



## Euro-Mediterranean Gas Markets: Emerging Trends and Perspectives

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# **MEDREG**



25 regulators (electricity & gas) from 21 countries

#### Mission

 To promote a harmonised, compatible, and non-discriminatory regulatory framework with a view to ensuring a secure, sustainable and competitive Mediterranean energy market

#### Through

- Fostering cooperation, information exchange and sustainable developments
- Providing capacity development activities
- Promoting greater compatibility of the energy markets
- MEDREG focuses on five areas of activities through its working groups:
   Electricity, Gas, Institutional, RE-EE and Consumer



## Mediterranean Energy Community



A sound institutional framework for energy regulation

Enhanced infrastructure investments

Common approach to consumer protection

Effective and efficient energy markets

Intensified regional cooperation through pilot projects



## Gas markets in the next five years



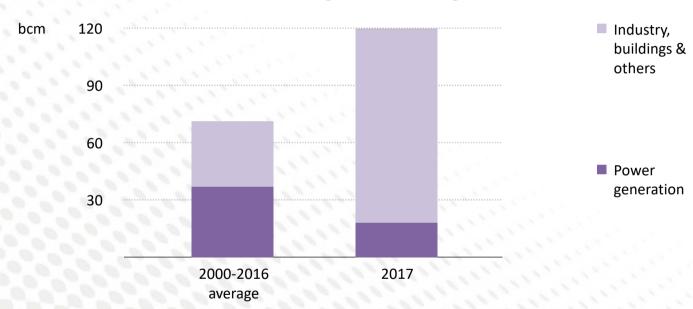
- Gas demand is in the fast lane, thanks to its flexibility & ability to ease environmental problems
- Global gas markets are being re-shaped by three major structural shifts
  - China becoming the world's largest natural gas importer
  - US gas production and LNG exports rising dramatically
  - > Industry displacing power generation as the leading growth sector
- The gas industry's future remains bright, but it is not without challenges
  - Gas price competitiveness & market reforms in emerging markets
  - Curbing methane leaks along the value chain



## Natural gas – life in the fast lane



#### Growth in global natural gas demand



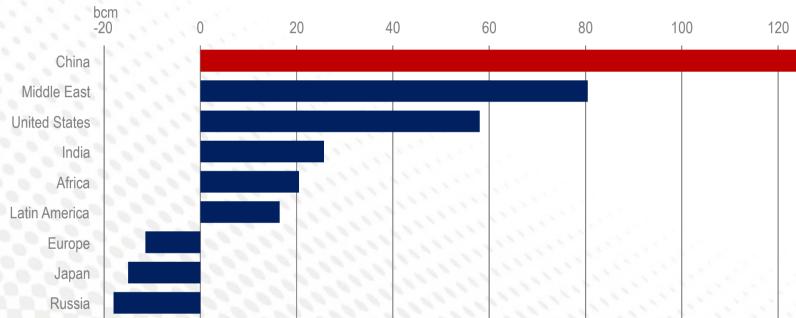
- Industry & buildings have taken over from the power sector as the drivers of gas demand;
- China accounted for 30% of the increase in global gas demand in 2017



## China dominates consumption growth



#### World natural gas consumption growth for selected countries and regions, 2017-23



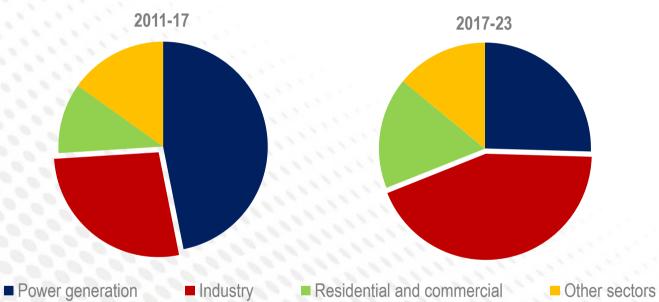
- Global consumption passes the 4 tcm mark by 2022
- China to account for almost 40% of growth driven by clean air policy target



