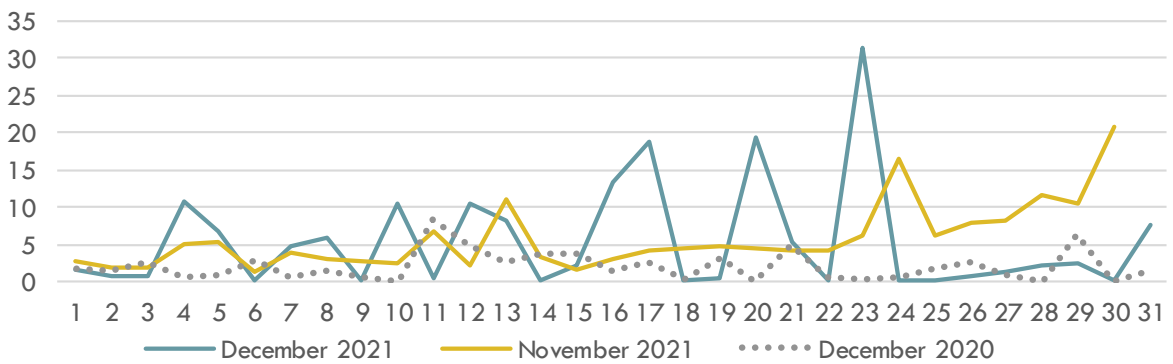
Period	Total Consumption (%)	Virtual Trade (%)
Dec 2020	1,7%	9,7%
Jan 2021	1,3%	8,7%
Feb 2021	3,3%	19,4%
Mar 2021	2,1%	12,4%
Apr 2021	2,0%	17,4%
May 2021	3,3%	14,2%
Jun 2021	2,9%	20,7%
Jul 2021	2,3%	16,4%
Aug 2021	1,7%	12,3%
Sep 2021	1,9%	12,8%
Oct 2021	1,8%	10,9%
Nov 2021	0,9%	5,4%
Dec 2021	1,1%	8,4%

TRANSMISSION SYSTEM DATA (1/2)

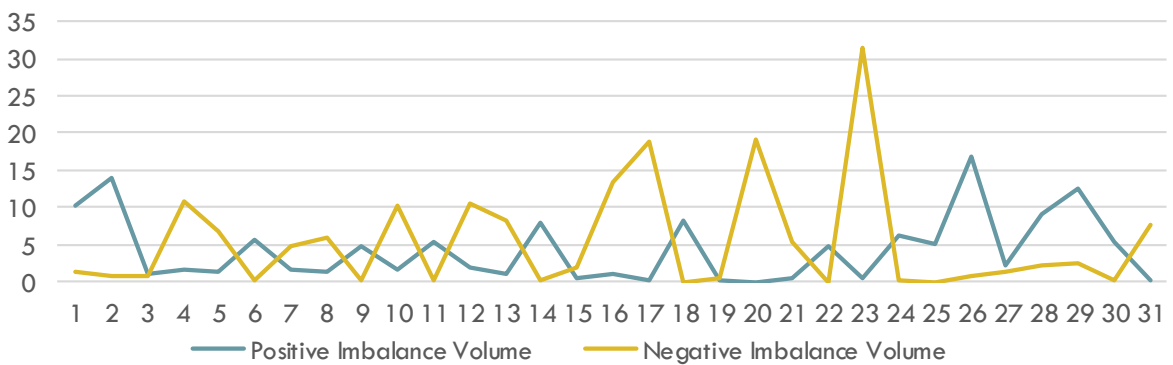
Natural Gas Market Positive Imbalance Volume (mio.Sm³)



Natural Gas Market Negative Imbalance Volume (mio.Sm³)



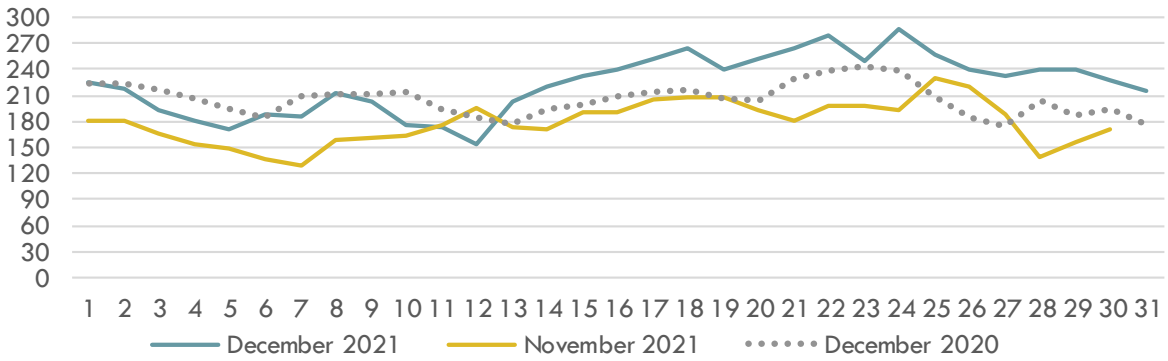
December 2021 Period Negative and Positive Imbalance Volume (mio.Sm³)



