

# Energy Transition and Geopolitics of Turkey

ADG ANADOLU NATURAL GAS CONSULTANCY AND TRADE LTD.

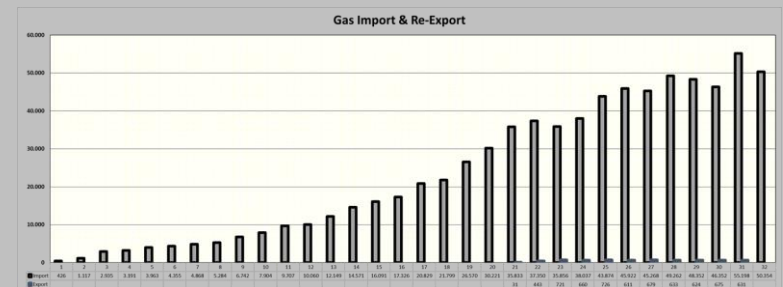
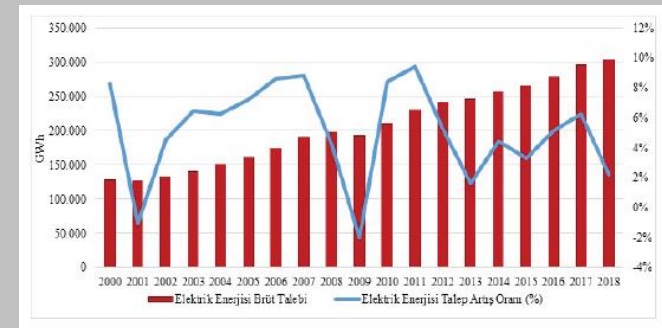
E MAIL: [g.yardim@adgltd.com.tr](mailto:g.yardim@adgltd.com.tr)  
[gokhanym@gmail.com](mailto:gokhanym@gmail.com)

Tel: +90 532 2150071

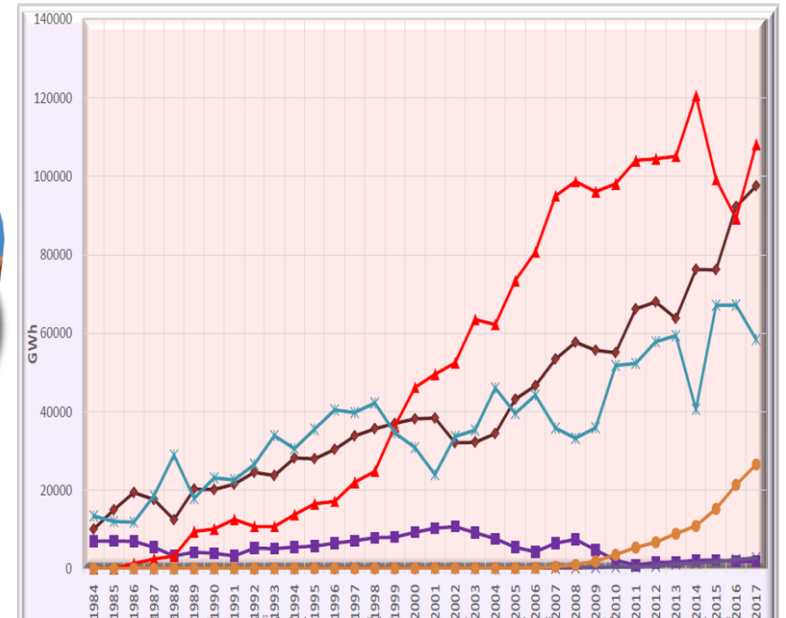
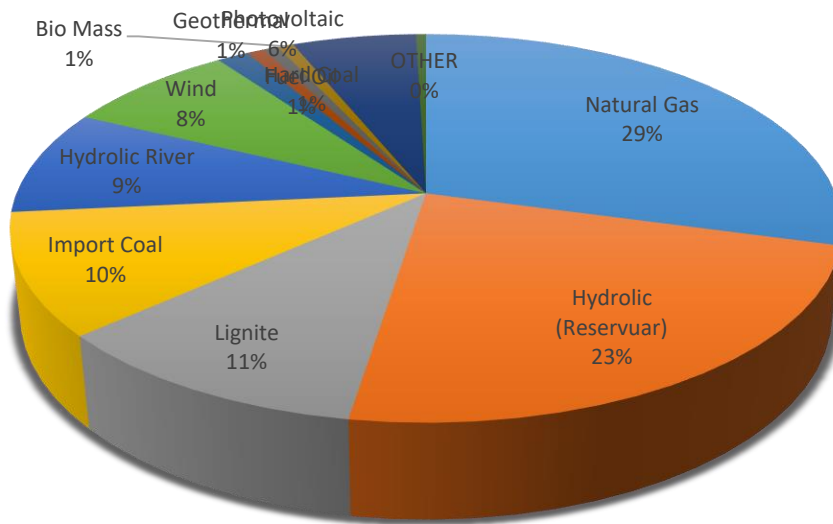


