



International Gas Union



5th Asia Gas Partnership Summit

Opportunities & Challenges for the Gas Industry in Asia

Datuk Dr. Abd. Rahim Hj. Hashim
Vice President of IGU,
Vice President of Research & Technology Division
of PETRONAS

Taj Palace Hotel, New Delhi,
14-15 April 2008



Agenda

- **About IGU**
- **Overall Gas Outlook**
- **Gas Outlook in Asia**
- **Challenges & Opportunities**







IGU serves as a spokesman for the gas industry world wide

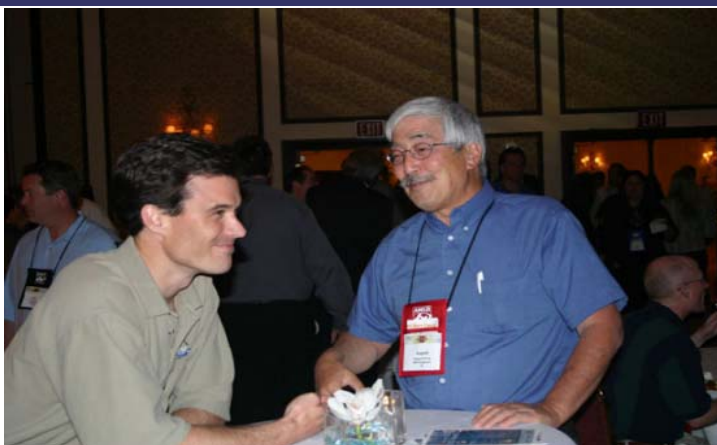


- World wide non–profit organisation (77 years)
- Promotes technical and economic progress of the gas industry
- Different types of membership and co-operations
 - Charter members
 - Associate members
 - Affiliated organisations
 - Supporters
- Fee for Charter- and Associate Members € 4,500





IGU offers various benefits to its members



Networking



Promotion



Knowledge

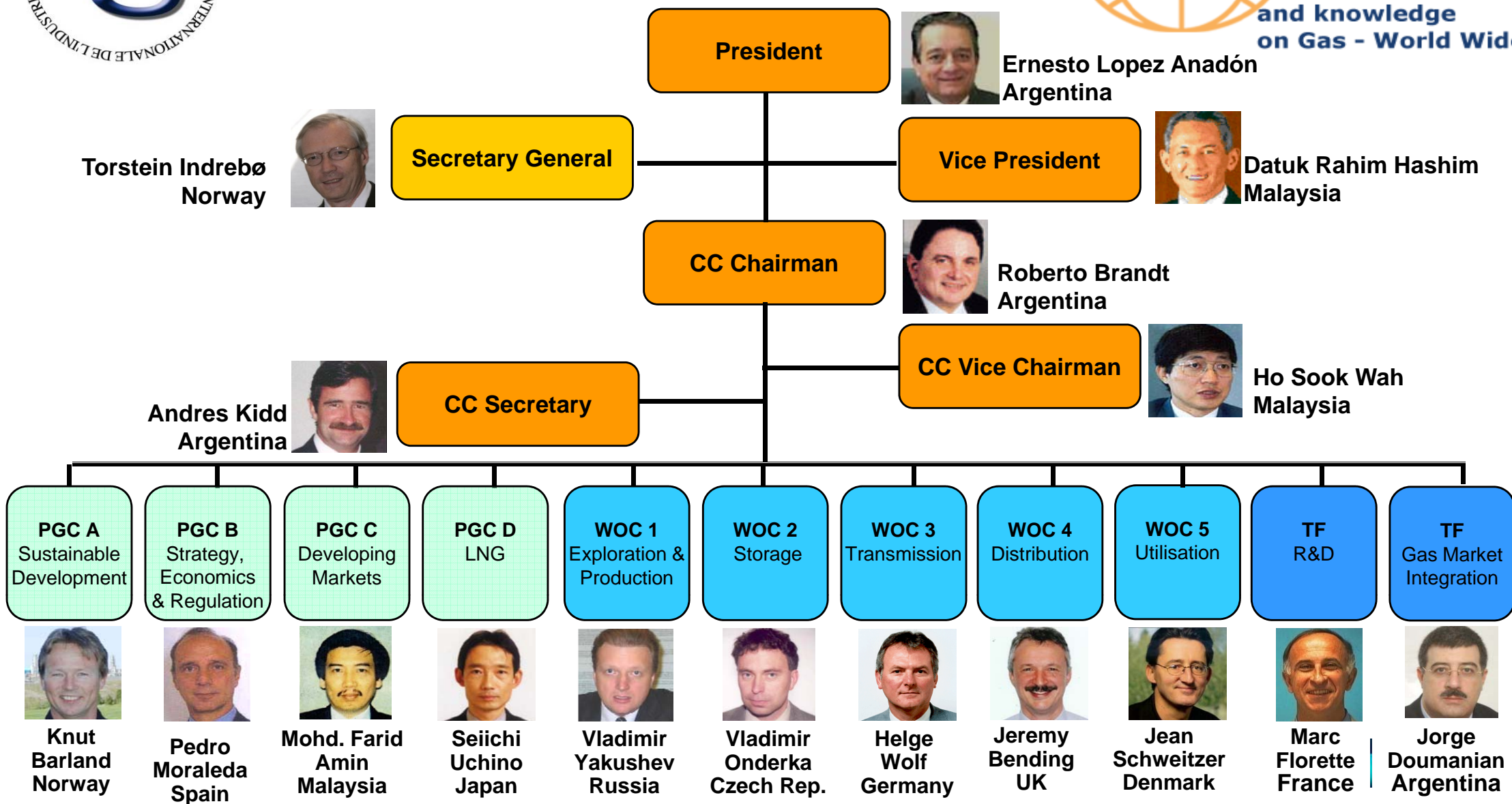


Information





Experts from all over the world are represented in the technical team





IGU World Gas Conferences every three years



- President is elected for a 3 year period; ends its term with the World Gas Conference in its own country
- Argentina 2009: **“Reviewing the Strategies for Natural Gas towards 2030”**
- 3,000 - 5,000 delegates





IGU is spokesman of the gas industry with top class contacts



- Organiser of IGU Gas Research Conferences (IGRC in Paris 2008)
- Co-Sponsor of LNG Conferences (LNG 16 in Algiers 2010)
- Liaison with UN, IEA and other international energy organisations



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The mission is the challenge

Our world needs energy!

