

IEA Oil and Gas Market Outlook

Dagmar Graczyk, Energy Policy and Security Division, IEA Sendai, 11 April – 2nd APEC EGCFE – Oil and Gas Meeting





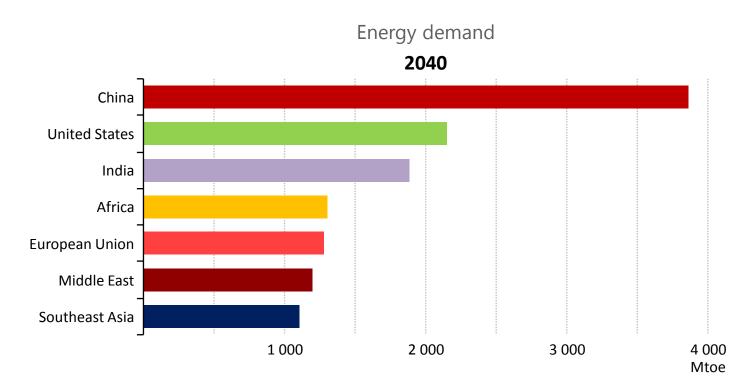
Long-term Market Outlook

Key takeaways from WEO 2018

Context

- Mixed signals about the pace & direction of change in global energy:
 - Oil markets are entering a period of renewed uncertainty & volatility
 - Natural gas is on the rise: China's rapid demand growth is erasing talk of a 'gas glut'
 - > For the first time, the global population without access to electricity fell below 1 billion
- Electricity is carrying great expectations, but questions remain over the extent of its reach in meeting demand & how the power systems of the future will operate
- Policy makers need well-grounded insights about different possible futures & how they come about.

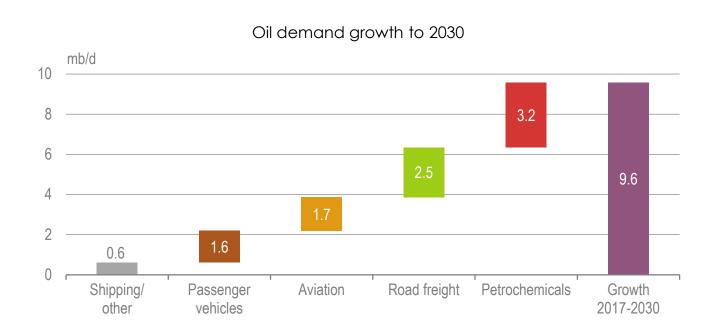
The new geography of energy



In 2000, more than 40% of global demand was in Europe & North America and some 20% in developing economies in Asia. By 2040, this situation is completely reversed.

Robust growth in global oil demand, driven by petrochemicals

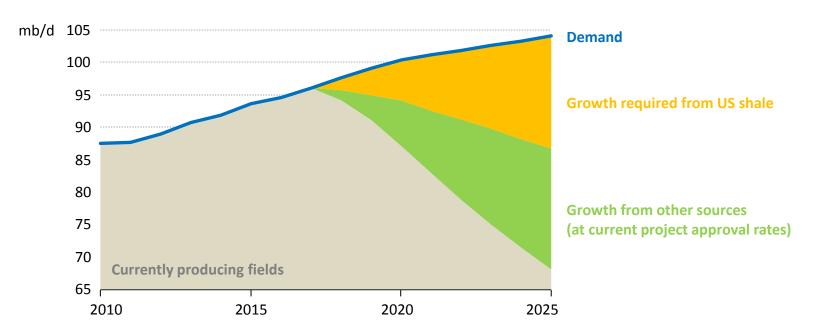




The petrochemical industry is the main driver of global oil demand growth, accounting for over a third of the increase in oil demand to 2030

Can US shale alone avoid a turbulent oil market?



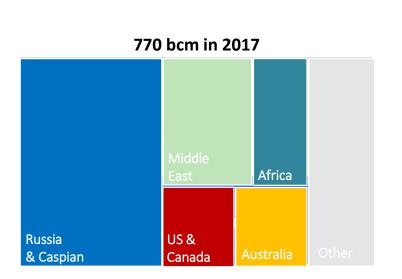


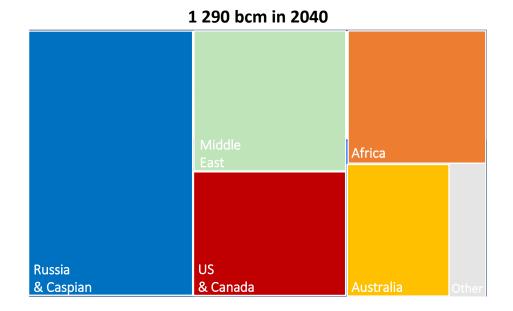
Oil demand looks robust in the near term; if approvals of new conventional projects remain low, market stability would require continuous exceptional growth in US shale