# Main Characteristics of Turkish Energy Market

1. Growing Demand
2. Energy Dependency

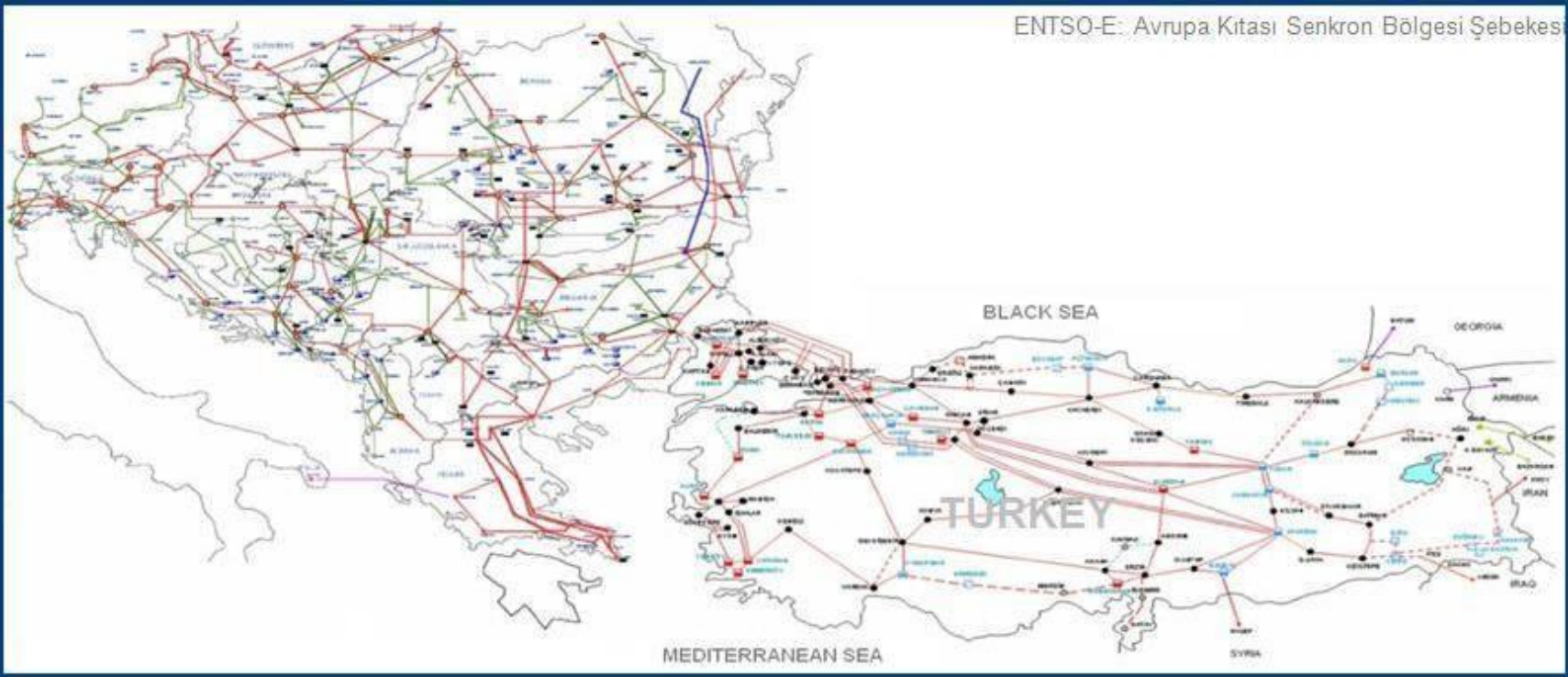