Secure, reliable, affordable energy services with minimal environmental impact

Earth at Night

Astronomy Picture of the Day
2009 November 27

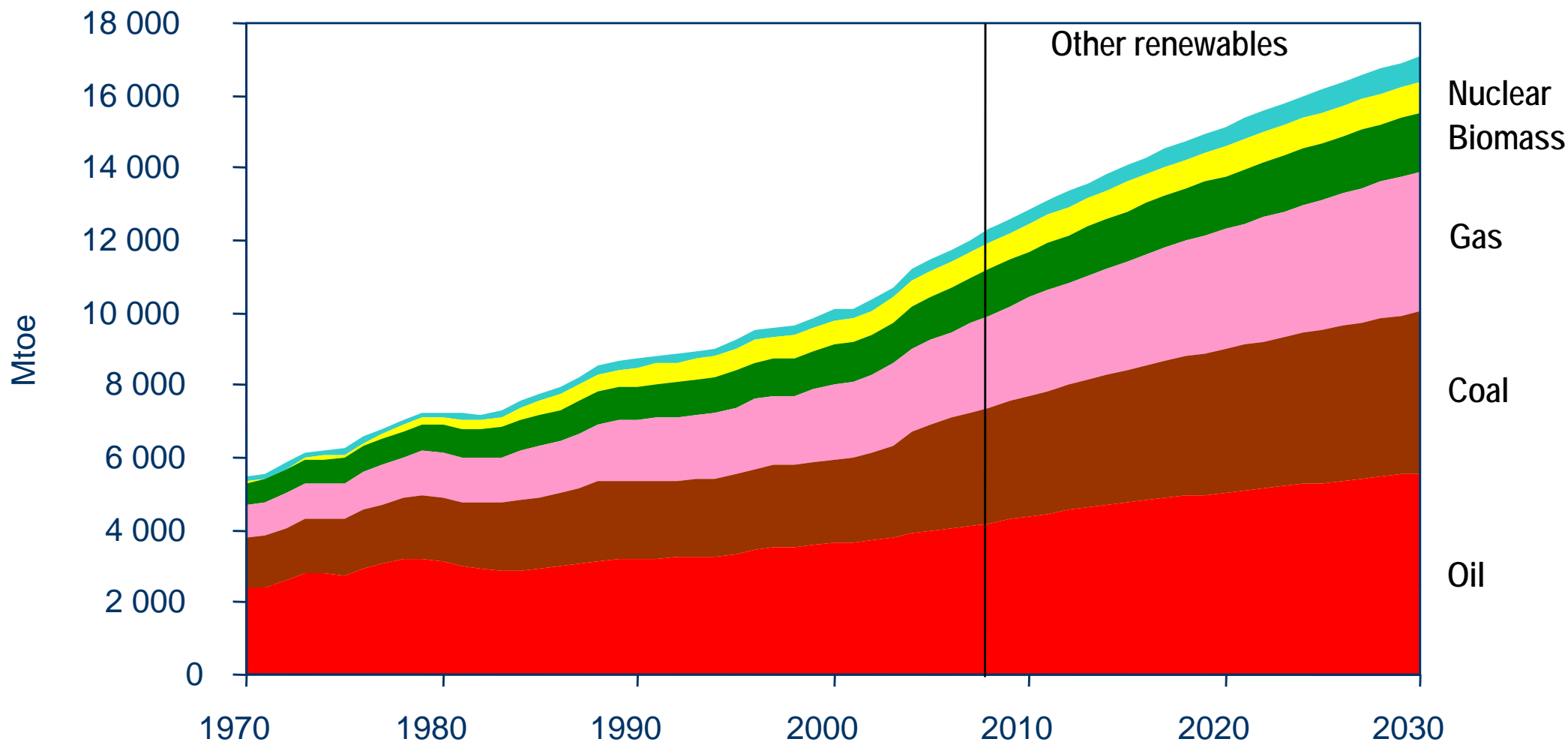


"Safe Forecasting"

- Population growth from 6 to 9 billion in 2050
- Urbanisation continues
- Increased level of global prosperity
- Times of "easy oil & gas" over
- Fossil fuels will dominate next decades



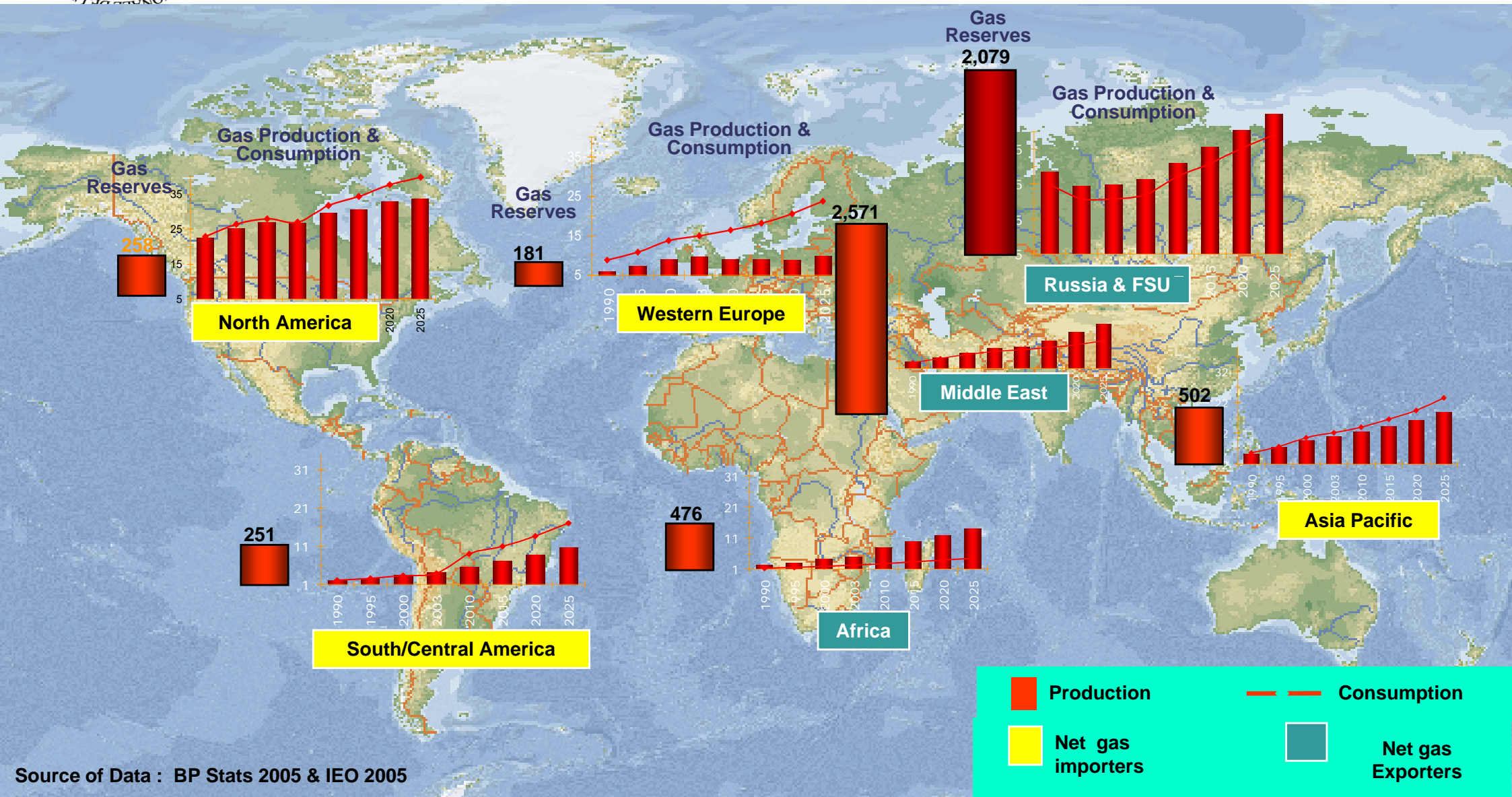
IEA forecasts growing gas demand in the future



