

EPIAS

NATURAL GAS MARKET MONTHLY BULLETIN

NOVEMBER 2021



SUMMARY DATA (1/2)

Arithmetic Means

	November 2021	October 2021	Monthly Change	November 2020	Annual Change
DRP (TL/'000 Sm ³)	4.622	3.171	45.8%	1.370	237.3%
WRP (TL/'000 Sm ³)	5.183	3.424	51.4%	1.351	283.7%
BGPP (TL/'000 Sm ³)	4.902	3.404	44.0%	1.412	247.3%
BGSP (TL/'000 Sm ³)	4.483	3.075	45.8%	1.329	237.2%
Traded Volume (mio.Sm ³)	1.648.567	2.802.290	-41.2%	4.696.400	-64.9%
Transaction Volume (TL)	7.587.283	8.805.574	-13.8%	6.501.211	16.7%
Gas Entry Volume (mio.Sm ³)	178.511.255	156.987.223	13.7%	180.193.331	-0.9%
Gas Exit Volume (mio.Sm ³)	178.568.259	157.063.319	13.7%	180.144.918	-0.9%
Number of Ordered Participants	15	16	-11.0%	20	-26.0%
Number of Orders	44	52	-15.2%	72	-38.6%
Number of Trades	22	21	2.7%	33	-34.9%

Maximum / Minimum Levels

	November 2021		October 2021		November 2020	
	Max	Min	Max	Min	Max	Min
DRP (TL/'000 Sm ³)	4.649	4.556	3.424	2.483	1.442	1.303
WRP (TL/'000 Sm ³)	6.924	4.600	3.424	3.424	1.410	1.300
BGPP (TL/'000 Sm ³)	6.923	4.693	4.559	2.602	1.485	1.342
BGSP (TL/'000 Sm ³)	4.510	4.419	3.321	2.408	1.399	1.264
Traded Volume (mio.Sm ³)	4.169.000	38.000	7.020.000	154.000	9.973.000	2.647.000
Transaction Volume (TL)	23.581.723	176.662	22.691.168	458.816	13.874.269	3.444.441
Gas Entry Volume (mio.Sm ³)	228.855.537	128.489.841	188.271.143	130.237.441	216.653.575	121.055.377
Gas Exit Volume (mio.Sm ³)	229.577.537	128.670.620	185.813.143	130.122.352	215.431.020	123.973.797
Number of Ordered Participants	18	10	20	10	23	16
Number of Orders	90	12	96	12	109	53
Number of Trades	38	2	41	3	45	23

SUMMARY DATA (2/2)

Totals

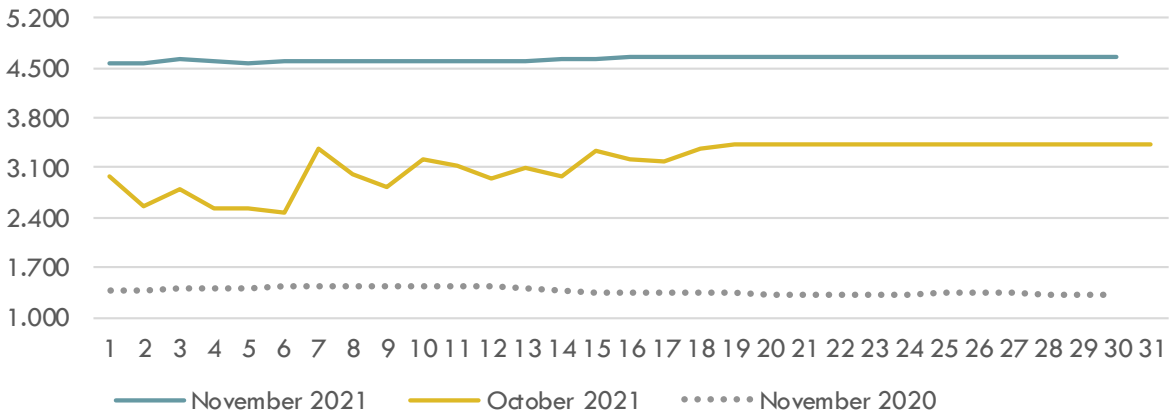
	November 2021	October 2021	Monthly Change	November 2020	Annual Change
Traded Volume (mio.Sm ³)	49.457.000	86.871.000	-43.1%	140.892.000	-64.9%
Transaction Volume (TL)	227.618.483	272.972.795	-16.6%	195.036.330	16.7%
Gas Entry Volume (mio.Sm ³)	5.355.337.640	4.709.616.694	13.7%	5.405.799.938	-0.9%
Gas Exit Volume (mio.Sm ³)	5.357.047.783	4.711.899.556	13.7%	5.404.347.549	-0.9%
Number of Orders	1.326	1.615	-17.9%	2.161	-38.6%
Number of Trades	583	631	-7.6%	971	-40.0%
Total Production of Natural Gas Based Power Plants (MWh)	7.948.374	9.838.306	-19.2%	7.489.777	6.1%
Total Electricity Generation (MWh)	24.508.951	24.168.159	1.4%	23.501.147	4.3%
Ratio of Natural Gas Based Generation to Total Electricity Generation (%)	32	41	-20.3%	32	1.8%