LNG ushers in a new global gas order



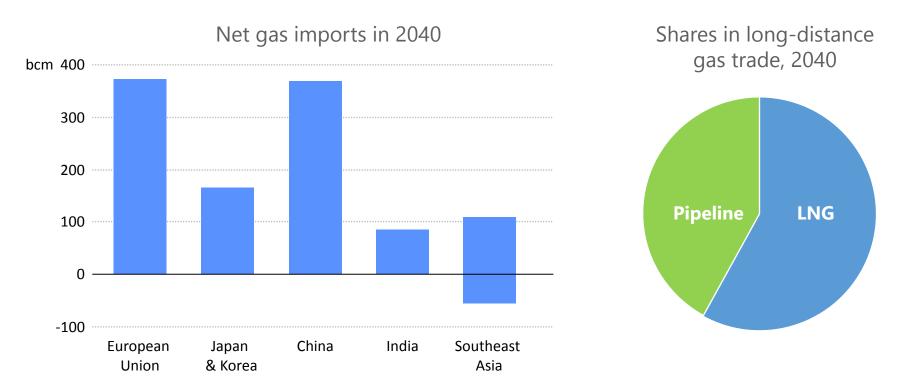
Gas exporters





Growing gas import requirements in developing Asia, Japan and Korea are largely met by LNG, with Africa a key emerging player in global gas markets

China – the emerging giant of gas demand



Developing countries in Asia – led by China – dominate the rise in long-distance gas trade; more than 80% of the growth to 2040 comes in the form of LNG

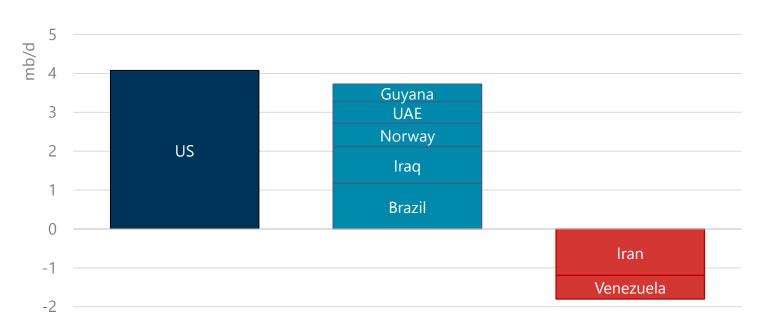


Oil Market (Mid-term)

US leads the way in global supply growth



Change in total oil supply 2018-24

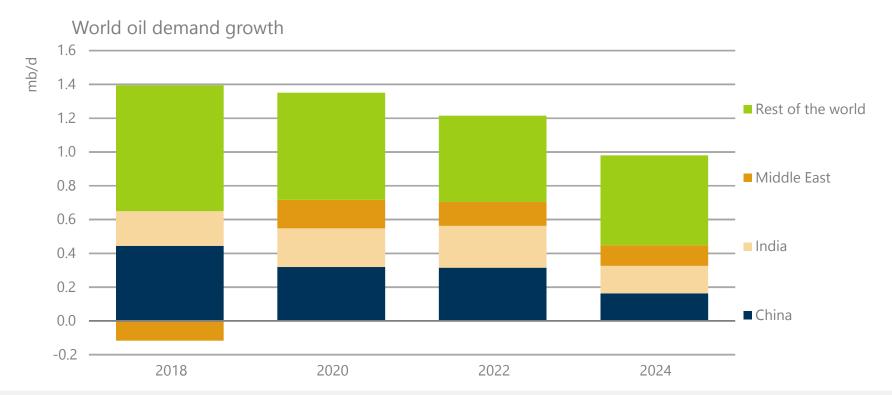


US expansion is 70% of global growth. Gains in Brazil, Iraq, Norway, the UAE and Guyana.

Main declines in Iran and Venezuela.

Oil Demand growth 1.2 mb/d per year, no peak in sight





China eases on shift to consumer economy and environmental policies. India's *volume* growth similar to China by 2024. Middle East fuel oil demand boosted. US demand steady.