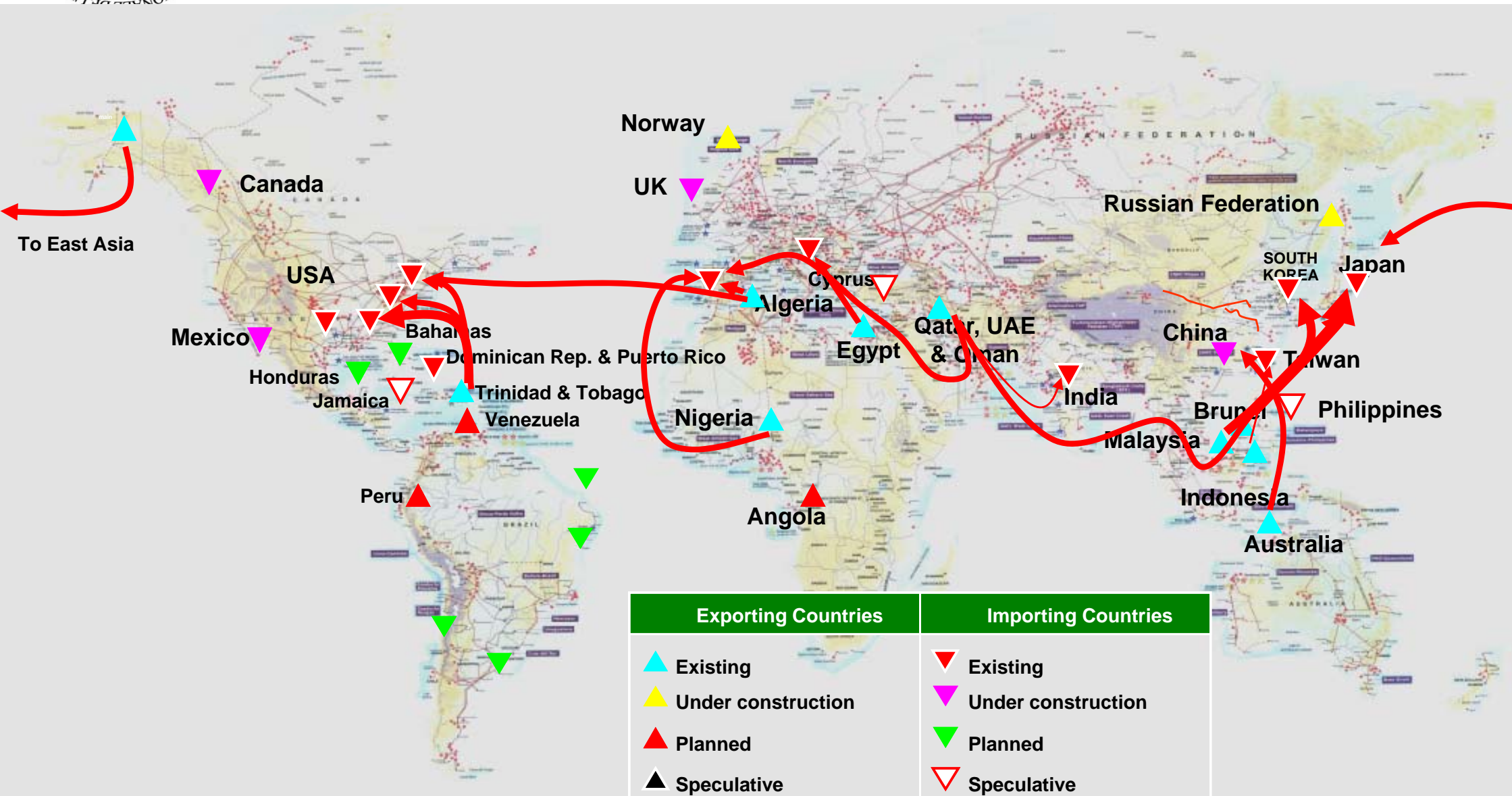
Source: OECD/IEA - 2007



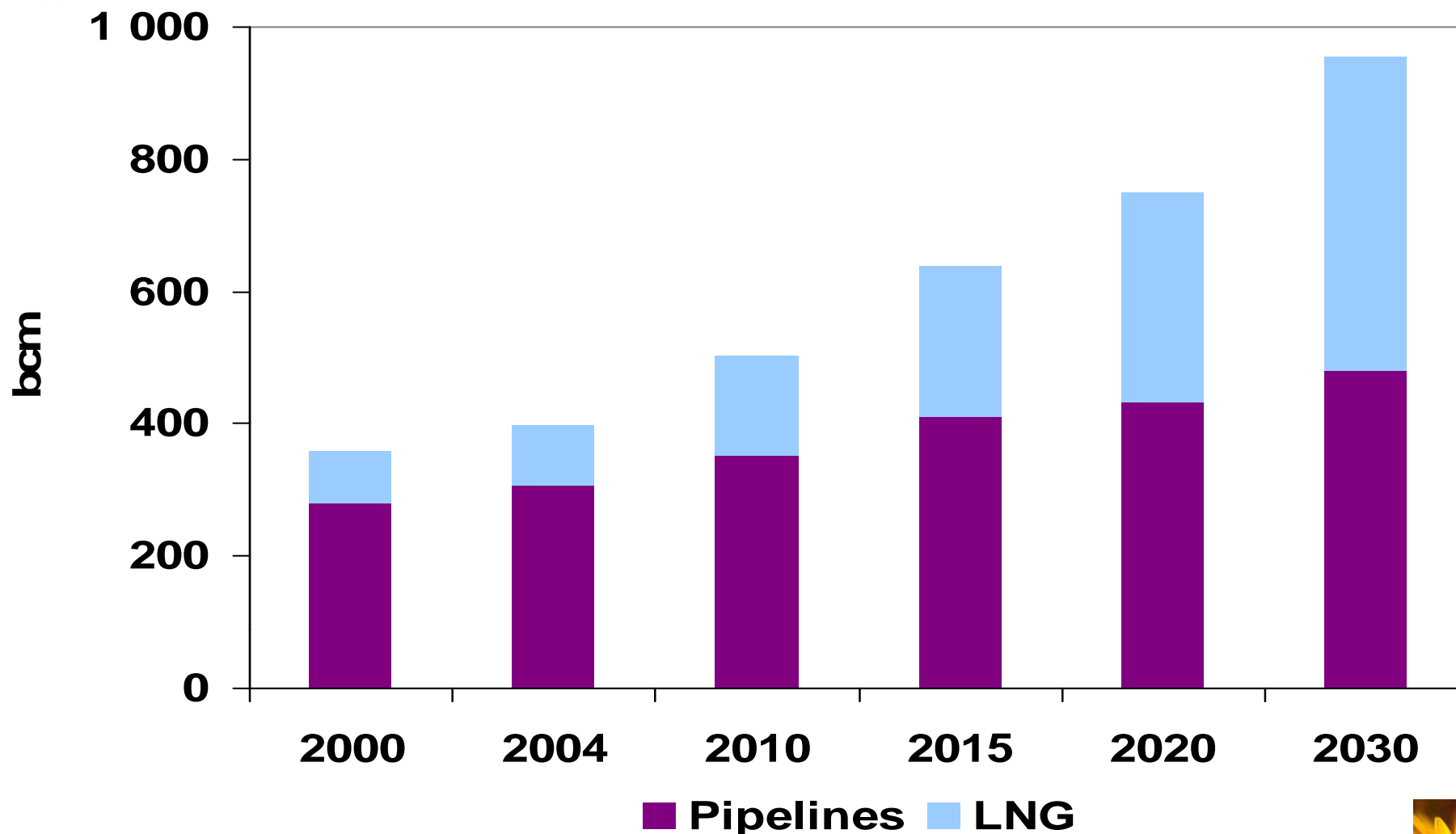
Natural gas reserves are primarily located in Russia & FSU and Middle East, rather far from the gas demand centres



