Road to Liberalised Market

- Liquidity
- Transparency
- Connectivity
- Political will
- Culture
Turkey Gas Consumption

- **Power Generation**: 36.06%
- **Industry**: 30.38%
- **Household**: 25.05%
- **Government Agencies**: 6.13%
- **Other**: 2.38%

Turkey wants to reduce import dependency in energy.
Turkey still expands its network and connects 1 million households annually.

### Yearly Consumption

<table>
<thead>
<tr>
<th>Year</th>
<th>Consumption (Million sm3)</th>
<th>Changes Compared to Previous Year (%)</th>
</tr>
</thead>
<tbody>
<tr>
<td>2007</td>
<td>35.395</td>
<td>14.24</td>
</tr>
<tr>
<td>2008</td>
<td>36.865</td>
<td>4.15</td>
</tr>
<tr>
<td>2009</td>
<td>35.219</td>
<td>-4.47</td>
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<tr>
<td>2010</td>
<td>37.411</td>
<td>6.22</td>
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<tr>
<td>2011</td>
<td>43.697</td>
<td>16.80</td>
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<tr>
<td>2012</td>
<td>45.242</td>
<td>3.53</td>
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<tr>
<td>2013</td>
<td>45.918</td>
<td>1.50</td>
</tr>
<tr>
<td>2014</td>
<td>48.717</td>
<td>6.10</td>
</tr>
<tr>
<td>2015</td>
<td>47.999</td>
<td>-1.47</td>
</tr>
<tr>
<td>2016</td>
<td>46.395</td>
<td>-3.34</td>
</tr>
<tr>
<td>2017</td>
<td>53.512</td>
<td>7.50</td>
</tr>
<tr>
<td>2018</td>
<td>48.974</td>
<td>-4.45</td>
</tr>
</tbody>
</table>
Turkey’s Gas Infrastructure

Total entry capacity of Turkey has exceeded 303 mcm/day. Target: 400 mcm/day.

- Silivri underground storage capacity to reach 4.6 bcm
- Tuz Gölü underground storage capacity to reach 5.4 bcm
- Private sector to add 1 bcm storage capacity by 2023

Breakdown of the Daily Entry Capacity (mcm/day):
- Pipeline: 145.5 mcm/day
- LNG: 117 mcm/day
- Storage: 40 mcm/day
- Production: 0.18 mcm/day

TANAP: 6 bcm annual capacity
TurkStream-1: 15.75 bcm annual capacity

Source: MENR
What does Gas Trading Platform Bring?

- Daily Reference Price
- Spot natural gas trade opportunity
- Market based balancing opportunity for TSO
- Self balancing opportunity for Gas Trading Companies
New Gas Market Model and Responsibility Distribution
EPIAS Prices

Lack of maturity on the order book.

Quarter changes effects import prices due to oil indexed formulae.

First day of Eid Holiday
Can’t be said that there is a correlation between Turkish prices with other liquid hubs in Europe.

Due to gas to gas competition, the prices fall summer time in Europe where due to oil indexed contracts the high price level stays even during summer times in Turkey.

Looking forward to see if there will be more correlation between PSV and UDN prices after the completion of TAP Project.

The effects of TurkStream?
Since the beginning of the market, total 1.3 bcm gas has been traded. 61% of total trade volume was traded by TSO for the system balance purposes.
EPIAS trade reached to the certain point. Now the target for Turkish gas market to increase liquidity.
Share of Market Participants

Shippers trades;

✓ The distribution of traded quantity is given on the graph.
The sum of negative imbalances of individual shippers is higher than positive imbalances. Hence for EPIAS, payables are higher than receivables when TSO is excluded.

Highest negative imbalances was in October ’18 with 147 millions cubic meters.

The monthly average positive imbalance payment is approximately 8,7 millions Euros where negative imbalances payments are 19,6 million Euros.
Investment Potential for Natural Gas Trade in Turkey

15.6 bcm potential supply gap expected by 2021

• 30% of the quantity of long term natural gas contracts will expire.
• Long term contracts based on oil price ➔ Contracts based on market price
• Market Mechanism
  • Spot
  • Futures

Regional Gas Trade

TURKEY: an emerging gas trade center between suppliers and consumers

Annual European Demand 0.49 tcm

With the introduction of TANAP and TurkStream, Turkey will play a key role in ensuring Europe’s security of gas supply.

TANAP: 1850 km long with 10 bcm annual capacity
TurkStream-2: 700 km long with 15.75 bcm annual capacity

Eurasian Gas Reserves ~53 bcm
Middle East Gas Reserves ~74 bcm
Looking beyond Horizon

Prompt Contracts
Physical Future Contracts
TEŞEKKÜRLER

Enerji Piyasaları İşletme A.Ş.