Brent Oil and TTF Prices

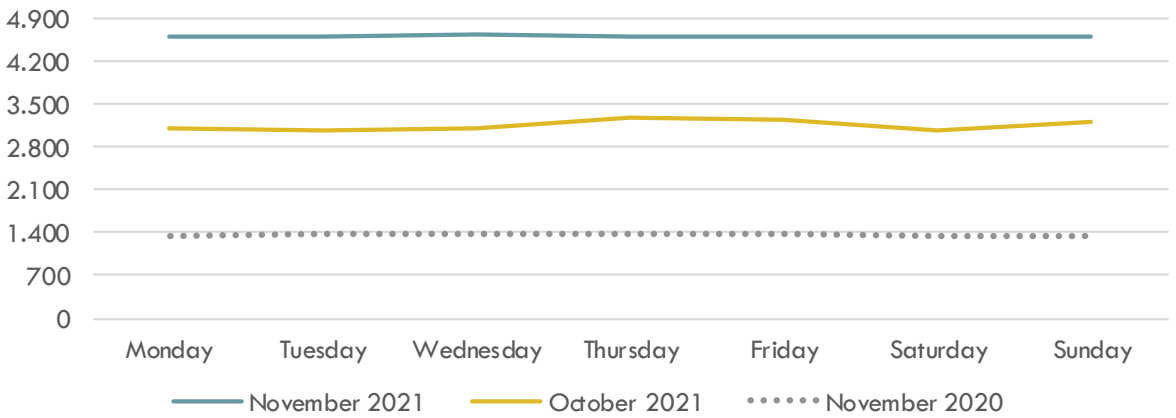
	November 2021	October 2021	Monthly Change	November 2020	Annual Change
Brent Oil(\$/bl)	80,85	83,75	-3,46%	43,98	83,83%
TTF (€/MWh)	81,3	85,59	-5,01%	13,73	492,13%

PRICES (1/2)

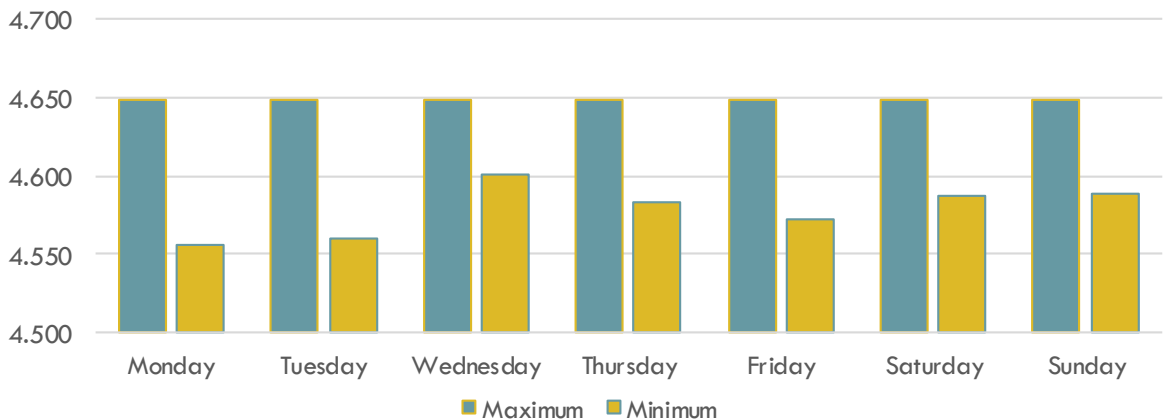
Natural Gas Market DRP (TL/'000 Sm³)



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

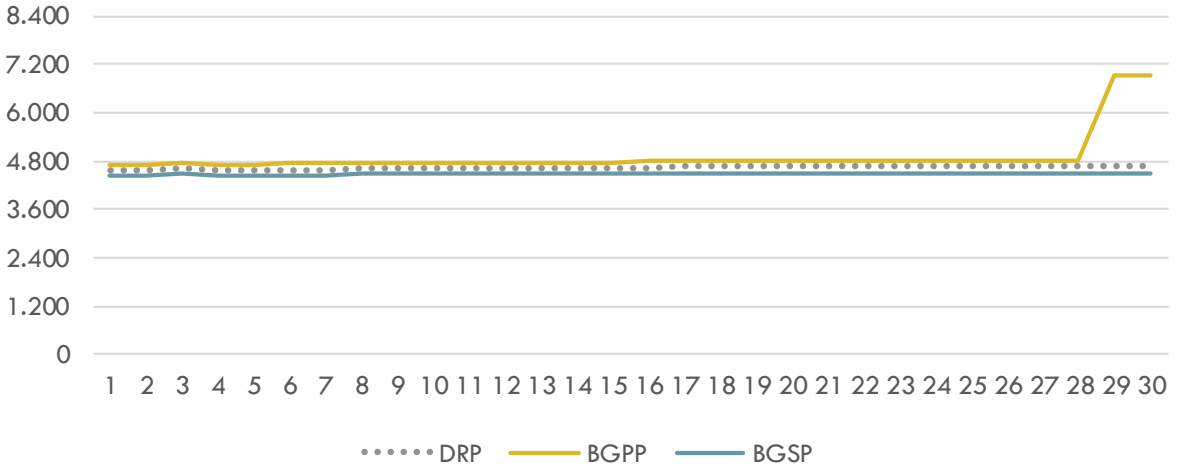


November 2021 Natural Gas Market By Days Max / Min DRP (TL/'000 Sm³)



PRICES (2/2)

