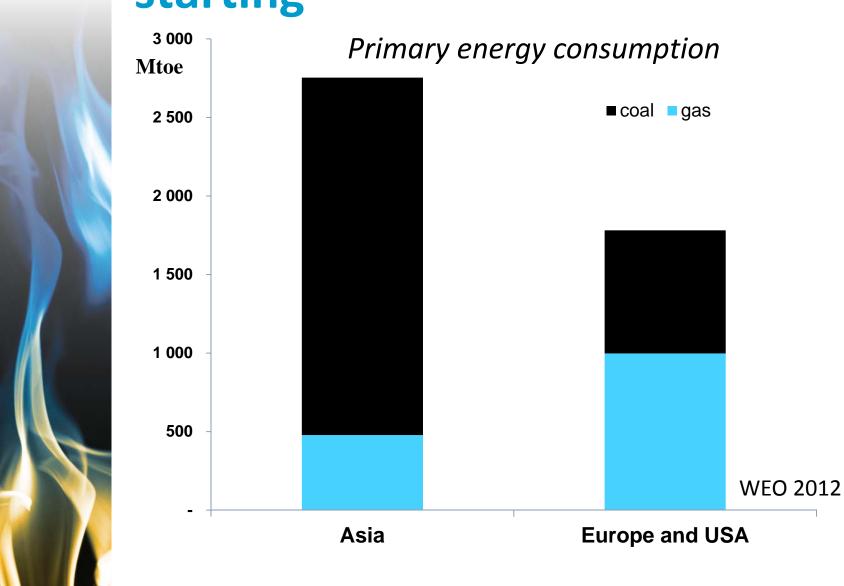






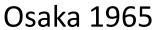
# For gas the Asian century is just starting





# Natural gas is the key to improving air quality in Asia



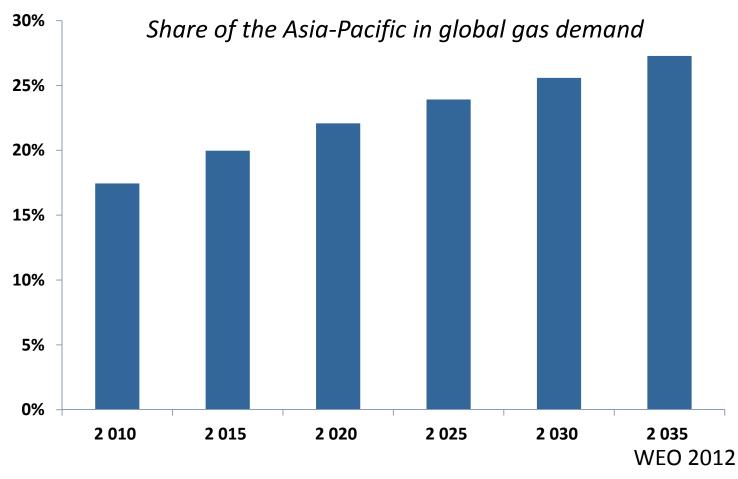




**Osaka 2013** 



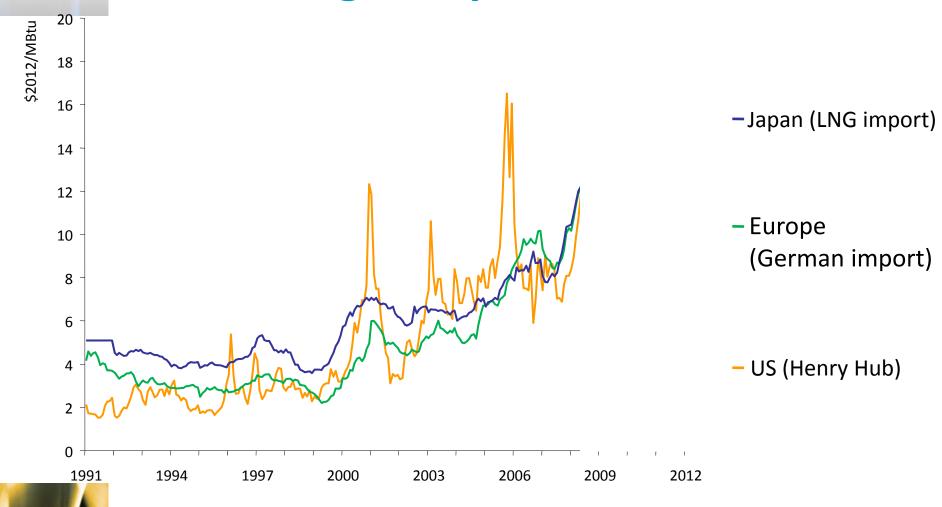
### Economic growth and energy policies will raise the importance of Asia in global gas