Increasing cross-border natural gas and LNG trade globally



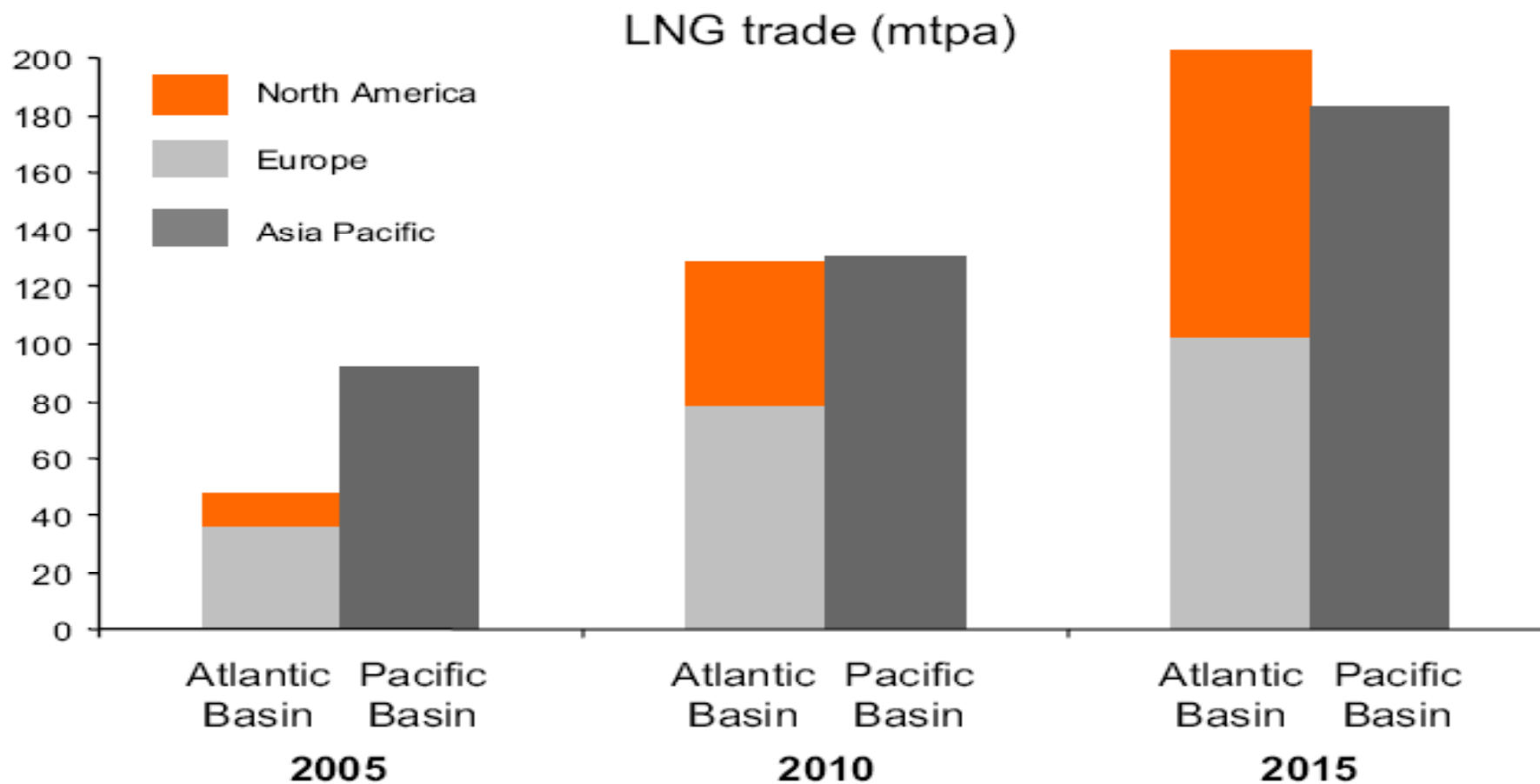
LNG capacity is catching up



Source: OECD/IEA – 2007, World Energy Outlook 2006



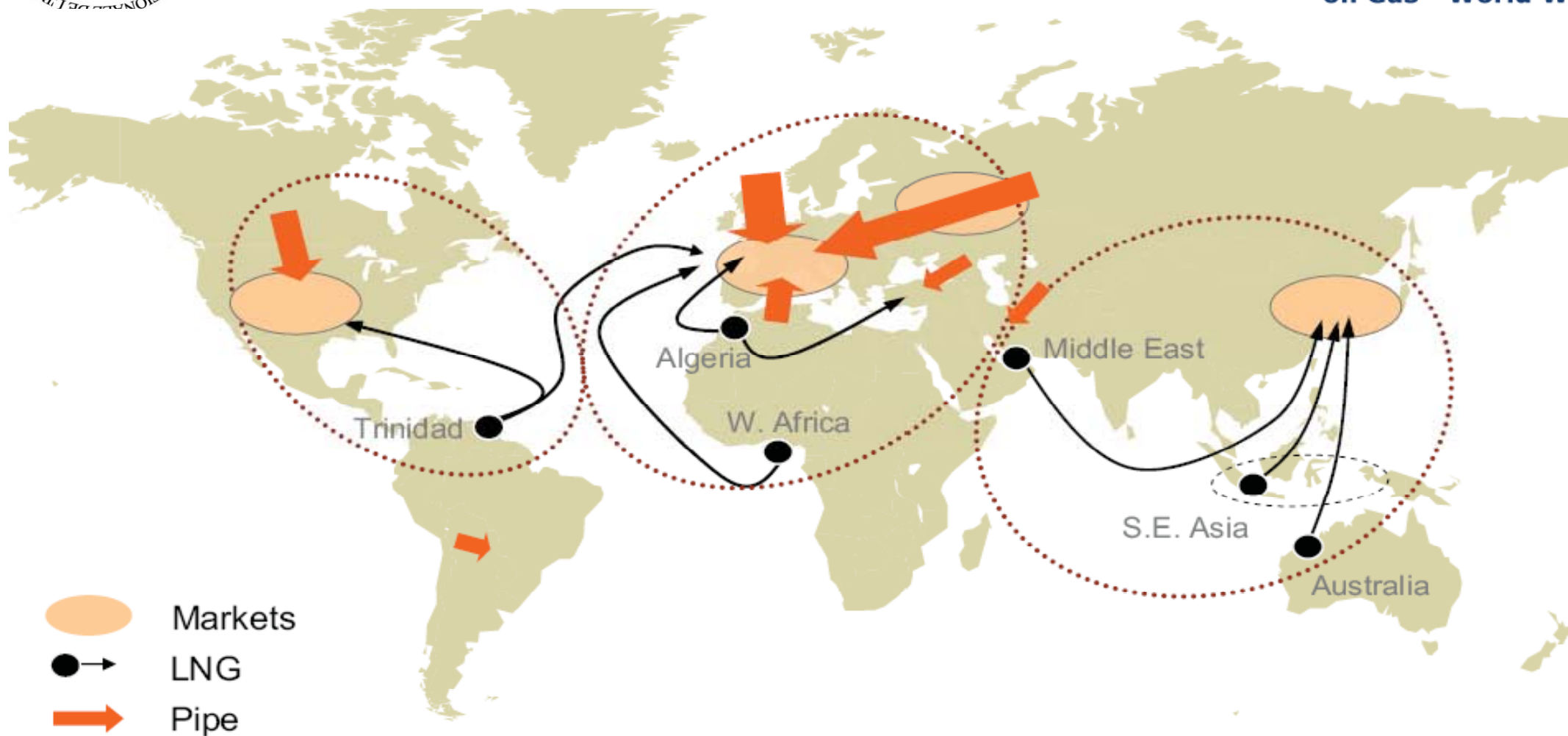
LNG Capacity forecasted to grow