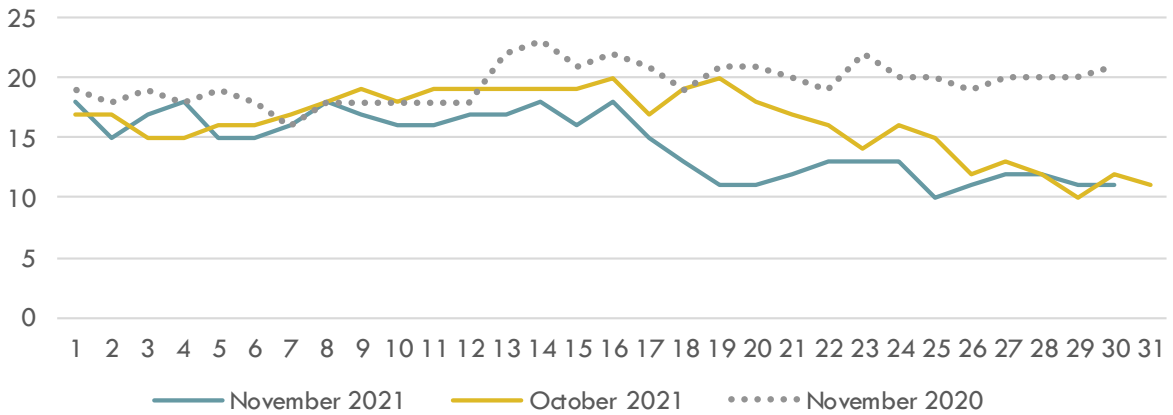
November 2021 DRP - BGPP - BGSP (TL/'000 Sm³)



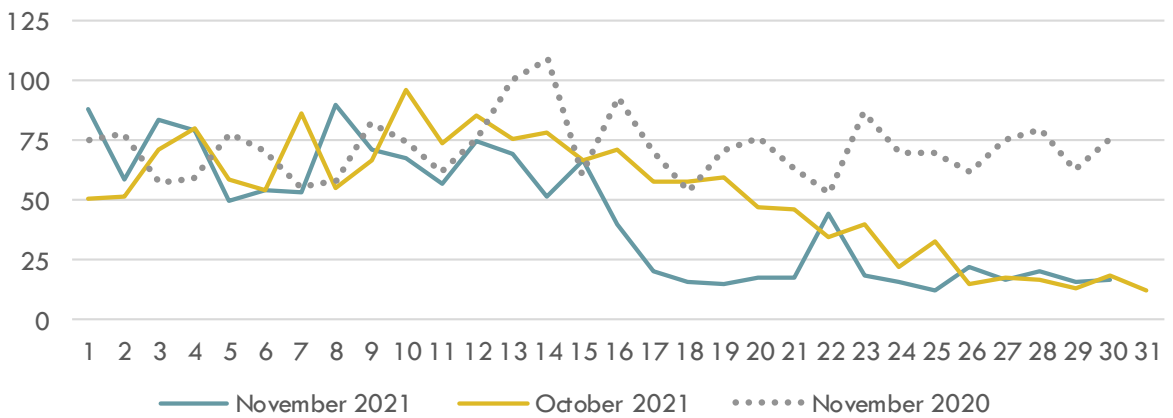
- ✓ The maximum DRP was 4.649 TL on 17 November 2021 Wed; the minimum DRP was realized at the level of 4.556 TL on 01 November 2021 Mon.
- ✓ The Maximum BGPP was 6.923 on 30 November 2021 Tue; the minimum BGPP was realized at the level of 4.693 TL on 01 November 2021 Mon.
- ✓ The maximum BGSP was 4.510 on 17 November 2021 Wed; the minimum BGSP was realized at the level of 4.419 TL on 01 November 2021 Mon.

ORDERS, TRADES, VOLUMES (1/3)

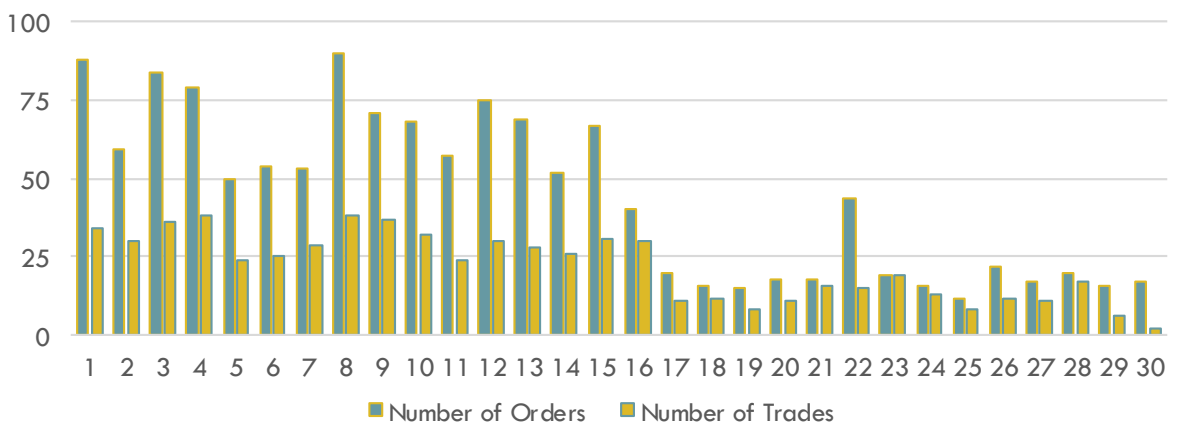
Natural Gas Market Number of Ordered Participants



