EWE Turkey Holding

Turkish Gas Sector: Next Steps

7th Energy Summit 23 November, Adana

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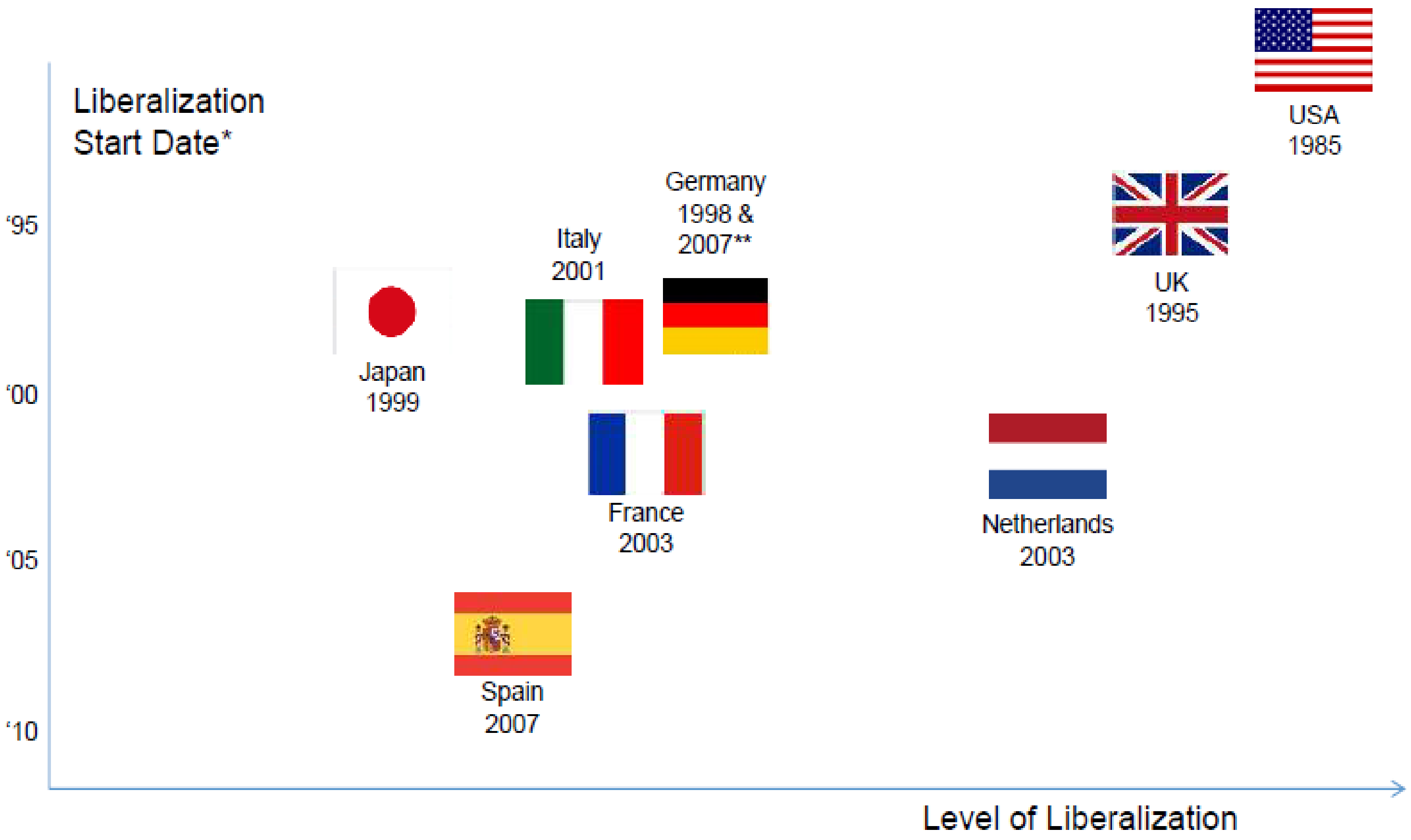
Where are other countries, where is Turkey?