# Industry surpasses power generation







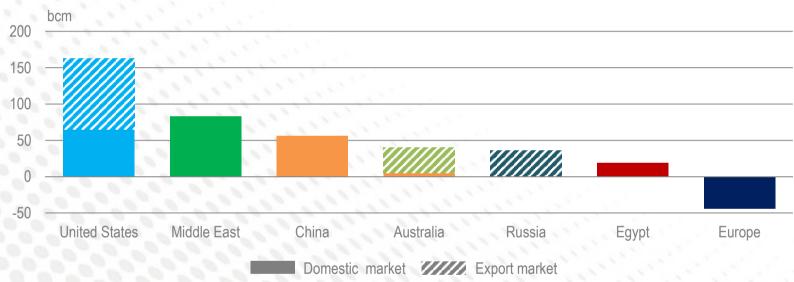
Industry accounts for over 40% of the growth in global gas demand to 2023, mainly on greater use for petrochemicals and fertilizers



## US leads the growth in global supply



Natural gas production growth for selected countries and regions, 2017-23



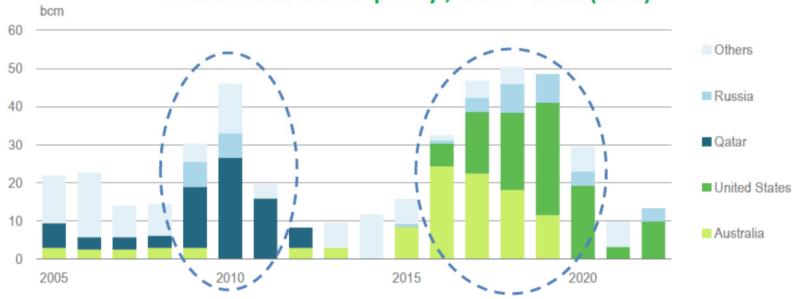
- The United States accounts for almost 45% of global growth in natural gas production and 75% of growth in LNG exports
- Since 2009, US shale gas added some 180 bcm- above Russian's 2016 exports to Europe Source:IEA



## Second wave of additional LNG



#### Incremental LNG capacity, 2005 - 2022 (bcm)

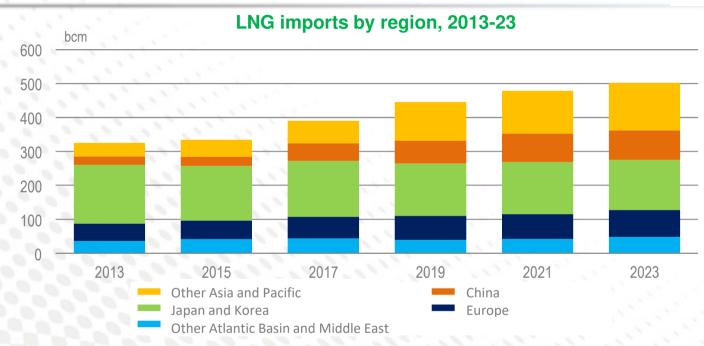


15 new projects with total export capacity of around 140 bcm are now under construction, Australia and US account for 75% of them



## Global LNG market reaches 500 bcm



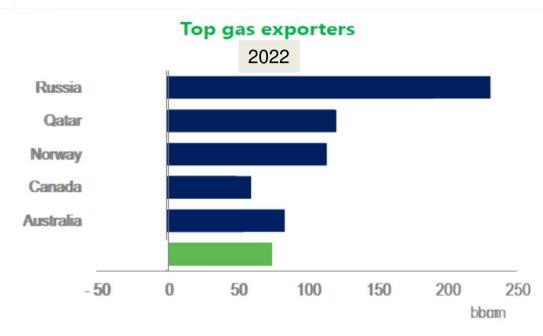


LNG trade passes 500 bcm mark by 2023, reaching almost 40% of global gas trade from around a third today; Developing Asian markets account for almost half of LNG market by 2023 Source:IEA