Source: Wood Mackenzie 2007



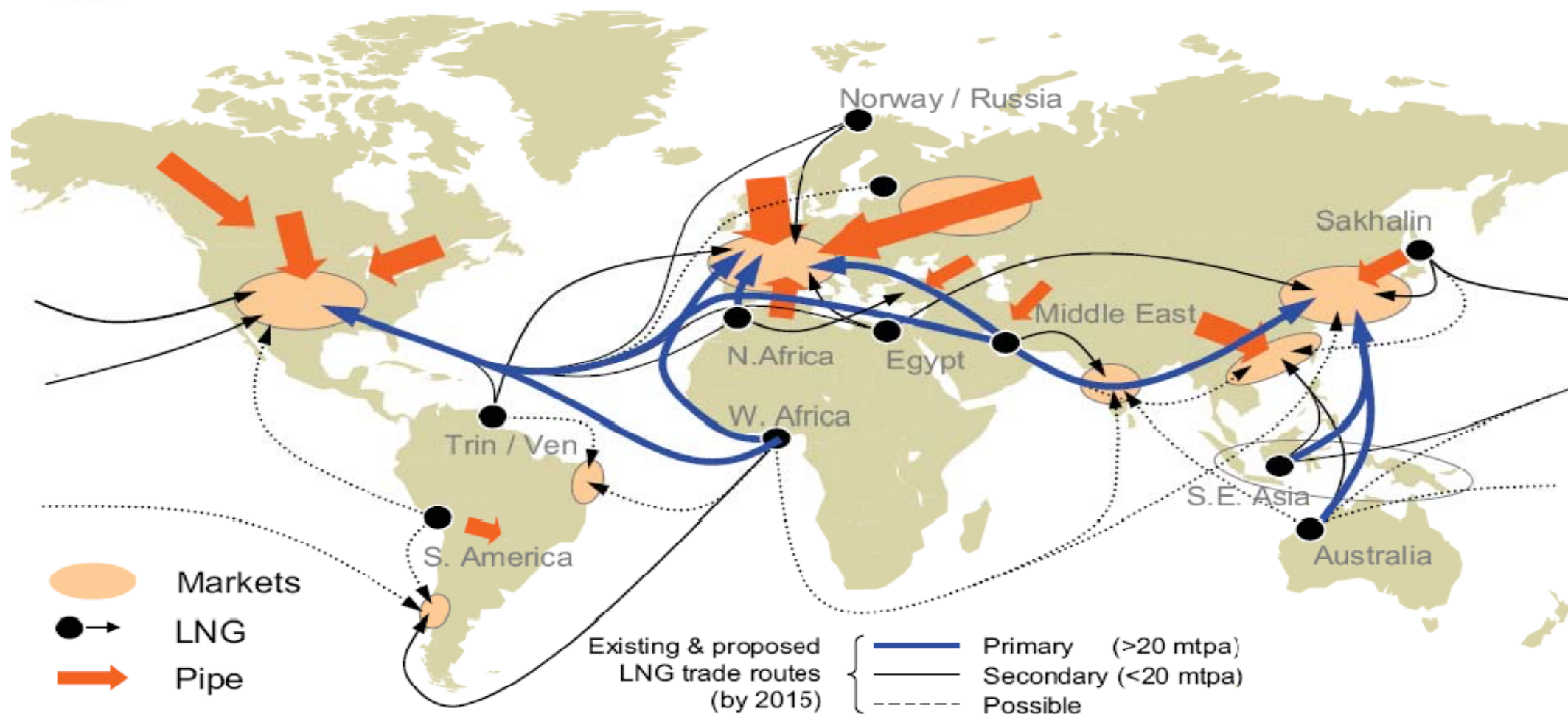
Gas markets were regional in the recent past



Source: BG Group



A global gas trade is evolving



Source: BG Group



LNG is driving gas market globalisation