- Unbundling
- Flexibility
- Autonomous TSO
- Sufficient Capacity
- Cost-reflective prices
- Non-discriminatory access
- Free import & export

Historical Developments in Natural Gas Market – Import &Wholesale&Trading

1994
BOTAS LNG Terminal

2001
Natural Gas Market Law No:4646

2005
Network Code has been in force

Contract Transfer Tender (4 bcm)

2007
First Private Import License (Shell)

2010
First Private LNG (Import) License (Egegaz)

2013
Additional volumes privatized (7.25 bcm)

2014
Draft Balancing Gas Market Legislation

2015
Establishment of EPİAŞ

2015
Change in price mechanism

?
New Natural Gas Market Law

Source: BOTAS

Achievements so far:

- Private sector active in the market
- Balancing Gas Market
- Capacity Increases

PERIOD KEY

Period Increment on Gas Supply Sources

First Steps in Liberalization Process

Market Development in Liberalization Process

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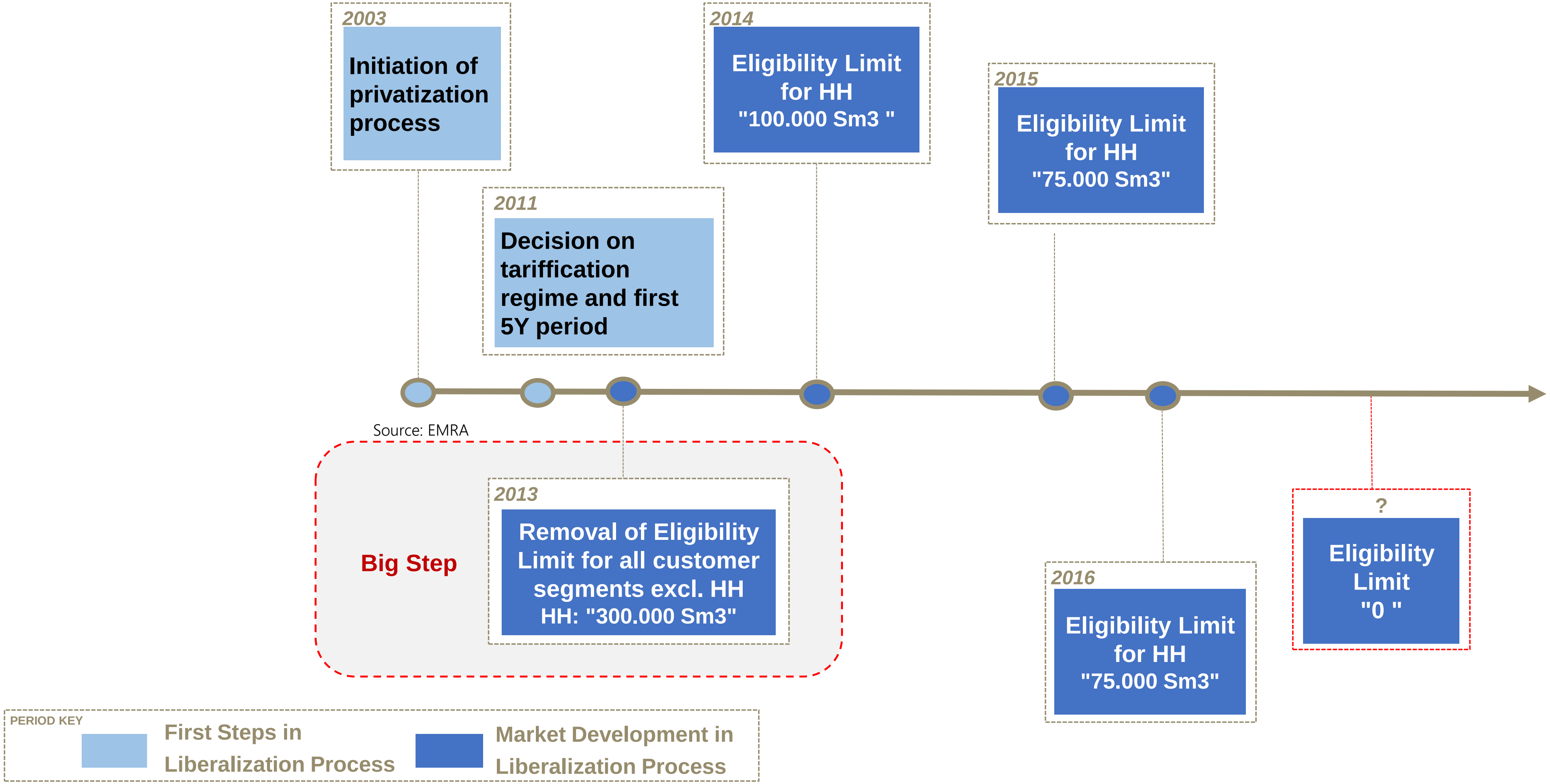
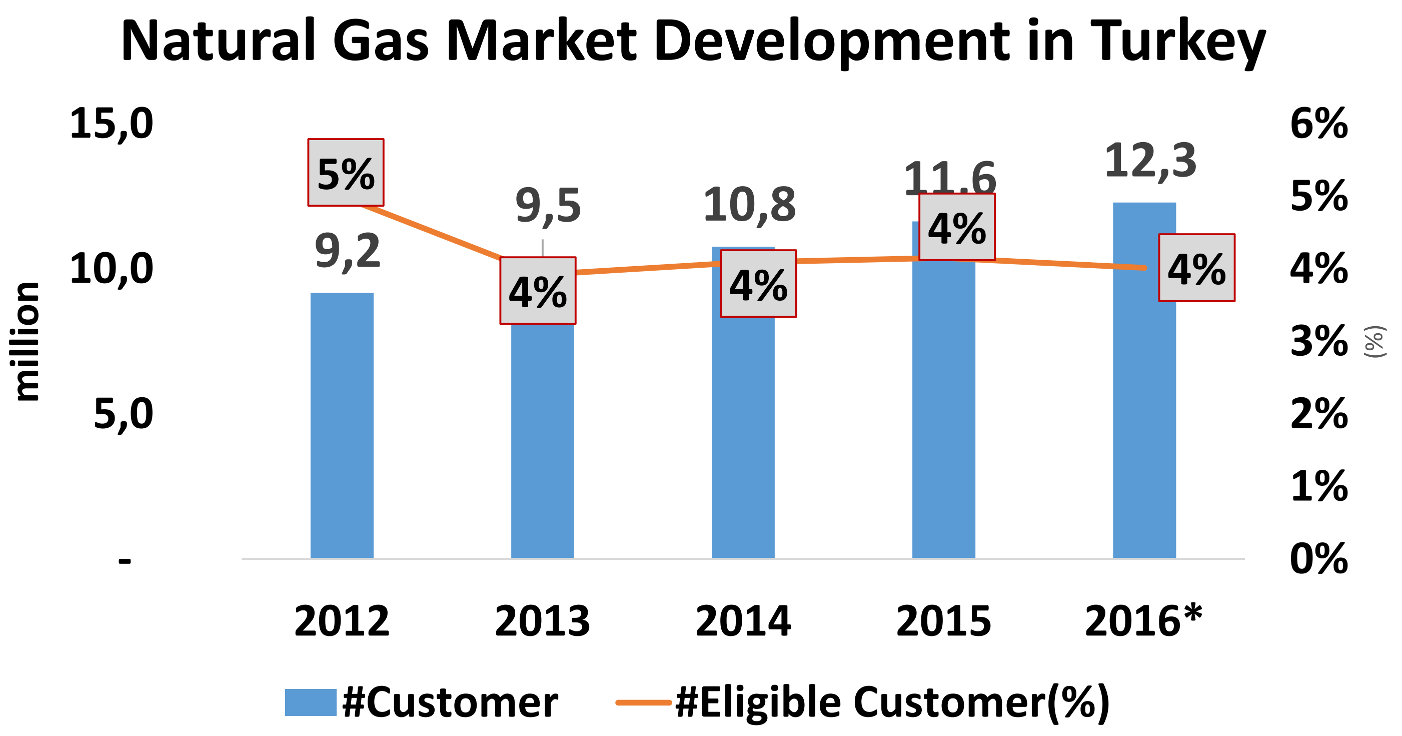
Historical Developments in Natural Gas Market - Retail