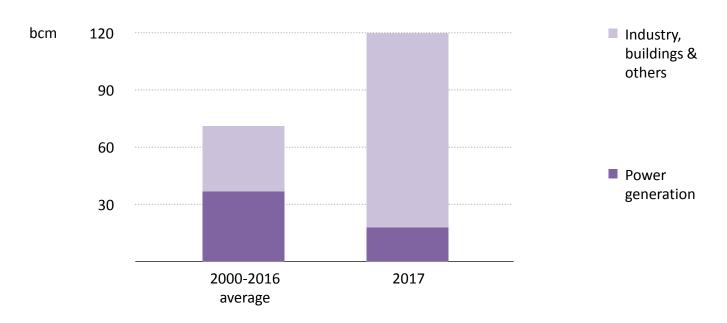


Gas Market (Mid-term)

Natural gas – life in the fast lane



Growth in global natural gas demand

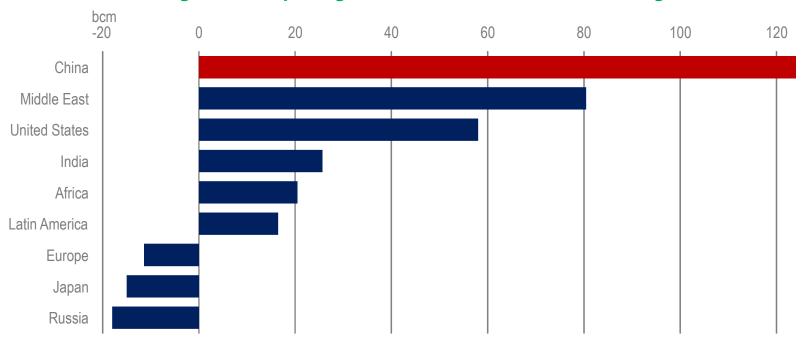


Industry & buildings have taken over from the power sector as the drivers of gas demand; China accounted for 30% of the increase in global gas demand in 2017

China dominates world gas consumption growth



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

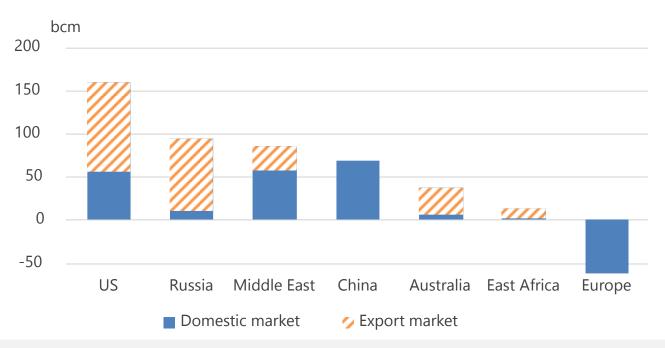


Global consumption passes the 4 tcm mark by 2022 China to account for almost 40% of growth driven by clean air policy target

The US takes the lion's share of the growth in global gas supply



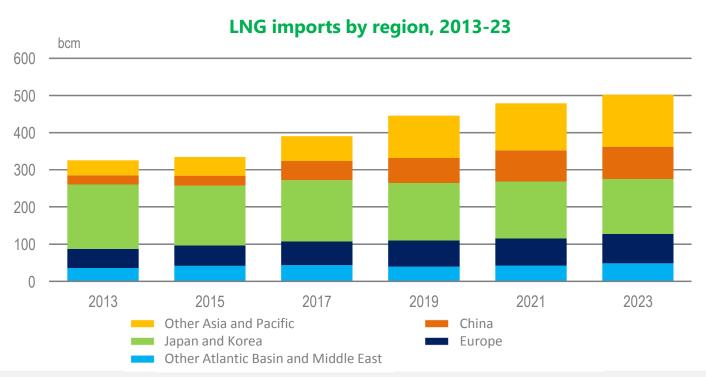
Natural gas production growth for selected countries and regions, 2018-2025



The United States accounts for a third of growth in global natural gas production to 2025 and two-thirds of anticipated growth in LNG exports

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

Conclusions for Mid-Term Oil and Gas Markets



- The links between energy & geopolitics are strengthening & becoming more complex, a major factor in the outlook for energy security
- Global oil demand growth to slow modestly with petrochemicals a key driver
- Global upstream investment set to extend a modest upturn in 2019, including a welcome uptick in spending on conventional assets
- The gas industry's future remains bright, but it is not without challenges

Gas price competitiveness & market reforms in emerging markets