Due to geology and geography, LNG will have to play a dominant role in supplying Asia

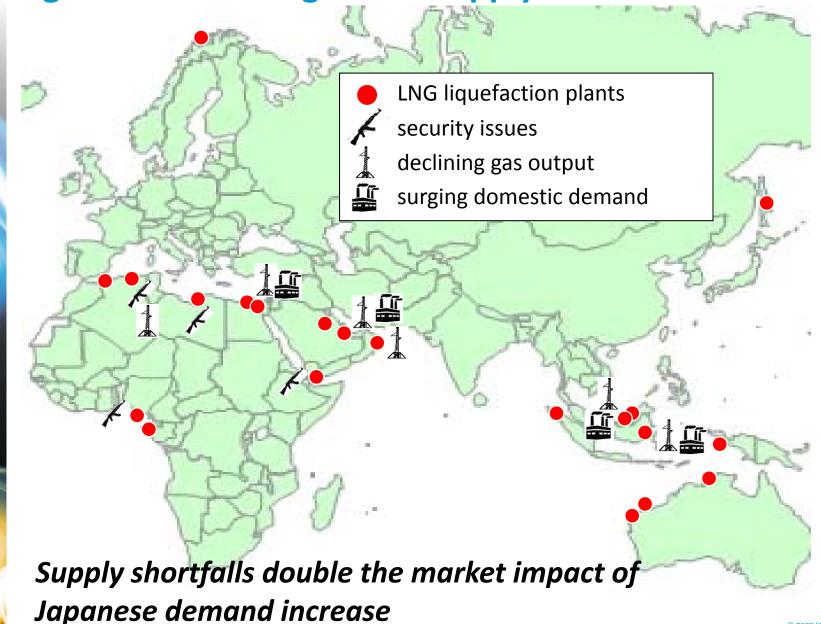


# The old business model is an increasing competitiveness burden



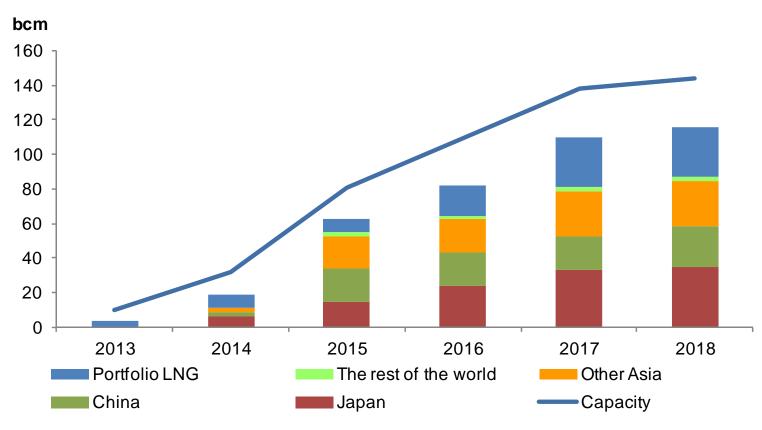


Security issues, depletion and domestic demand growth lead to tight LNG supply





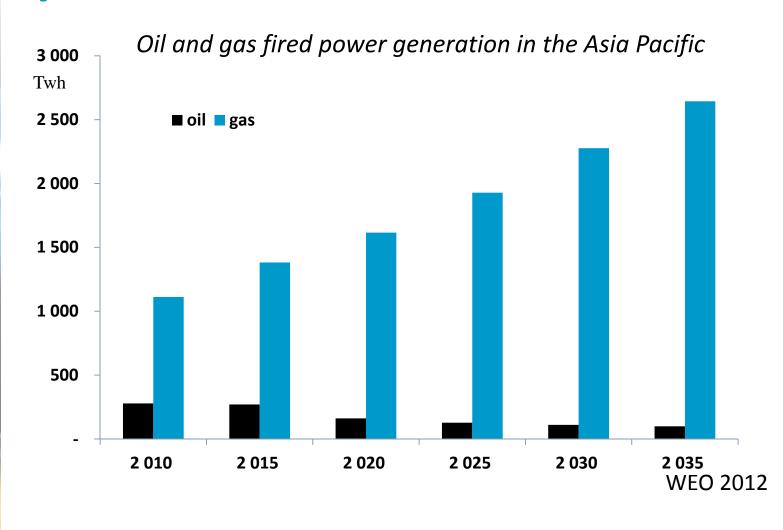