Source: EMRA

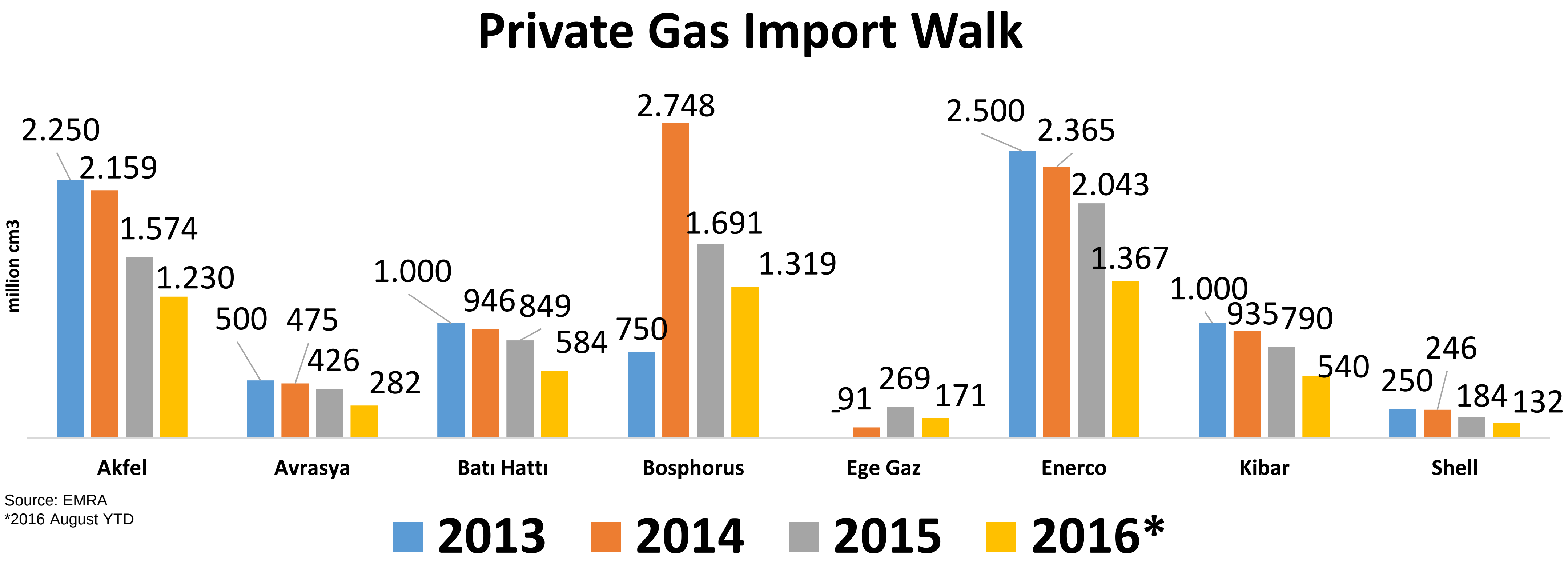
Natural Gas Market Development and Liberalization in Turkey



→ Remarkable progress in connecting households!

Source: EMRA
*As of August 2016

Private Gas Import Market in Turkey



Source: EMRA
*2016 August YTD

- **In 2015 total gas import decreased 2% compared to 2014 however it had increased 9% in 2014 compared to 2013.**
- **Gas import market share of BOTAŞ was 80% and 84% in 2014 and 2015 respectively**

Next Steps – Import&Whosales&Trading

- **Unbundling/reorganization of BOTAS**
- **Pushing current pipeline projects**
- **Increasing number of private sector players and market share**
- **Starting gas trading via EPİAS**
- **Flexible contracts**
- **Energy storage projects to strengthen security of supply**

→Developing Turkey as a hub

Next Steps – Gas Distribution

- **Unbundling of gas distribution**
- **Connecting the countryside**
- **Allowing competition in all customer levels**
- **Allowing market prices**
- **Integration of customer satisfaction to tariff methodology**
- **Picking up important security issues such as chimney control**

