

Gas Market Report 2018

Keisuke Sadamori, Director, Energy Markets and Security, IEA IEEJ, Tokyo, 30 August 2018

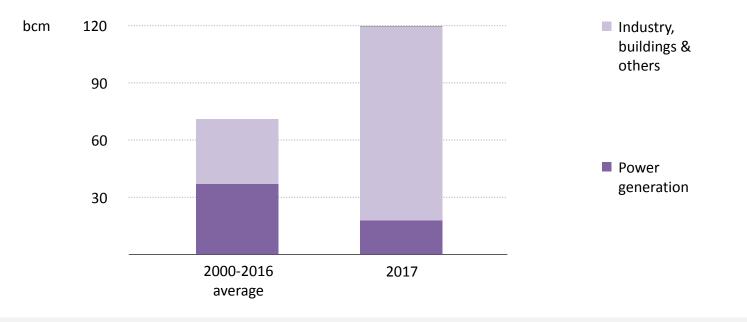


Context - Gas markets in the next five years

- 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



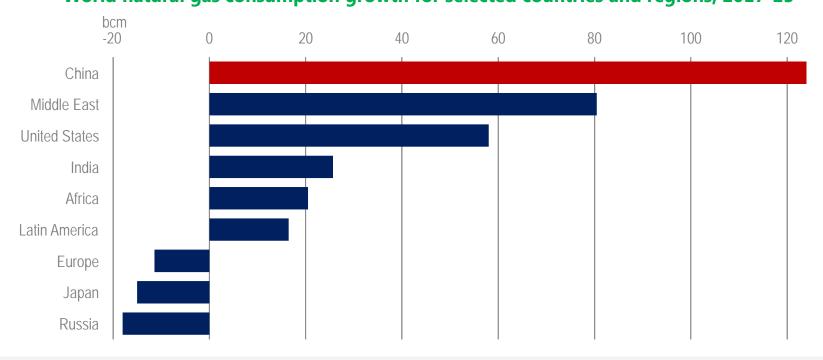


Growth in global natural gas demand

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 world gas consumption growth



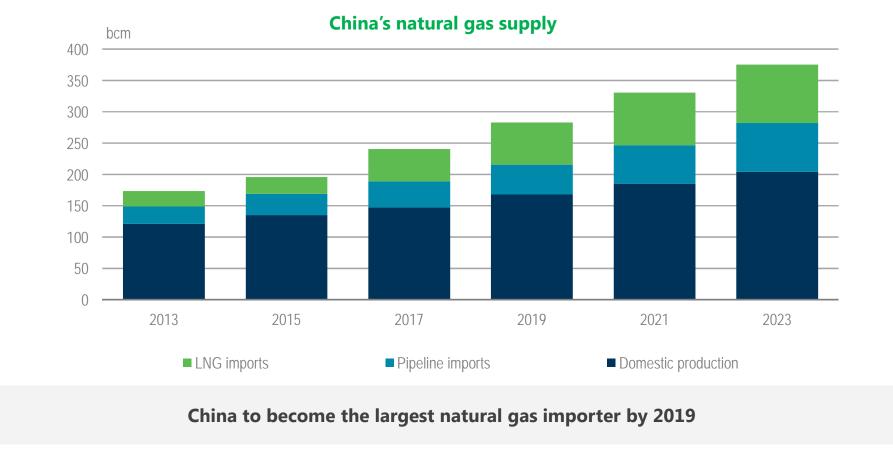


World natural gas consumption growth for selected countries and regions, 2017-23

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

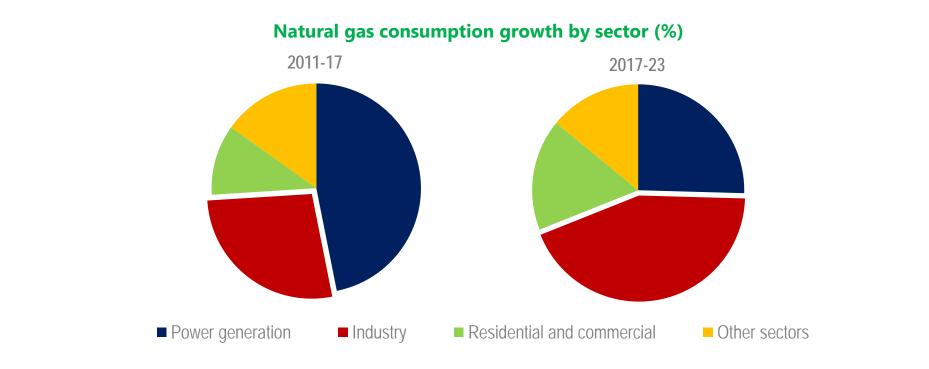
China dominates consumption growth





Industry surpasses power generation to lead growth





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

The United States takes the lion's share of the growth in global supply



bcm 200 150 100 50 0 -50 United States Middle East China Australia Russia Egypt Europe Domestic market Export market

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

Europe's supply demand gap increases

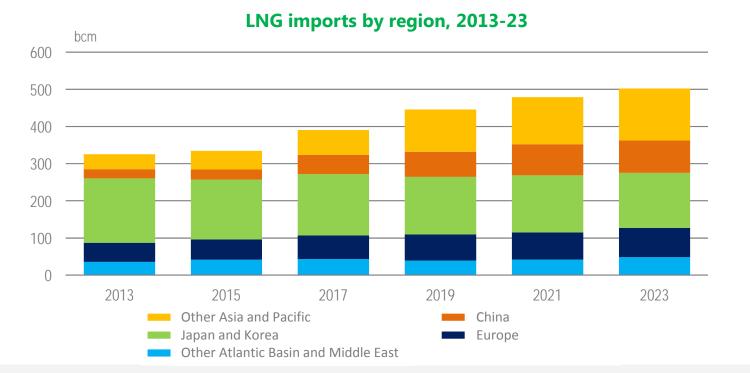


Europe's natural gas balance, 2013-23 100% 90% No/w LT pipeline contracts 80% 70% Imports 60% Netherlands 50% 40% Other Europe 30% United Kingdom 20% Norway 10% 0% 2015 2017 2018 2013 2014 2016 2019 2020 2021 2022 2023

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

Global LNG market reaches 500 bcm mark by 2023

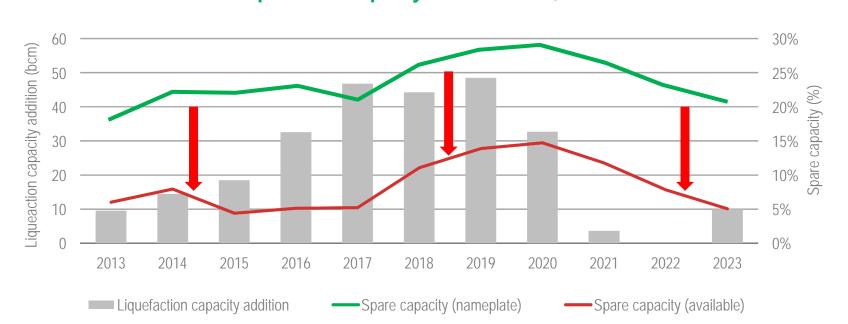




LNG trade passes 500 bcm mark by 2023, reaching almost 40% of global gas trade from around a third today; Developing Asian markets account for almost half of LNG market by 2023

LNG market to tighten without new investment





LNG liquefaction capacity and utilisation, 2013-23

LNG liquefaction capacity is growing faster than demand, but new projects have ground to a halt

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 2nd 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