# New LNG supply is predominantly backed by long-term contracts



Portfolio LNG and secondary re-exports both play an increasing role

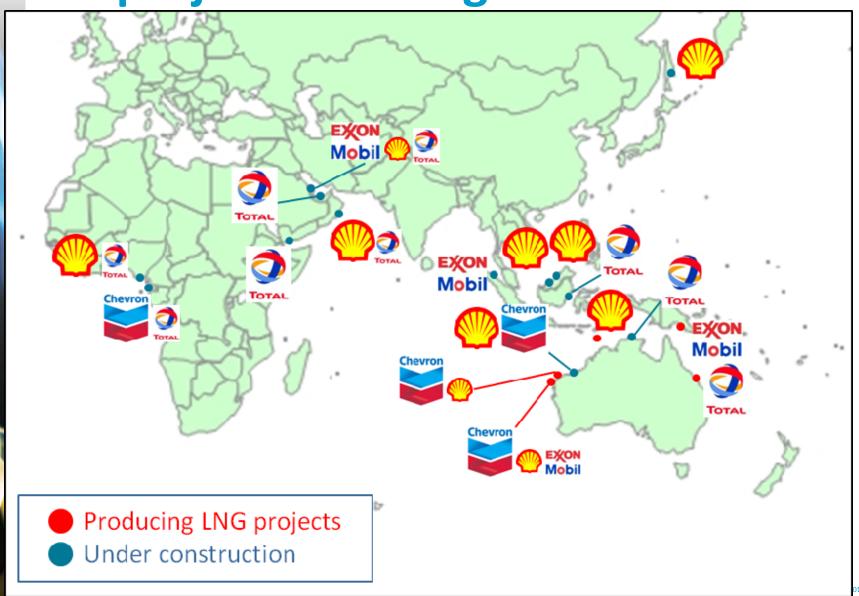


### Are oil and gas still substitute products?





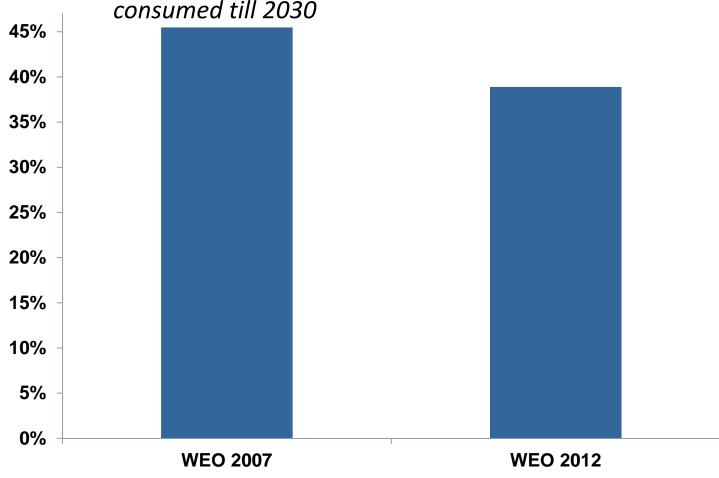
Is a destination clause still essential for project financing?





