

Turkish Gas Market



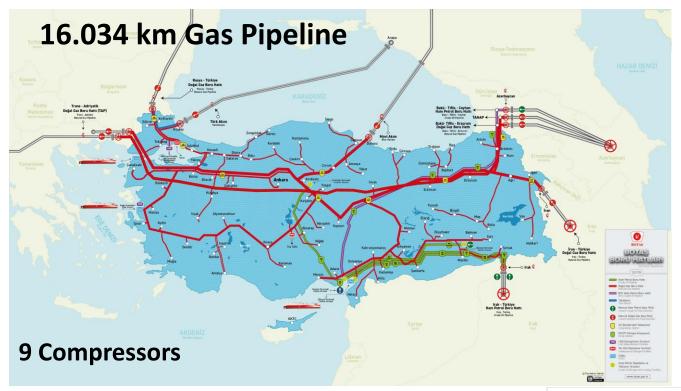
Mustafa Güzel Natural Gas Market Manager

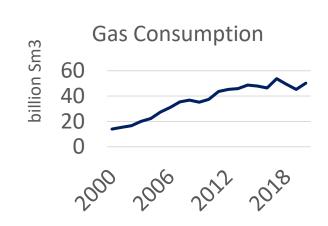
June 8, 2020



BOTAS PIPELINE GRID

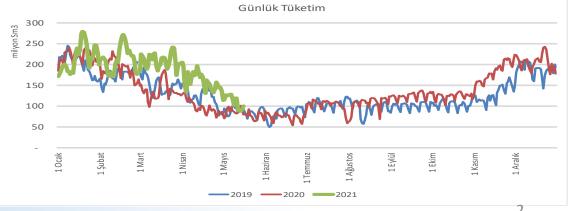






Total Entry Capacity 342 million Sm³/day and it is planned to be more than 500 million Sm³/day

50 bcm yearly gas consumption



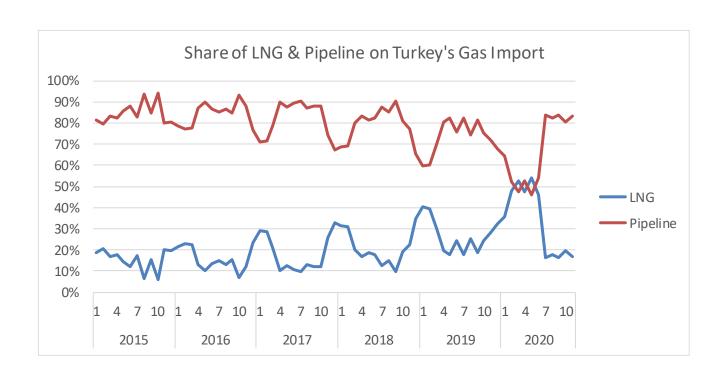


GAS IMPORT



Million Sm3	Yearly						
	2016	2017	2018	2019	2020	2021	
ABD	243	768	444	1.219	2.977	1.378	
Azerbaycan	6.480	6.544	7.521	9.585	11.548	2.085	
Cezayir	4.284	4.617	4.599	5.678	5.573	1.412	
Diğer	784	1.739	1.158	918	1.399	-	
İran	7.705	9.251	7.863	7.736	5.321	1.523	
Katar	919	1.562	2.981	2.459	3.248	-	
Nijerya	1.398	2.080	2.147	2.420	1.881	647	
Rusya	24.540	28.637	23.642	15.193	16.178	5.051	
Toplam	46.352	55.197	50.355	45.208	48.126	12.097	

	2016	2017	2018	2019	2020	2021*
Algeria	9%	8%	9%	13%	12%	12%
Azerbaijan	14%	12%	15%	21%	24%	17%
Iran	17%	17%	16%	17%	11%	13%
Nigeria	3%	4%	4%	5%	4%	5%
Other	2%	3%	2%	2%	3%	0%
Qatar	2%	3%	6%	5%	7%	0%
Russia	53%	52%	47%	34%	34%	42%
USA	1%	1%	1%	3%	6%	11%