# Transition in Energy Production

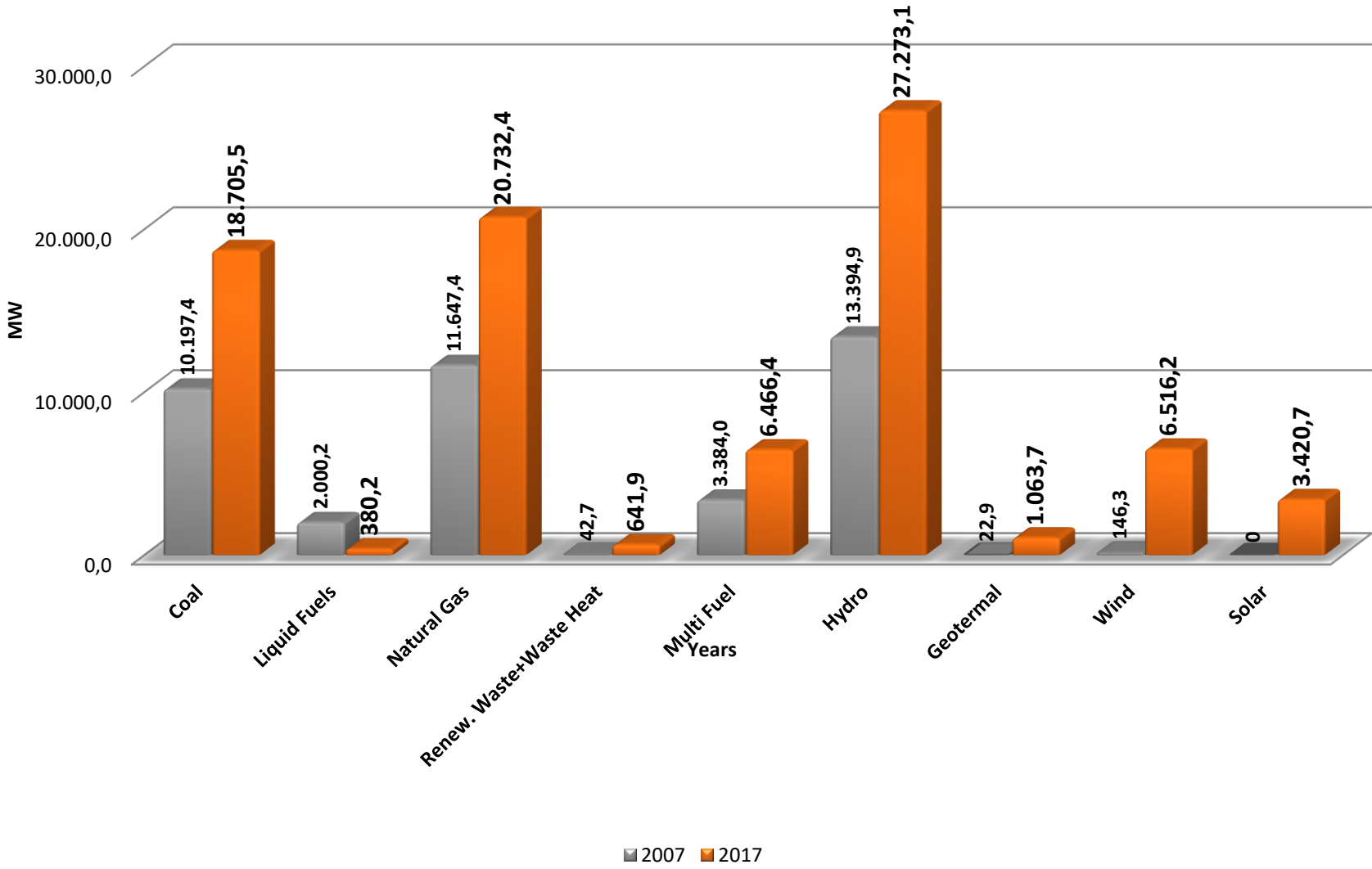


Renewable Energy Capacity % 50 Production % 38  
 Fossil Fuels Capacity.....% 50 Production % 62