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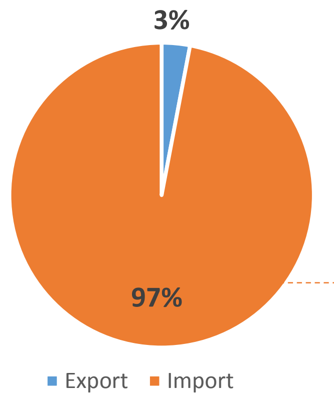
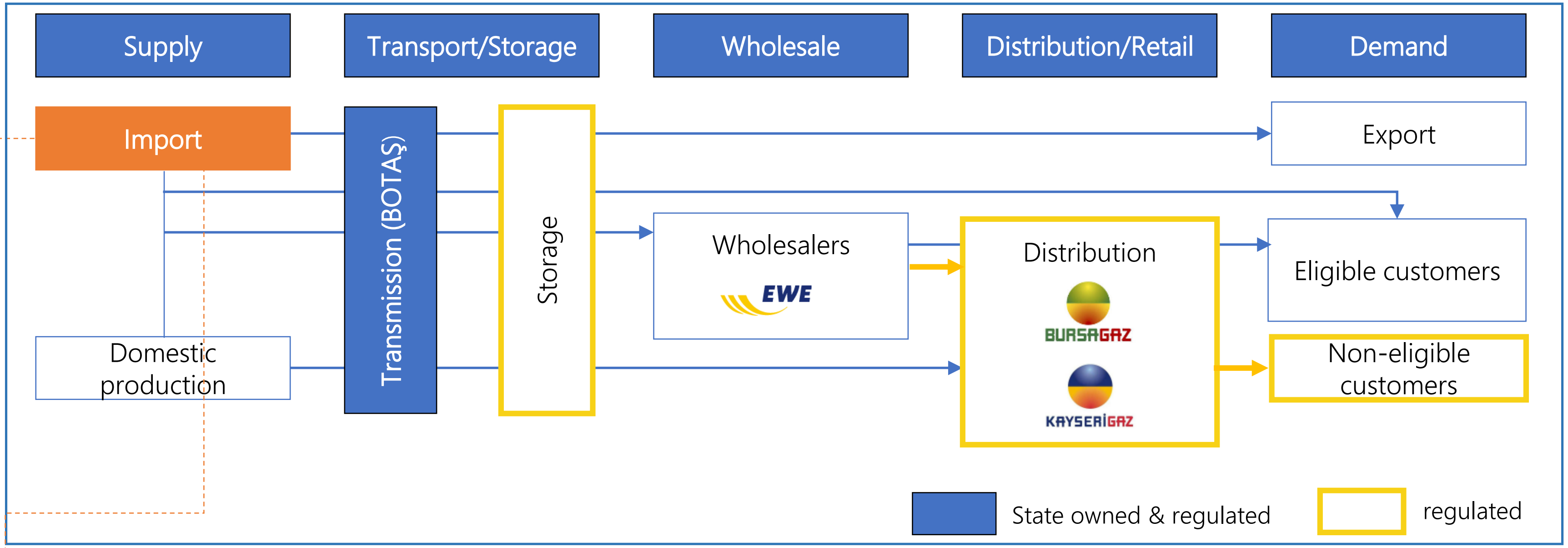
Thank you

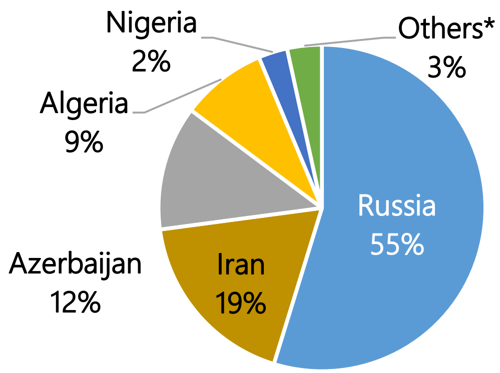
Appendix

Despite government's liberalisation targets gas import is still dominated by BOTAŞ as of today

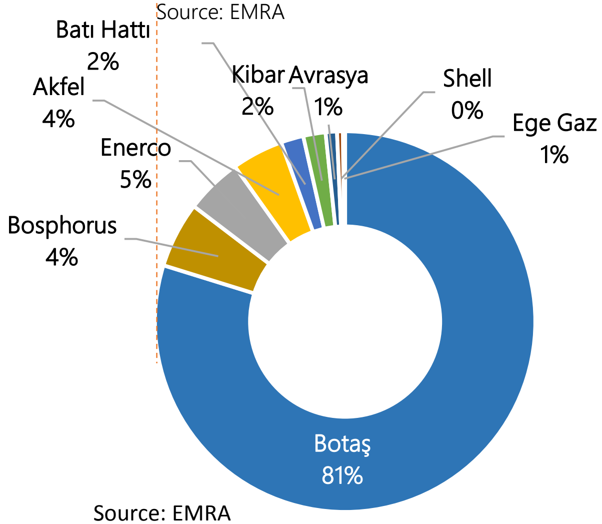




Source: EMRA



Source: EMRA
As of Aug 2016



Source: EMRA
As of Aug 2016

Storage Companies*	NG: BOTAŞ LNG: BOTAS, EGEGAZ FSRU: KOLİN
Wholesale Companies*	35 companies
Distribution Companies*	68 companies
Import Companies*	NG: 17 companies Spot LNG: 43 companies

Source: EMRA
As of Aug 2016

- BOTAŞ is the system operator and the dominant supplier in the market
- Gas supply is mainly composed of long term contracts.

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