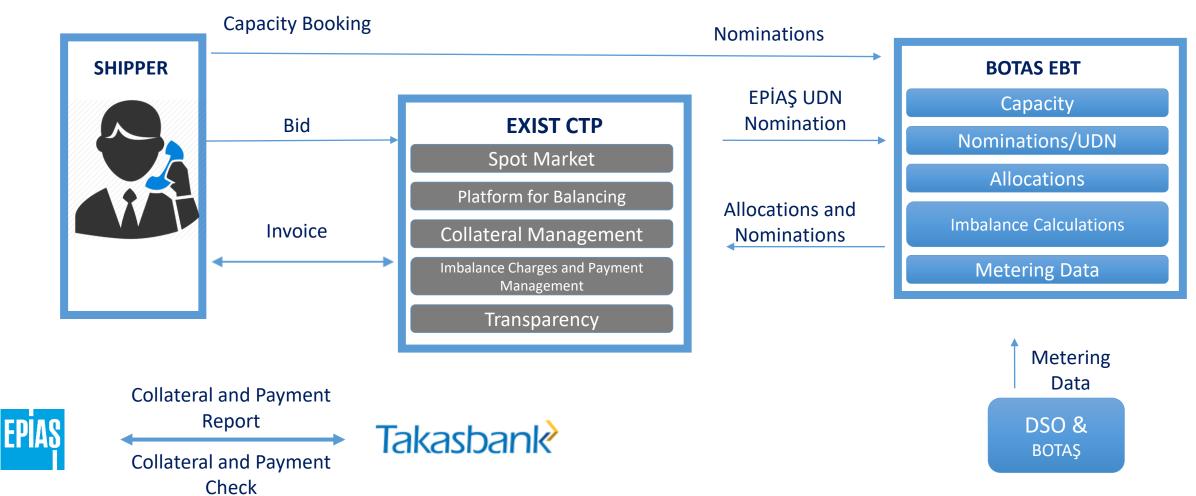




GAS MARKET MODEL



In-house software







Organized Wholesale Gas Market

Balancing And Spot Gas Market Launched on September 1st, 2018

What it brings us:

Market based balancing opportunity for TSO

Spot natural gas trade and self balancing opportunities for Gas Trading

Companies

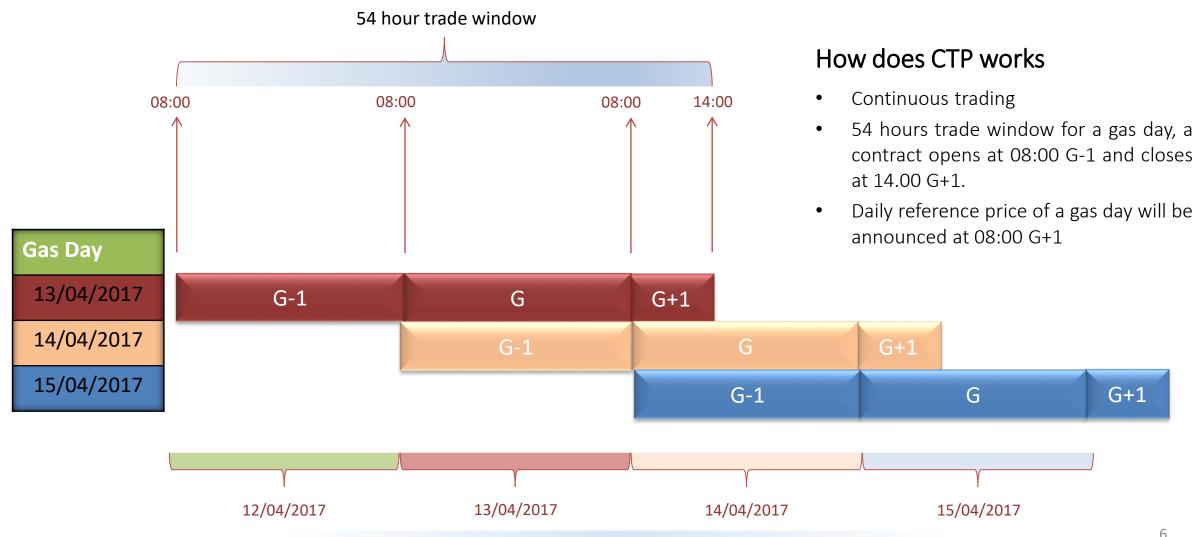
Physical Delivery Gas Futures Market

Alternative pricing mechanism for long term contracts



Market Procedures

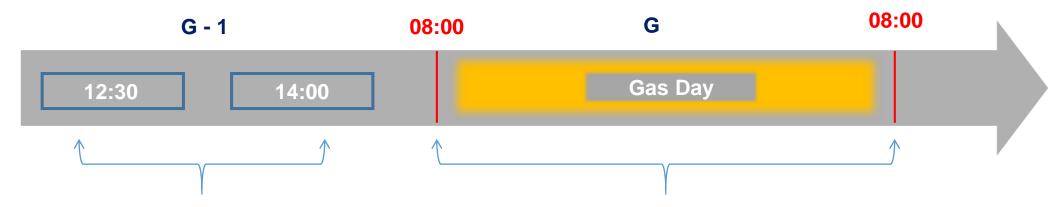






Balancing Actions





TSO enters the market pre-specified times. Addition to these exact times, it can enter market anytime it wishes with a 30 minutes notification.