ENTSO-E: Avrupa Kıtası Senkron Bölgesi Şebekesi



# TURKEY'S INSTALLED CAPACITY BY PRIMARY ENERGY RESOURCES FOR THE YEARS 2007 AND 2017

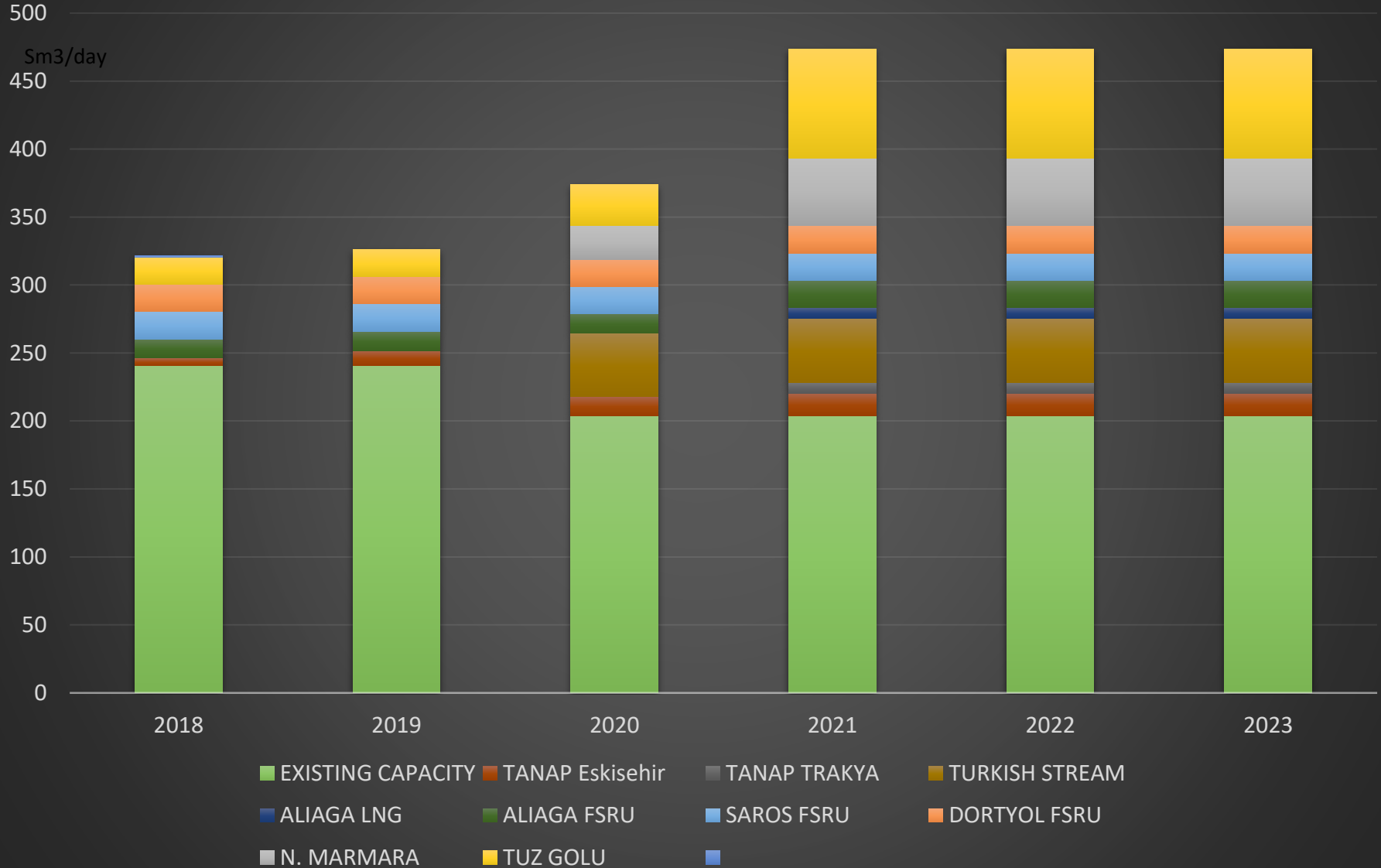


# BOTAŞ DOĞAL GAZ İLETİM SİSTEMİ

## BOTAŞ NATURAL GAS TRANSMISSION SYSTEM



# NATURAL GAS PIPELINE ENTRY CAPACITY



# Trans-Anatolian Natural Gas Pipeline (TANAP)

## TURKEY-AZERBAIJAN PROJECTS

- 6.6 BCM started in 2007
- 6.0 BCM started in 2018
- 0.15 BCM for BTC Pipeline PS
- 1.2 BCM of 12.75 BCM transferred to SOCAR TURKEY
- **BTC Oil Pipeline, BTE Gas Pipeline and TANAP is the Backbone of Southern Corridor**



### Legth :

Turkey: 1850 km  
Europe : 878 km  
Azerbaijan:443 km  
Georgia: 248 km

### Capacity: 31 milyar m<sup>3</sup>

Turkey: 6 bcm

Europe: 10 bcm