# US will join to top gas exporters





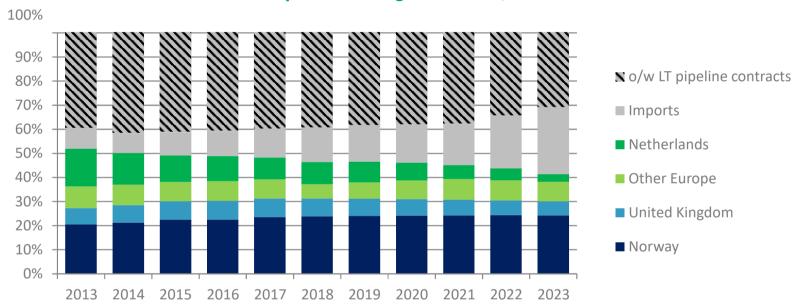
A wave of new LNG supply, led by US, will provide more options to guard against supply shocks, changing the gas security equation



# Europe's supply demand gap increases Med



#### Europe's natural gas balance, 2013-23



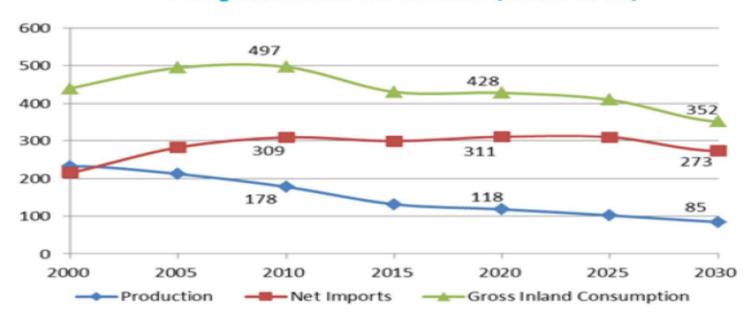
- Domestic production decline further accelerates with plan to phase out Groningen field
- New options for supply from pipeline and LNG, especially in North West Europe



# **EU Gas projections**



# EU gas consumption, production, imports Projections to 2030 (EUCO 2030)

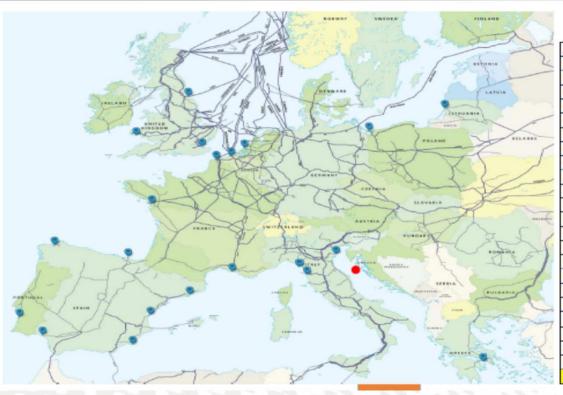


Source:EC



# Regasification capacity in the EU



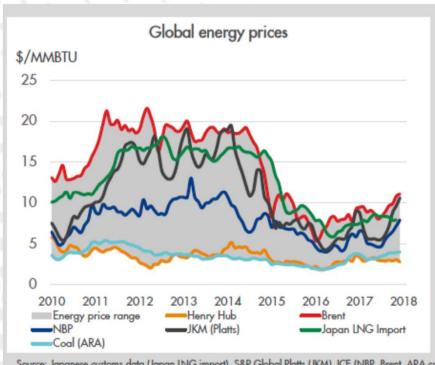


|                | bcm/a | bcm/a   |
|----------------|-------|---------|
|                | LNG   | Storage |
| Austria        |       | 9.0     |
| Belgium        | 9.0   | 0.8     |
| Bulgaria       |       | 0.6     |
| Croatia        |       | 0.5     |
| Czech Republic |       | 3.6     |
| Denmark        |       | 1.2     |
| France         | 34.3  | 12.8    |
| Germany        |       | 24.8    |
| Greece         | 5.0   |         |
| Hungary        |       | 6.4     |
| Ireland        |       |         |
| Italy          | 14.7  | 17.9    |
| Latvia         |       | 2.4     |
| Lithuania      | 4.0   |         |
| Malta          | 2.0   |         |
| Netherlands    | 12.0  | 14.4    |
| Poland         | 5.0   | 3.4     |
| Portugal       | 7.9   |         |
| Romania        |       | 3.1     |
| Slovakia       |       | 3.4     |
| Spain          | 68.9  | 3.0     |
| Sweden         | 0.8   |         |
| UK             | 48.1  | 4.8     |
| EU-28          | 211.7 | 112.6   |