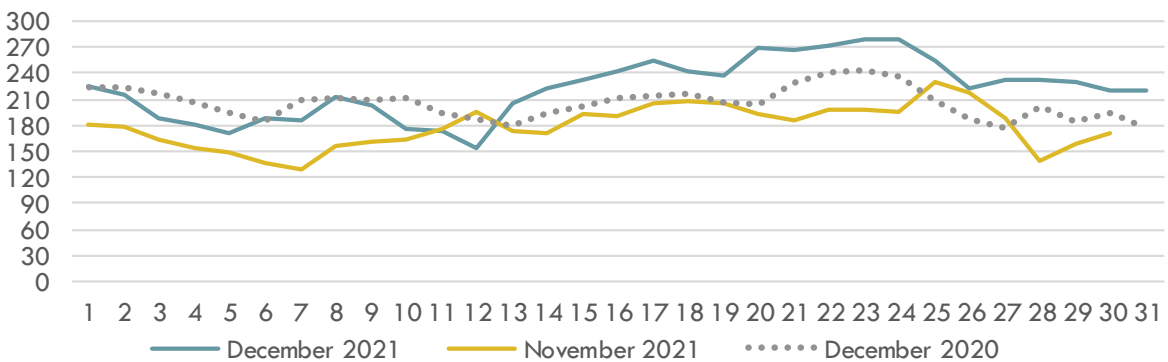
- ✓ The maximum positive imbalance volume was 16.801.184 sm³ on 26 December 2021 Sun; the minimum positive imbalance volume was realized at the level of 7.145 sm³ on 20 December 2021 Mon.
- ✓ The maximum negative imbalance volume was 31.365.201 sm³ on 23 December 2021 Thu; the minimum negative imbalance volume was realized at the level of 3.619 sm³ on 18 December 2021 Sat.

TRANSMISSION SYSTEM DATA (2/2)

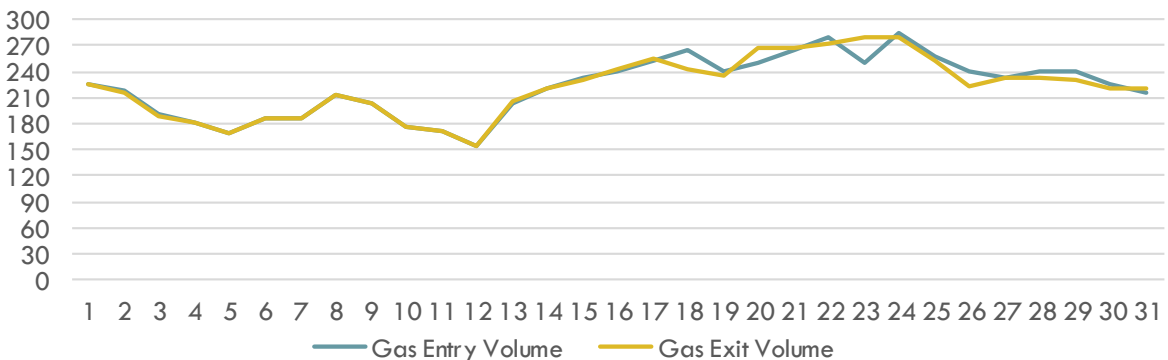
Natural Gas Market Gas Entry Volume (mio.Sm³)



Natural Gas Market Gas Exit Volume (mio.Sm³)



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



- ✓ Maximum gas entry volume realized on 24 December 2021 Fri was 285.238.955 sm³; minimum gas entry volume on 12 December 2021 Sun was 153.447.220 sm³ levels.
- ✓ Maximum gas exit volume realized on 23 December 2021 Thu was 279.020.022 sm³; minimum gas exit volume 12 December 2021 Sun was 153.652.093 sm³ levels.
- ✓ Maximum gas volume in stocks realized on 30 December 2021 Thu was 424.886.934 sm³; minimum stok gas volume 23 December 2021 Thu was 376.246.778 sm³ levels.

ADDITIONAL BALANCING TRANSACTIONS

Transactions with 1 Code

Contract Day	Transaction Volume ('000 Sm ³)	WAP (TL/'000 Sm ³)	Direction
01.12.2021	2.502	6.914	Purchase
02.12.2021	2.258	6.923	Purchase
03.12.2021	2.686	6.924	Purchase
04.12.2021	113	6.500	Sales
05.12.2021	167	6.844	Purchase
06.12.2021	211	6.799	Purchase
07.12.2021	194	6.647	Purchase
08.12.2021	332	6.499	Purchase
09.12.2021	156	6.410	Purchase
10.12.2021	221	6.469	Purchase
11.12.2021	255	6.417	Purchase
12.12.2021	247	6.407	Purchase
13.12.2021	284	6.386	Purchase
14.12.2021	423	6.440	Purchase
15.12.2021	1.452	6.914	Purchase
16.12.2021	493	6.820	Purchase
17.12.2021	316	6.774	Purchase
18.12.2021	2.217	6.924	Purchase
19.12.2021	2.726	6.924	Purchase
20.12.2021	2.280	6.924	Purchase
21.12.2021	567	6.924	Purchase
22.12.2021	949	6.924	Purchase
23.12.2021	22	6.924	Purchase
24.12.2021	135	6.924	Purchase
31.12.2021	671	6.924	Purchase

Transactions with 2 Code

Contract Day	Transaction Volume ('000 Sm ³)	WAP (TL/'000 Sm ³)	Direction
17.12.2021	15.000	6.924	Purchase
18.12.2021	15.000	6.924	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 Sm ³)	Direction
-	-	-	-

- ✓ Additional balancing transactions with a maximum code of 1 were 2.726.000 sm³ on 19 December 2021 Sun; additional balancing transactions with a minimum code of 1 were realized at the level of 22.000 sm³ on 23 December 2021 Thu.
- ✓ In December, additional balancing transaction code of 2 was realized 30.000.000 sm³ in total.
- ✓ In December, no additional balancing transaction code of 3 was realized.
- ✓ In December, no additional balancing transaction code of 4 was realized.