### Shareholding Structure:

BOTAŞ : % 30  
SOCAR : % 58  
BP : % 12

### Gas Delivery Türkiye

30/06/2018

Europe  
2020



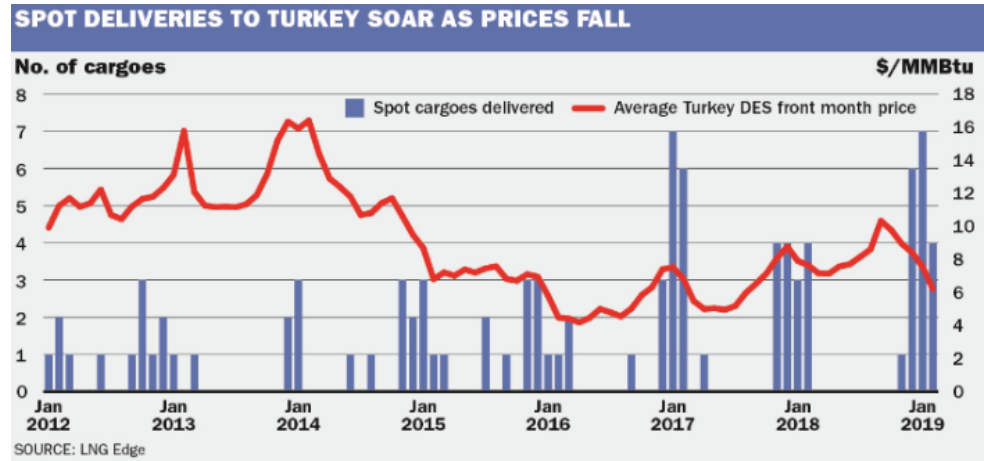


# Gas Import Agreements in operation

Source	Type	Volume bcm/year	Duration	Start Year	End Year	Licence Duration
Russia West Route	Pipeline	4	23	1998	2022	12/07/2022
Russia West Route	Pipeline	4	23	1998	2022	2022
Russia Blue Stream	Pipeline	16	25	2003	2028	15/05/2023
Russia West Route	Pipeline	1	20	2013	2032	26/11/2035
Russia West Route	Pipeline	5	30	2013	2043	26/11/2042
Iran	Pipeline	10	25	2001	2026	18/04/2023
Azerbaijan	Pipeline	6,6	15	2007	2022	15/05/2023
Azerbaijan	Pipeline	6	15	2018	2033	
Algeria	LNG	4	30	1994	2024	18/04/2023
Nigeria	LNG	1.2	22	1999	2021	18/04/2023
<b>TOTAL</b>		52.2				