- LNG market connectivity & trade flexibility increasing
- Supply flexibility has increased significantly
- US is emerging as the balancing market



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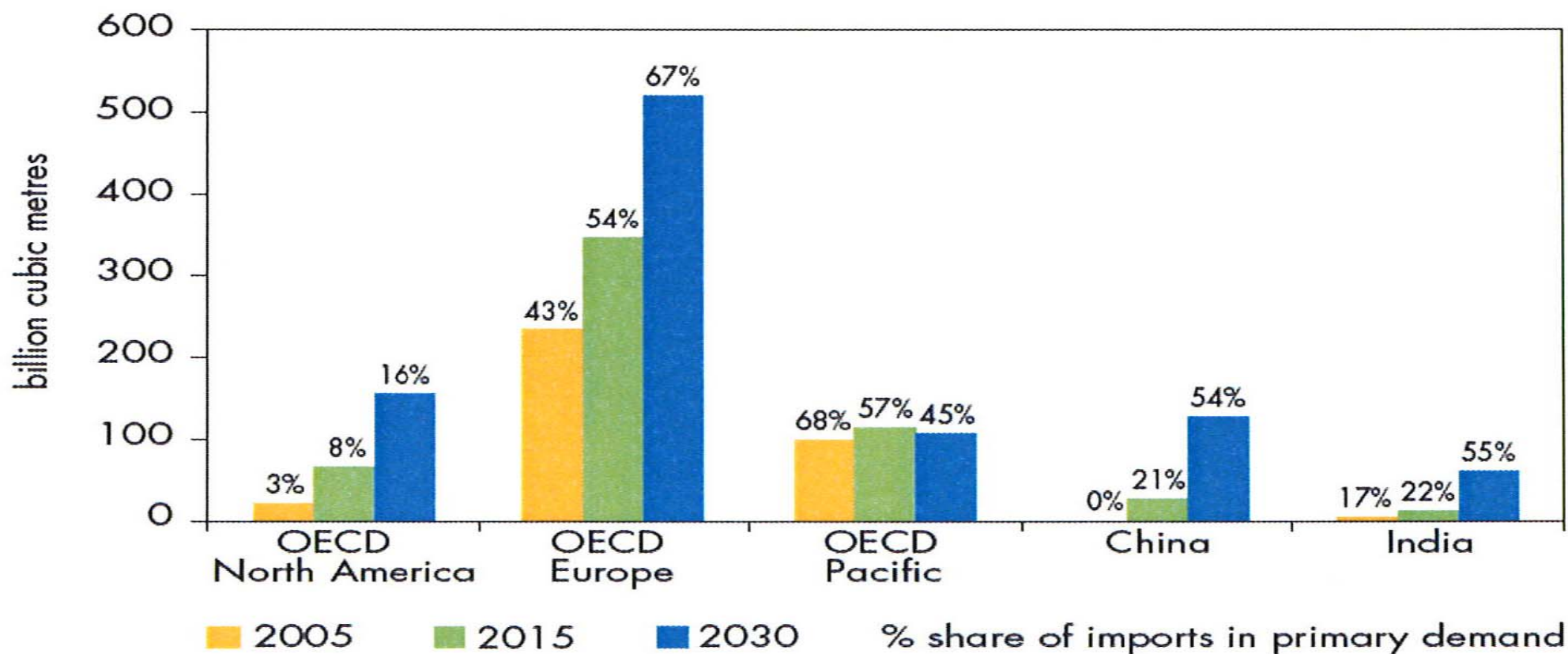