Natural Gas Market Number of Orders

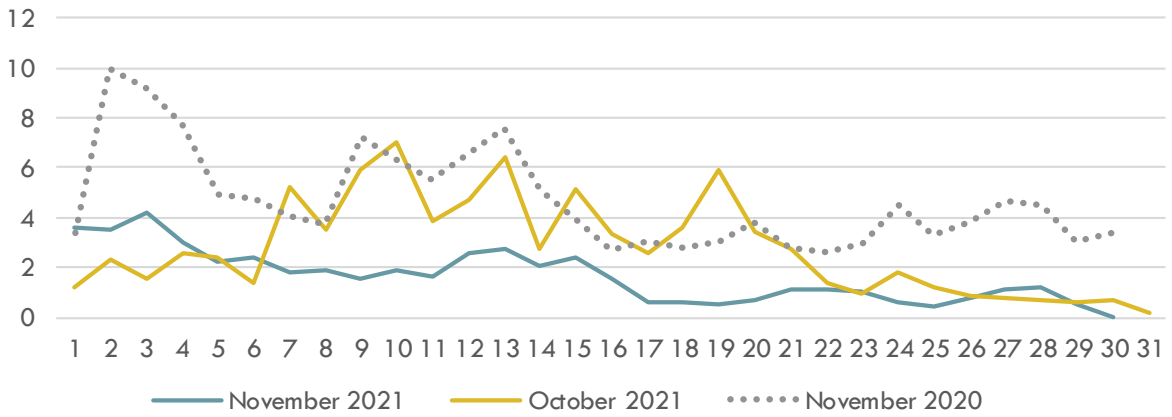


November 2021 Natural Gas Market Number of Orders and Trades

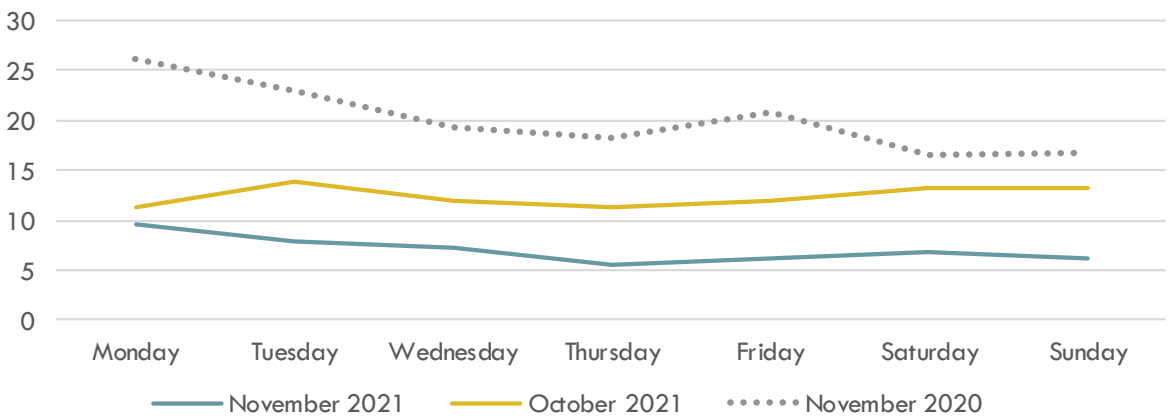


ORDERS, TRADES, VOLUMES (2/3)

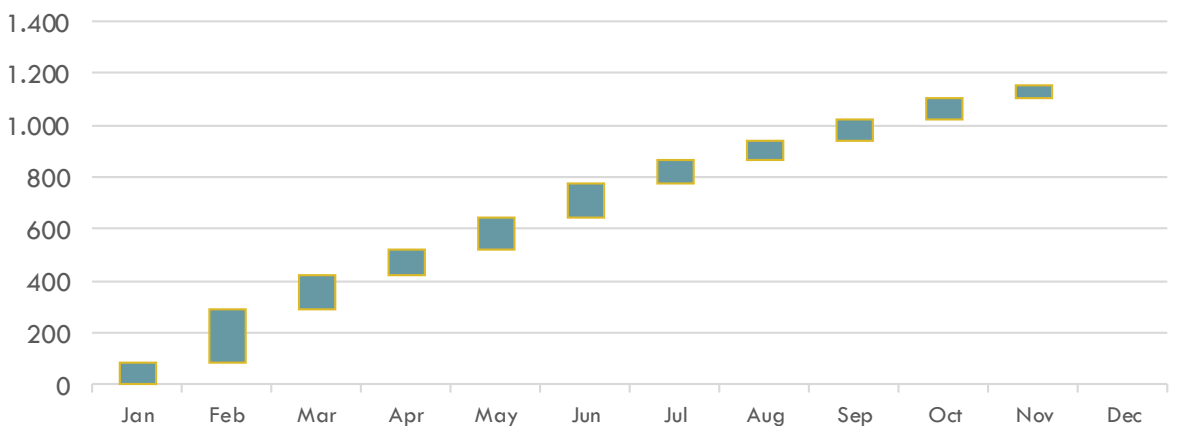
Natural Gas Market Trade Volume (mio.Sm³)



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

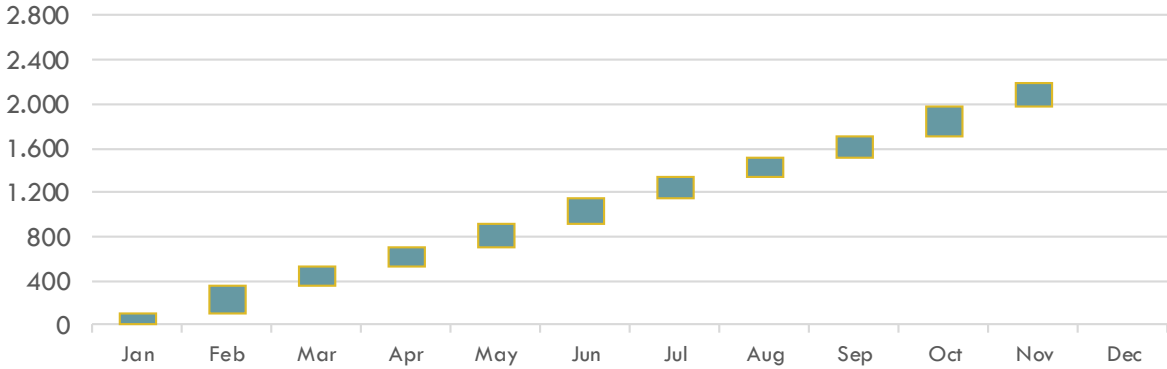


Natural Gas Market Annual Accumulated Trade Volume for 2021 (mio.Sm³)