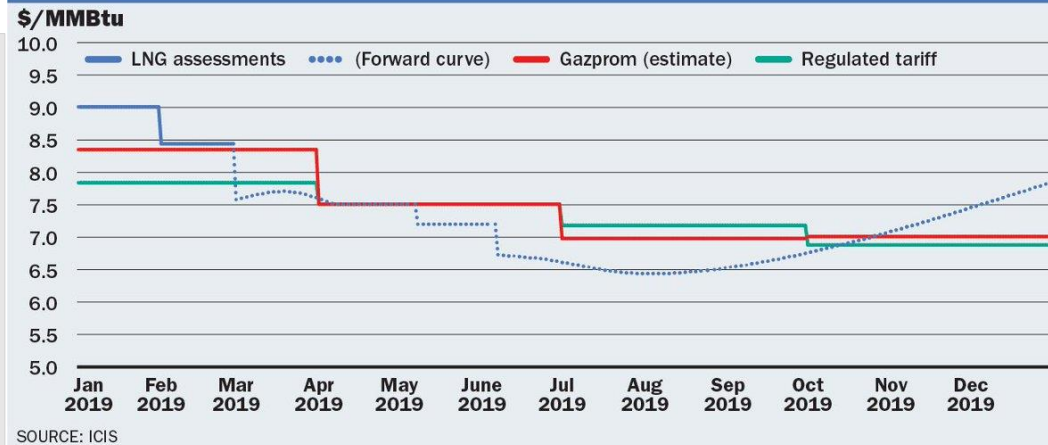
**BOTAS imported 72 LNG contracted & spot cargoes between Nov'18-Feb'19, one of highest importers in Europe.**