Emerging gas markets in Asia



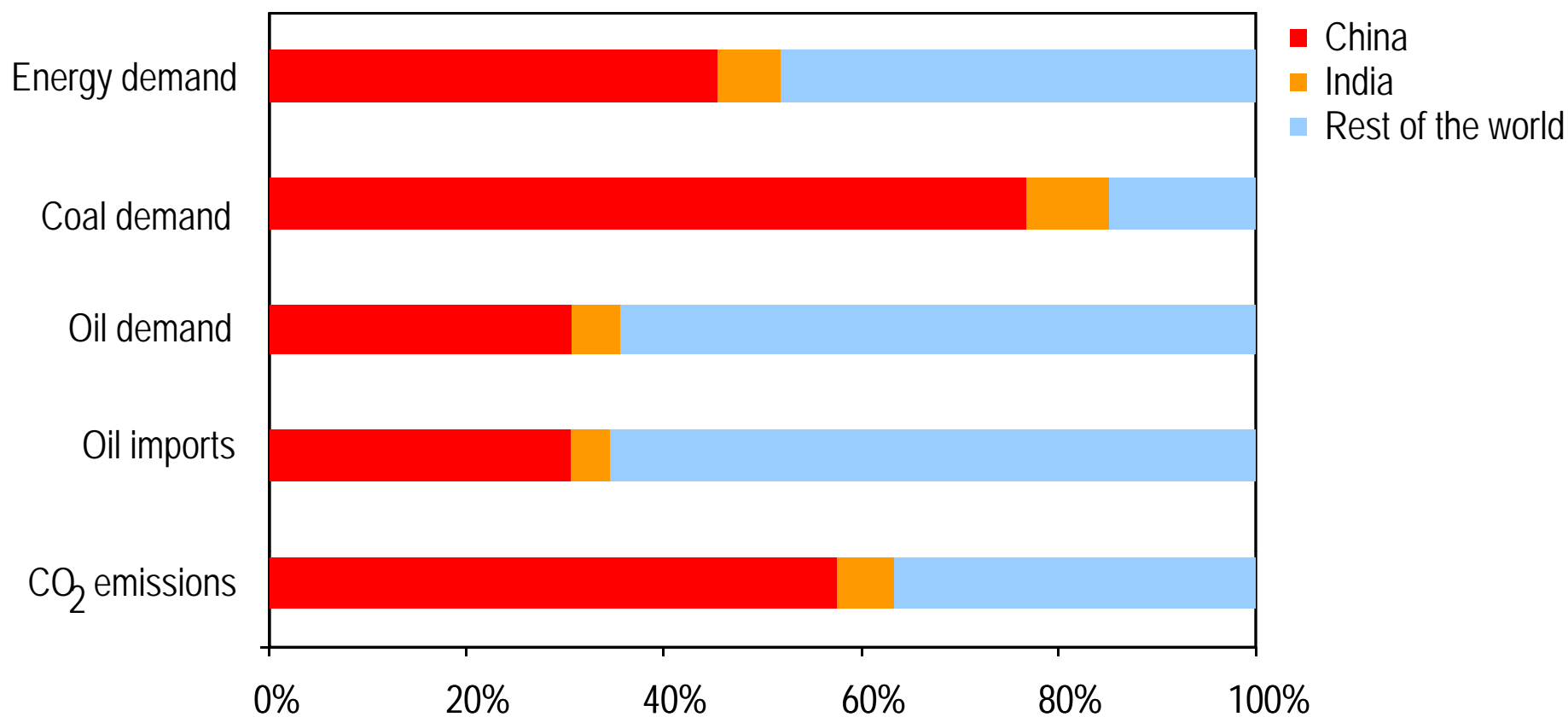
Import dependency is increasing in most regions by 2030

Net Imports of Natural Gas by Major Region in the Reference Scenario



China & India major “increase drivers”

Increase in World Primary Energy Demand, Imports & Energy-Related CO₂ Emissions in the Reference Scenario, 2000-2006