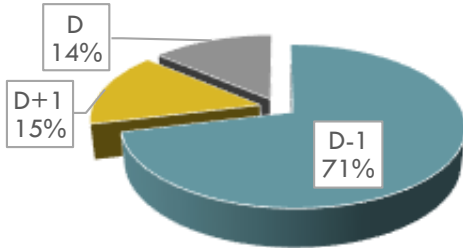


ORDERS, TRADES, VOLUMES (3/3)

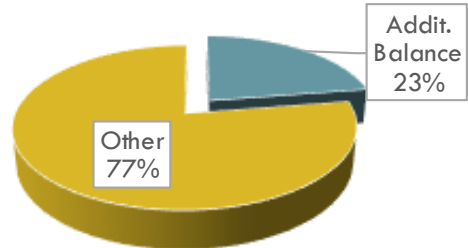
Natural Gas Market Annual Accumulated Transaction Volume for 2021 (Million TL)



Traded Volume of Daily Contracts for November 2021 Period by Sessions



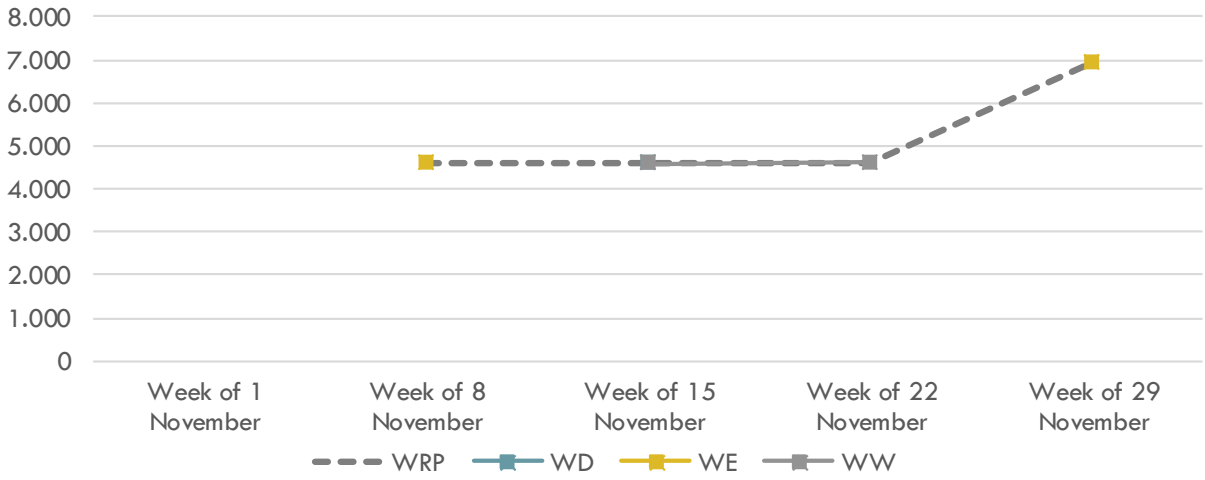
Additional Balancing Traded Volume for November 2021 Period



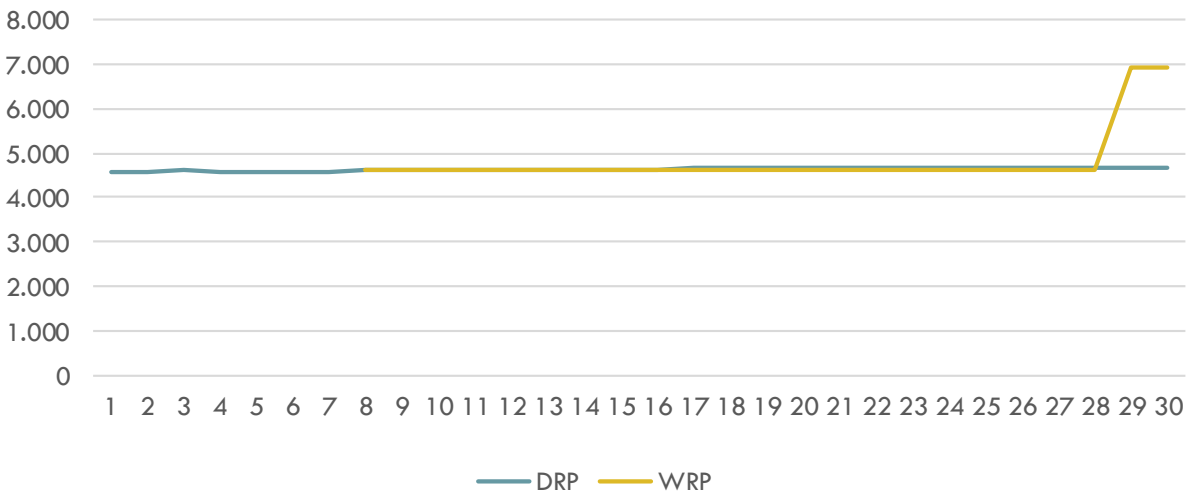
- ✓ The maximum total traded volume was 4.169 sm³ on 03 November 2021 Wed; the minimum total traded volume was realized at the level of 38 sm³ on 30 November 2021 Tue.
- ✓ The maximum total transaction volume was 23.581.723 TL on 15 November 2021 Mon; the minimum total transaction volume was realized at the level of 176.662 TL on 30 November 2021 Tue.
- ✓ The maximum d-1 traded volume was 3.812.000 sm³ on 03 November 2021 Wed; the minimum d-1 traded amount was realized at the level of 0 sm³ on 24 November 2021 Wed.
- ✓ The maximum d-1 traded volume was 17.623.530 TL on 03 November 2021 Wed; the minimum d-1 traded amount was realized at the level of 0 TL on 24 November 2021 Wed.
- ✓ The maximum d traded volume was 700.000 sm³ on 28 November 2021 Sun; the minimum d traded amount was realized at the level of 0 sm³ on 07 November 2021 Sun.
- ✓ The maximum d traded volume was 3.254.300 TL on 28 November 2021 Sun; the minimum d traded amount was realized at the level of 0 TL on 07 November 2021 Sun.
- ✓ The maximum d+1 traded volume was 438.000 sm³ on 15 November 2021 Mon; the minimum d+1 traded amount was realized at the level of 0 sm³ on 19 November 2021 Fri.
- ✓ The maximum d+1 traded volume was 2.022.246 TL on 15 November 2021 Mon; the minimum d+1 traded amount was realized at the level of 0 TL on 19 November 2021 Fri.
- ✓ The ratio of ctp compared to total consumption was realized at the level of 0,9% in November 2021.
- ✓ Ctp share in virtual trade was realized at 5,4% in November 2021.

