Trends in global gas markets: implications of decarbonization policies

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Even greater efforts in efficiency, renewables, nuclear power and other low carbon technologies would be required to get close to a 1.5 °C pathway.
Long-term energy demand set to grow fast in Asia

Change in energy demand in selected regions, 2014-2040

Energy use worldwide grows by one-third to 2040, driven by Asia.
A new chapter in China’s growth story with regional and global impacts

Along with energy efficiency, structural shifts in China’s economy favouring expansion of services, mean less energy is required to generate economic growth.
The cost of clean energy continues to fall...

The falling cost of clean technologies opens new opportunities, but support mechanisms need to be reviewed as costs decline.
Gas has a growing role in a low carbon future... but methane emissions must be reduced.

Fossil-fuel demand in the 2 Degrees Scenario

Source: World Energy Outlook 2015, 450 Scenario

Reaching the 2 °C target will see a slowdown in gas demand growth, but gas will still remain a core component of the energy mix.
China is an energy efficiency heavyweight

Primary energy savings from efficiency gains since 2000 and renewable energy supply in China

Dramatic progress on energy efficiency saved 350 million tonnes of coal in 2014. Energy savings are as large as China’s renewable energy supply.
China, USA and EU led strong additional renewables deployment

Renewable capacity additions to 2021
Growth in global gas demand slows as it faces greater competition in the power sector; yet it is the only fossil fuel that does not suffer a decline in its share of the energy mix.
China drives increase in global gas demand

US gas demand growth slows sharply, driven by stagnation in the power sector; EU gas demand gradually recovers on coal & nuclear power plant retirements
Growth in gas production is led by the United States and Australia.

The United States & Australia rather than the more established exporters – Russia, Qatar & ASEAN – are the main source of production growth.
Global LNG export capacity increases sharply

**LNG capacity additions will be led by the US & Australia over the next five years; projects in Canada & East Africa could also move ahead if demand & prices recover**
New investment in new LNG export capacity has ground to a halt. The collapse in investment increases the risk of tighter markets in the next decade; concerns about gas supply security could quickly re-emerge.
As imports from Japan & Korea are set to decline, the rebalancing of global markets will depend on the rate of expansion in China & other developing Asia.
Infrastructure costs favour coal power over gas in Asian energy importers

Asian markets comprised 85% of global coal power investment, while N. America and Middle East, with robust infrastructure, favoured gas for new fossil fuel power.
Europe: growing gas imports but what future role for gas after COP21?

OECD Europe’s gas demand is likely to have peaked it may need to increase imports by ~50 bcm/year by 2021 and by ~ 65 bcm/year by 2025 compared with 2015, even after including additional supplies via Southern gas corridor.

Source: 2016MTGMR, 2015 WEO New Policies Scenario
• Energy Security
• Environmental Protection
• Economic Growth
• Engagement Worldwide