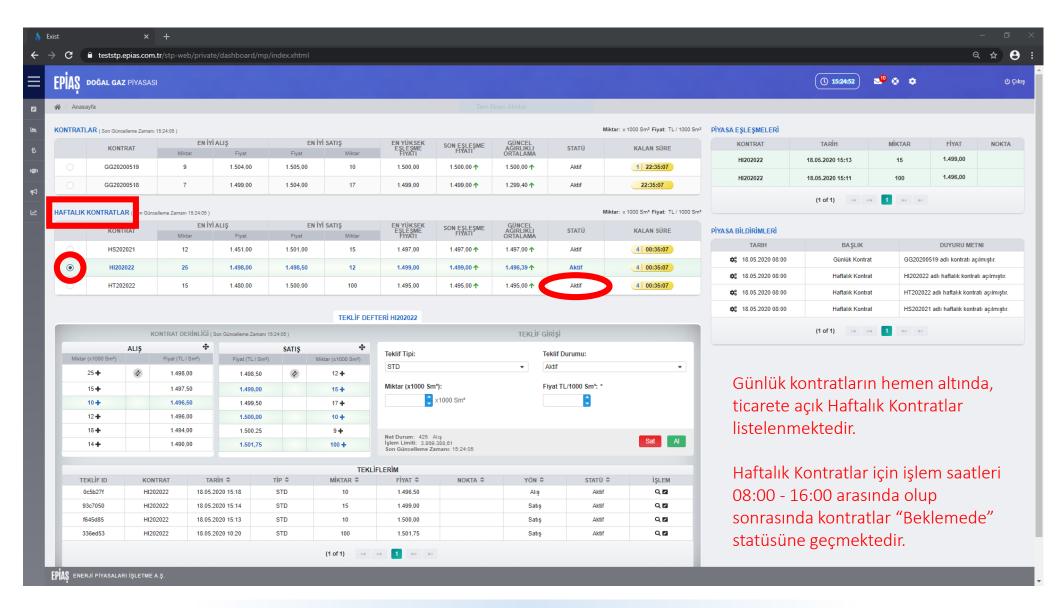
TSO may ask EPIAS to open locational contracts according to system needs.

BOTAŞ TSO takes actions on the platform for balancing its system at G-1 and G.



CTP Interface







Collaterals



Collateral for spot market

- ✓ Mandatory to make any trade on the EPIAS platform
- ✓ Players can trade as much as their collateral amount.
- ✓ Only cash Turkish Lira is accepted.

Collateral for VAT

- ✓ EPIAS fees, VAT's are covered under this collaterals.
- ✓ Cash, bank letter and any other securities can be accepted.

Collateral for imbalances

- ✓ Collected by EPIAS on behalf of BOTAS TSO.
- ✓ Collected for shippers possible imbalances for the next day.
- ✓ Calculated based on shippers previous negative imbalances.
- ✓ Cash, bank letter and any other securities can be accepted.
- ✓ Cannot be less than 300.000 TL.



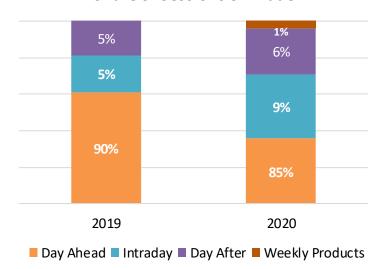
The Organized Whole Sale Market Statistics



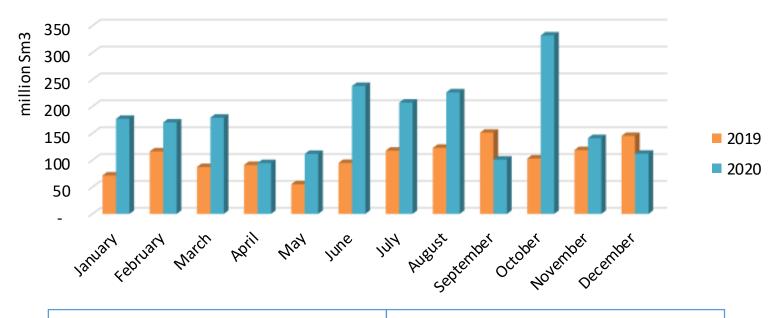
51 Market Players

- Around 30.000 matching
- 900 million EUR trade volume
- 4,5 bcm gas traded (48 Twh)

Share of Sessions on Trade



Monthly Trade Volume (million Sm3)