# Spot prices continue to reflect strong demand for LNG







Source: Japanese customs data (Japan LNG import), S&P Global Platts (JKM), ICE (NBP, Brent, ARA coal), NYMEX (Henry Hub)

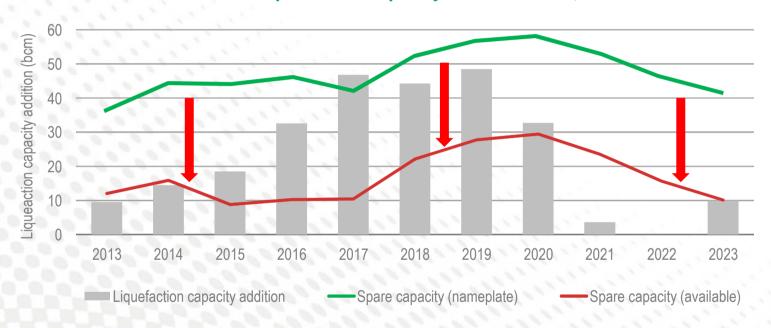
Source:Shell



# LNG market to tighten without new investment



#### LNG liquefaction capacity and utilisation, 2013-23





## Completing EU internal gas market



- ➤ Build key LNG related infrastructure

  BEMIP(Baltics), CESEC (Central South East Europe) and South-West
- Fully implement existing EU energy legislation
- Ensure level playing field for existing LNG terminals (regulated and exempted)



## **Global Conclusions**



- Global demand for natural gas to grow strongly over the next 5 years, led by China
- The United States to become a leading player in LNG markets, driven by a 2<sup>nd</sup> boom in US gas production
- LNG trade to expand by 30% over next 5 years, underpinning a shift to a more competitive, global natural gas market
- New investment will be required along the entire natural gas value chain to provide flexibility & security of supply
- For the future of gas to remain bright, prices need to stay competitive in emerging markets & industry needs to continue to improve its environmental performance



## Mediterranean Gas Market Outlook-1



- Legal and regulatory frameworks are continuously improving
- Market arrangements and import/export levels are still need to be enhanced
- Gas infrastructure is not well developed with some exceptions
- Gas accounts a remarkable amount in electricity generation although not evenly distributed among countries
- Renewable targets and new gas discoveries will likely lead an increased gas usage in the entire region depending on the political consensus



## Mediterranean Gas Market Outlook-2



- Due to political and technical barriers in developing pipelines, LNG could offer great flexibility in transporting these resources to the World markets
- Significant proven hydrocarbon reserves could play a vital role not only in the region but also on the European energy market
- A stable, harmonised and transparent regulatory framework is essential to promote investment in infrastructure in the Mediterranean region

## Regulatory Outlook



- Most of the Mediterranean Countries have recognized the value of a stable, transparent and robust energy regulatory framework, establishing independent regulators provided with adequate powers and resources
- In some countries regulation is not fully empowered to protect consumers, to foster and promoting investments and market developments
- The level of independency from Governments and Parliaments is not sufficient to protect energy regulators from undue influences that may modify regulation

### Conclusions-1-



- The exploitation of East Mediterranean hydrocarbons remains a sophisticated geopolitical and financial puzzle, solving which will require not only political, and but also some brave financial and economic endeavours
- Recent discoveries may have massive consequences for the region and also for the European energy markets
- Current proven reserves show that the region possesses a significant potential to forge new commercial ties, strengthen the security of supply and contribute to the resolution of political disputes
- In the medium to long term, the energy resources of the Eastern Mediterranean could help reducing the dependency of both Europe and Balkan countries, including Turkey on Russian gas deliveries

### Conclusions-1-



- The downturn in global oil and natural gas prices has already constrained the quick development of these resources and investment
- Delaying the exploration for new discoveries would require greater effort to find markets for the region's natural gas
- Nevertheless, and against the challenging background described above, it appears that the most ideal option for the delivery of East Mediterranean gas to Europe would be the construction of a pipeline, which could transport both Israeli and Cypriot gas to Turkey and then the EU

# THANK YOU FOR YOUR ATTENTION!





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