**2 Turkish FSRUs and 2 on-land LNG import terminals and doubled send-out capacity (110mcm/day)**

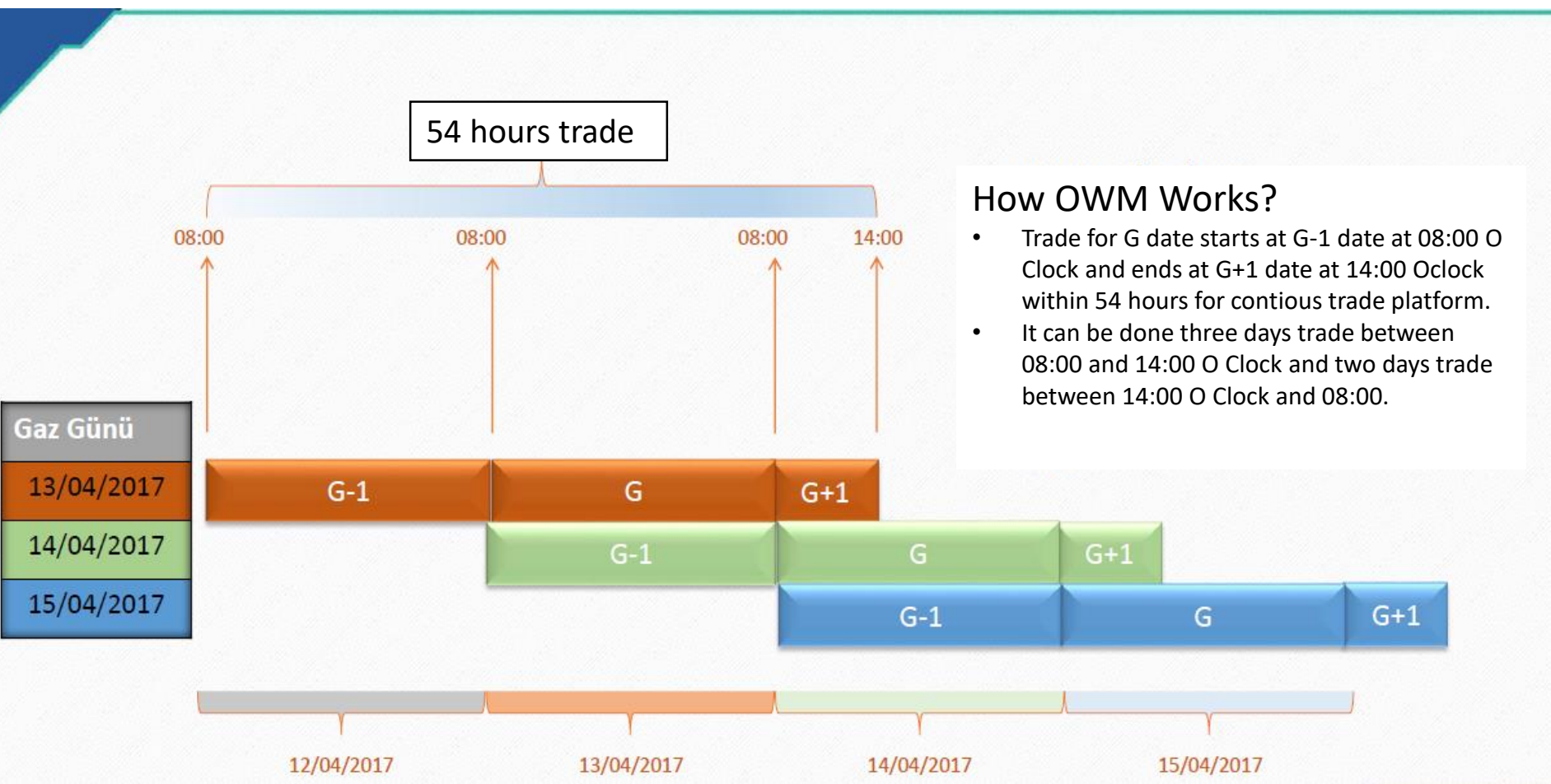


IMPORT	2015	2016	2017	2018
RUSSIA	26.783	24.540	28.690	23.642
IRAN	7.826	7.705	9.251	7.863
AZERBAIJAN	6.169	6.480	6.544	7.521
ALGERIA	3.916	4.284	4.617	4.599
NIGERIA	1.240	1.220	2.080	1.668
<b>SPOT LNG</b>	<b>2.493</b>	<b>2.124</b>	<b>4.068</b>	<b>5.061</b>
<b>TOTAL IMPORT</b>	<b>48.427</b>	<b>46.352</b>	<b>55.250</b>	<b>50.354</b>

### LNG PRICE UNDERCUTS GAZPROM IN TURKEY



# GAS EXCHANGE SPOT MARKET



# Natural Gas Pipelines



## Gösterim / Legend

- |  |   |   |   |   |  |  |
|--|---|---|---|---|--|--|
| LNG Tesisleri<br>LNG Terminals   | FSRU Terminali<br>FSRU Terminals  | Doğal Gaz Yeraltı Depolama Tesisleri<br>Underground Storage Facility                              | Ham Petrol Depolama Ve Yükleme Tesisleri<br>Crude Oil Storage And Loading Facility        | Mevcut Doğal Gaz Boru Hatları<br>Existing Natural Gas Pipelines                           | Mevcut Petrol Boru Hatları<br>Existing Crude Oil Pipelines | Planlanan Uluslararası Doğal Gaz Boru Hatları<br>Planned International Natural Gas Pipelines |
| Uluslararası Proje, Mühendislik, İhale ve İnşaat Halindeki Doğal Gaz Boru Hatları<br>International Pipelines Under Project, Engineering, Tender for Construction Phase | İnşaat veya Mühendislik Aşamasındaki Ulusal Boru Hatları<br>National Pipelines Under Project or Engineering | Trans Anadolu Doğalgaz Boru Hattı Projesi<br>Trans Anatolian Natural Gas Pipeline Project (TANAP) | Güney Kafkasya Doğal Gaz Boru Hattı Projesi<br>South Caucasus Gas Pipeline Project (SCPX) | Trans-Adriyatik Doğal Gaz Boru Hattı Projesi<br>Trans-Adriatic Gas Pipeline Project (TAP) |  |  |

---

IMPORT	2015	2016	2017	2018
RUSSIA	26.783	24.540	28.690	23.642
IRAN	7.826	7.705	9.251	7.863
AZERBAIJAN	6.169	6.480	6.544	7.521
ALGERIA	3.916	4.284	4.617	4.599
NIGERIA	1.240	1.220	2.080	1.668
SPOT LNG	2.493	2.124	4.068	5.061
TOTAL IMPORT	48.427	46.352	55.250	50.354

---