In 2020,

- 64% increase in trade volume
- 2.089 million Sm3=22 Twh
- 340 million USD

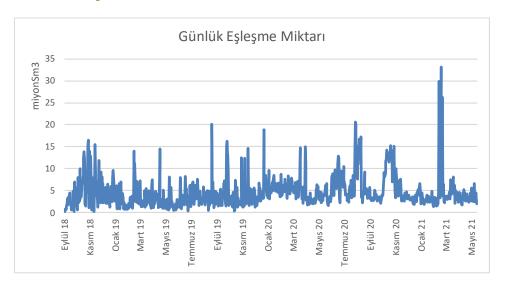
In 2021 (for 5 month),

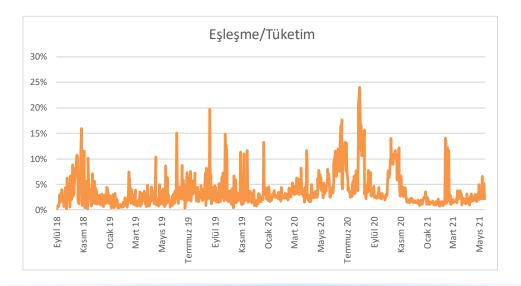
- 650 million Sm3=7 Twh
- 110 million USD





Daily Matched Quantities

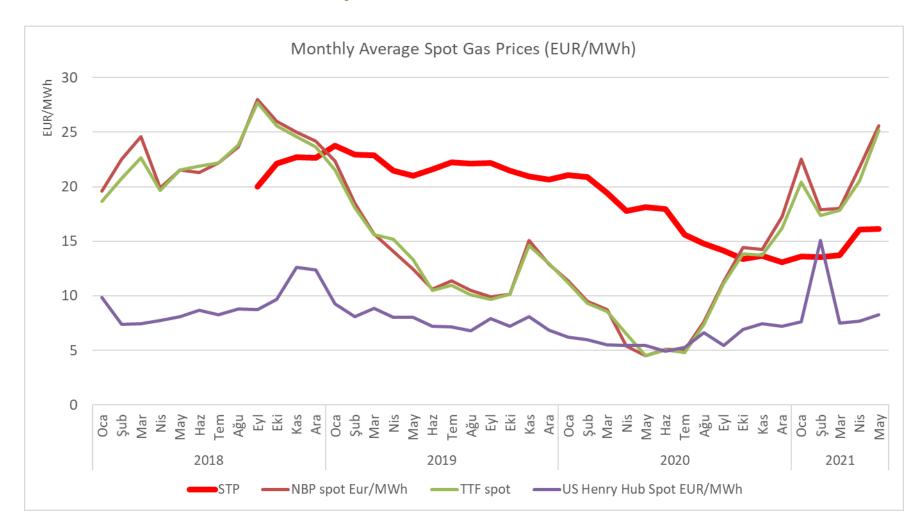








Spot Gas Prices

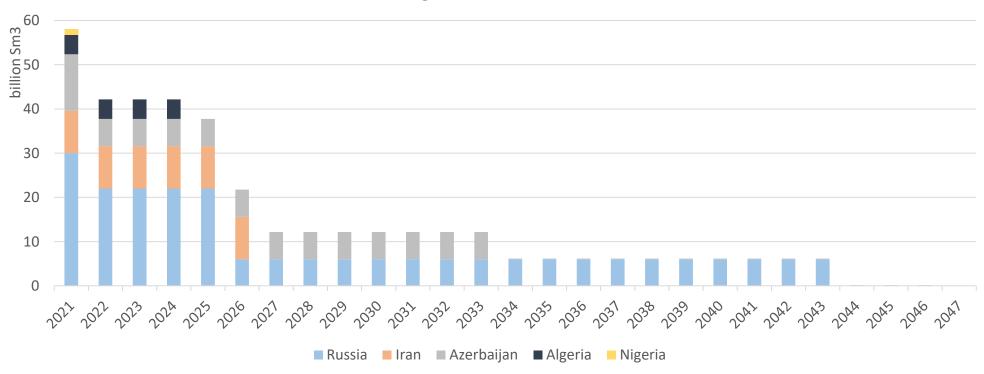




GAS IMPORT CONTRACTS



Long Term Gas Contracts







In The Near Future

- Unbundle of BOTAS (The Turkish government is planning to unbundle the monopoly gas importer and shipper Botas)
- Interconnection Agreements with Greece, Bulgaria and might be with Georgia
- Sales policies
- On the demand side participation of distribution companies and power plants to market
- Long-term contracts, the most important obstacle to the liberal gas market, will expire
- Futures Market (October 2021 in operation)





Thank You

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