Source: IEA Natural Gas Market Review 2007

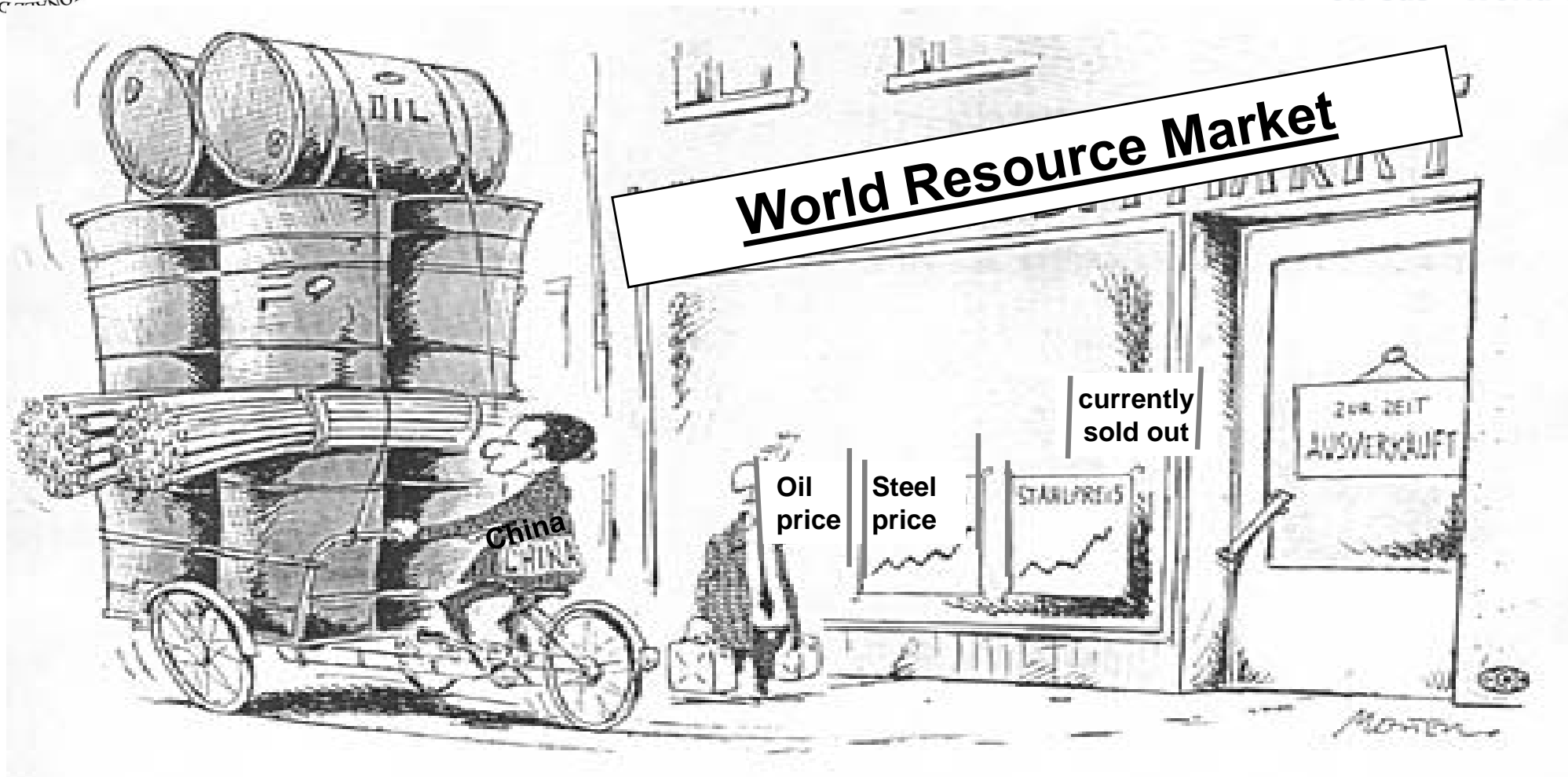


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“Sold out” at the world resource market



Go west? - No, go east!



Russia's new target markets in Asian Pacific countries

- High gas potential in Asian Pacific countries (China!)
- PRC's gas needs will amount up to 120 bcm by 2010
- Shorter transmission route to China than to Europe
- Absence of transit countries along the supply route



Russia's bright prospects of gas sector development in far east



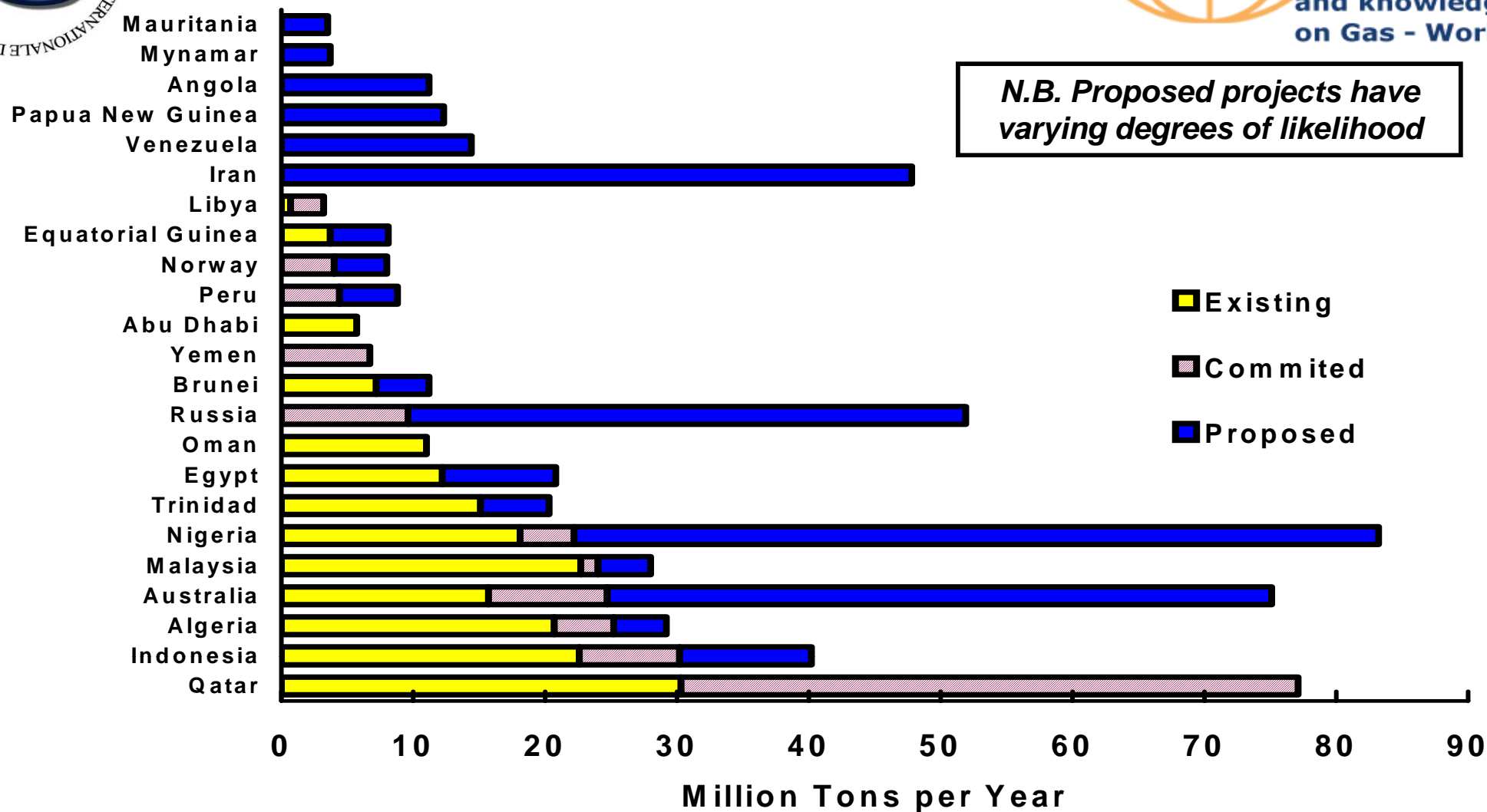
Challenges and Opportunities in undertaking Iran-Pakistan-India or 'Peace' Pipeline



Where will next generation LNG come from?



N.B. Proposed projects have varying degrees of likelihood



**Thank you
for your attention!**

See you in Buenos Aires!

**24th World Gas Conference
and Exhibition**

October 5 – 9 2009