WEEKLY PRODUCTS (1/2)

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

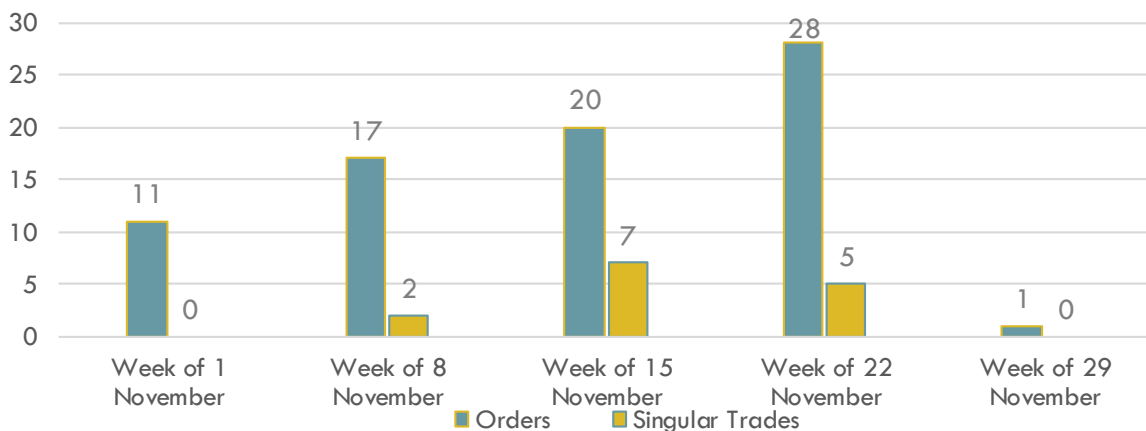


November 2021 DRP - WRP (TL/'000 Sm³)

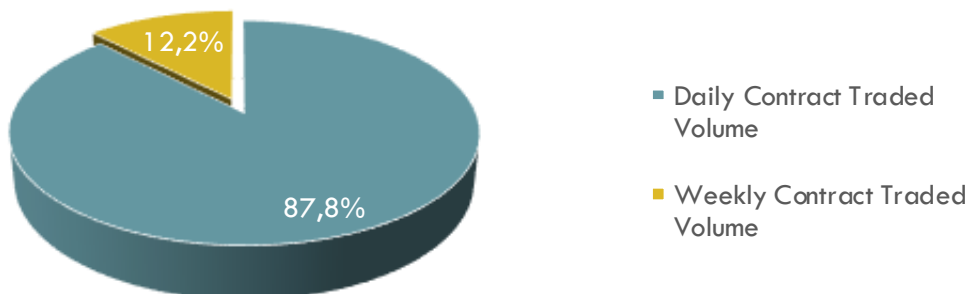


WEEKLY PRODUCTS (2/2)

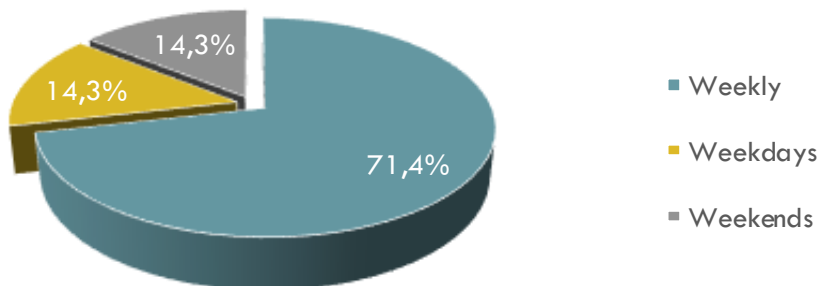
November 2021 Weekly Products Number of Orders and Trades