### With non-conventional technology and new discoveries, resources will compete for markets

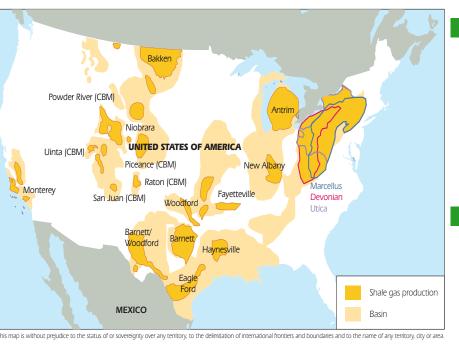
The proportion of proven reserves projected to be consumed till 2030



In 5 years discoveries and reserve additions exceeded production by 175 years worth of Japanese demand



#### The United States continues to lead nonconventional development

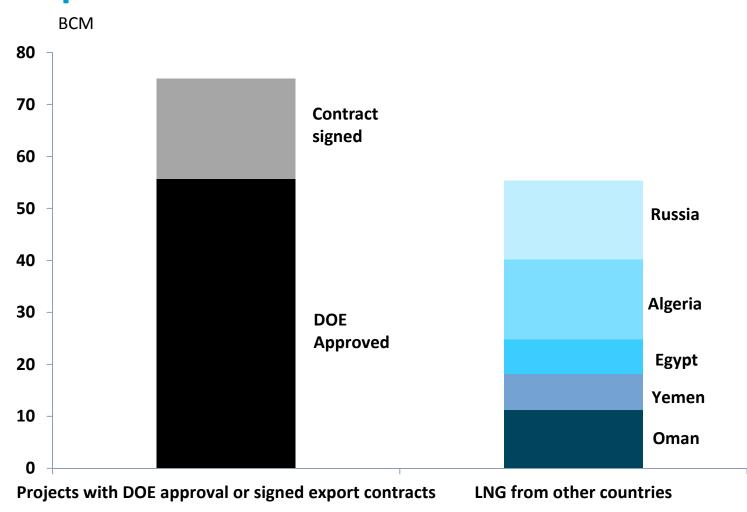


- Technological improvements in seismic, drilling and fracking
- "Mass manufacturing" methods in oil field services
- Strong financial boost from liquids

With US markets saturated, Canadian production growth depends on LNG exports



### North America is emerging as a major exporter

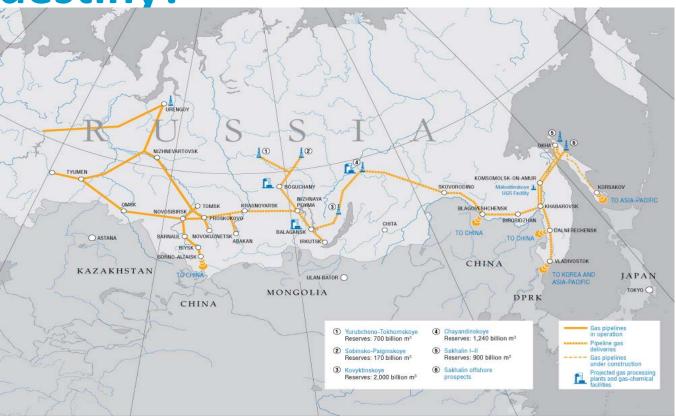


Can Henry Hub+ emerge as a price signal for Asia?



Russian gas: the East is the manifest

destiny?



Source: Gazprom. Note that political boundaries are not endorsed by the IEA

- Production constrained by EU and domestic demand
- •Surging independent production backed by NGLs
- •Asian exports depend on capital-intensive infrastructure









- 3<sup>rd</sup> party access and unbundling in gas AND electricity
- Wholesale price liberalization
- Flexible infrastructure
- Encouraging entry of new supply
- Diversifying the primary energy mix (nuclear, renewables)

Investment security and producer confidence needs to be maintained



## GAS Medium-Term Market Report 2013 Towards an efficient LNG market in the Asia - Pacific Maria van der Hoeven **Executive Director** 0 September, 2013 Market Trends and Projections to 2018