November 2021 Traded Volume Distribution by Contract Type



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



STP

Last 1 Year Trades

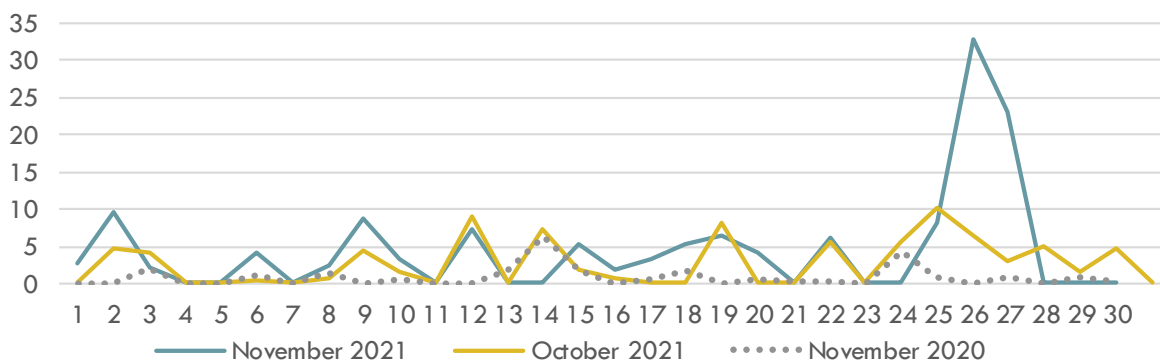
Period	Traded Volume (mio.Sm ³)	Traded Amount (TL)
Nov 2020	140,89	195.036.330
Dec 2020	111,99	146.183.670
Jan 2021	87,85	114.407.452
Feb 2021	199,29	243.462.785
Mar 2021	134,06	176.783.157
Apr 2021	99,70	165.534.142
May 2021	123,50	213.116.614
Jun 2021	127,49	234.315.489
Jul 2021	95,74	198.270.544
Aug 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

CTP's share in Total Cons. and Virtual Trade

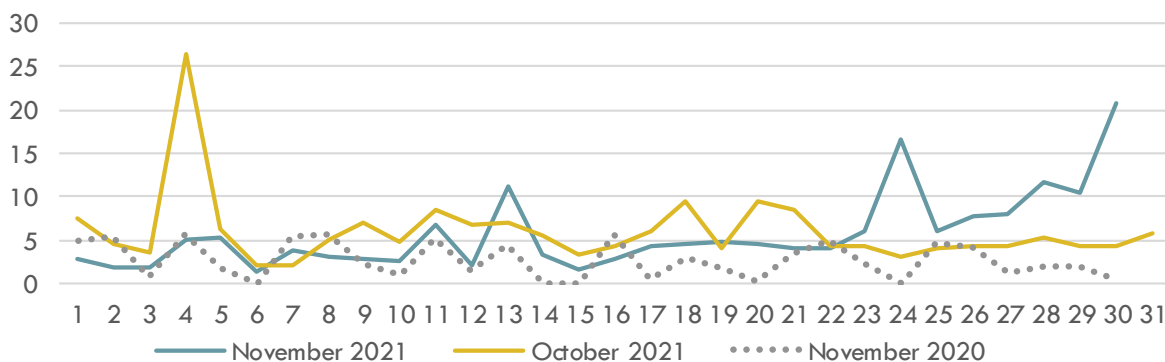
Period	Total Consumption (%)	Virtual Trade (%)
Nov 2020	2,6%	11,2%
Dec 2020	1,7%	9,7%
Jan 2021	1,3%	8,7%
Feb 2021	3,3%	19,4%
Mar 2021	2,1%	12,4%
Apr 2021	2,0%	17,4%
May 2021	3,3%	14,2%
Jun 2021	2,9%	20,7%
Jul 2021	2,3%	16,4%
Aug 2021	1,7%	12,3%
Sep 2021	1,9%	12,8%
Oct 2021	1,8%	10,9%
Nov 2021	0,9%	5,4%

TRANSMISSION SYSTEM DATA (1/2)

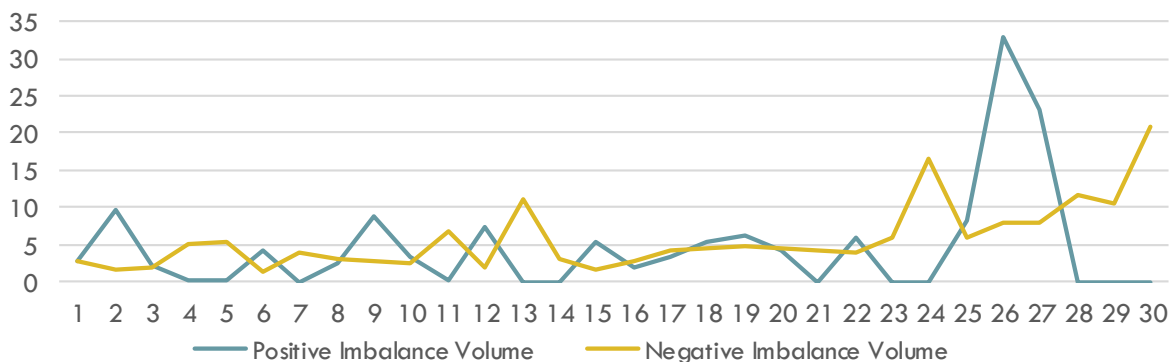
Natural Gas Market Positive Imbalance Volume (mio.Sm³)



Natural Gas Market Negative Imbalance Volume (mio.Sm³)



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

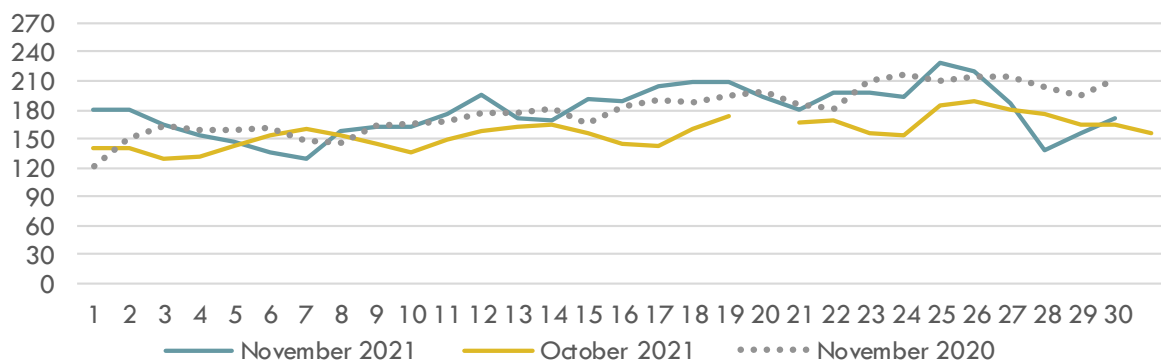


✓ The maximum positive imbalance volume was 32.886.865 sm³ on 26 November 2021 Fri; the minimum positive imbalance volume was realized at the level of 2.061 sm³ on 29 November 2021 Mon.

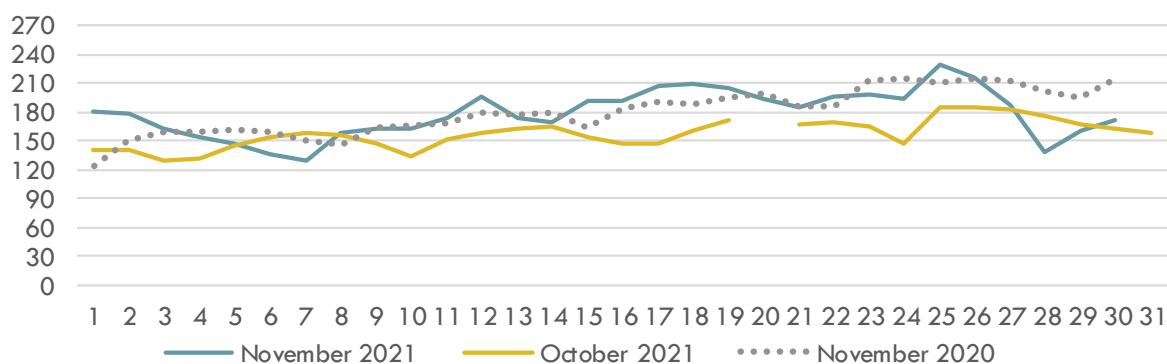
✓ The maximum negative imbalance volume was 20.793.693 sm³ on 30 November 2021 Tue; the minimum negative imbalance volume was realized at the level of 1.300.480 sm³ on 06 November 2021 Sat.

TRANSMISSION SYSTEM DATA (2/2)

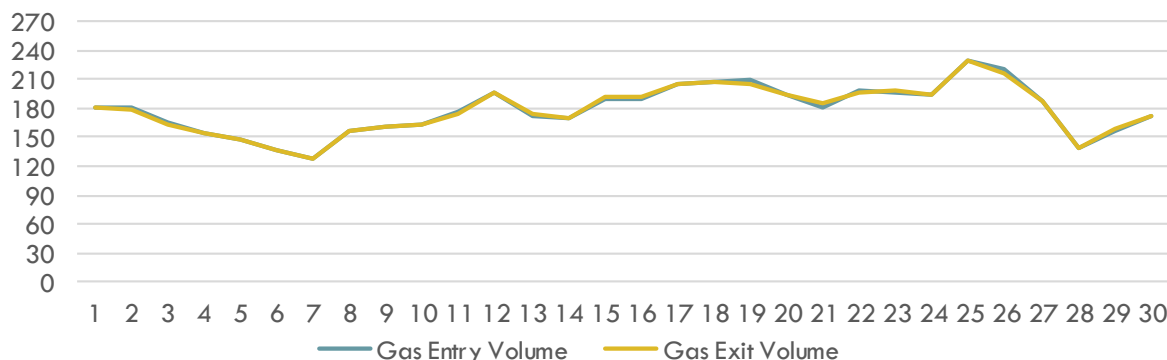
Natural Gas Market Gas Entry Volume (mio.Sm³)



Natural Gas Market Gas Exit Volume (mio.Sm³)



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



- ✓ Maximum gas entry volume realized on 25 November 2021 Thu was 228.855.537 sm³; minimum gas entry volume on 07 November 2021 Sun was 128.489.841 sm³ levels.
- ✓ Maximum gas exit volume realized on 25 November 2021 Thu was 229.577.537 sm³; minimum gas exit volume 07 November 2021 Sun was 128.670.620 sm³ levels.
- ✓ Maximum gas volume in stocks realized on 11 November 2021 Thu was 401.791.218 sm³; minimum stok gas volume 25 November 2021 Thu was 395.200.120 sm³ levels.

ADDITIONAL BALANCING TRANSACTIONS

Transactions with 1 Code

Contract Day	Transaction Volume ('000 Sm ³)	WAP (TL/'000 Sm ³)	Direction
01.11.2021	1.646	4.508	Purchase
02.11.2021	1.132	4.559	Purchase
03.11.2021	2.067	4.630	Purchase
04.11.2021	1.047	4.565	Sales
05.11.2021	322	4.500	Sales
06.11.2021	563	4.572	Sales
07.11.2021	271	4.571	Sales
08.11.2021	160	4.609	Sales
09.11.2021	90	4.597	Sales
10.11.2021	272	4.590	Sales
11.11.2021	217	4.601	Sales
12.11.2021	747	4.603	Sales
13.11.2021	1.044	4.603	Sales
14.11.2021	709	4.607	Sales
15.11.2021	346	4.611	Sales
16.11.2021	247	4.631	Sales
21.11.2021	202	4.649	Purchase
22.11.2021	53	4.649	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 2.067.000 sm³ on 03 November 2021 Wed; additional balancing transactions with a minimum code of 1 were realized at the level of 53.000 sm³ on 22 November 2021 Mon.
- ✓ In November, no additional balancing transaction code of 2 was realized.
- ✓ In November, no additional balancing transaction code of 3 was realized.
- ✓ In November, no additional balancing transaction code of 4 was realized.