

“Supply and Demand Security from a Risk Management Perspective”

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International Gas Union



Budapest, Hungary
April 21-22, 2008

What counts in the end??



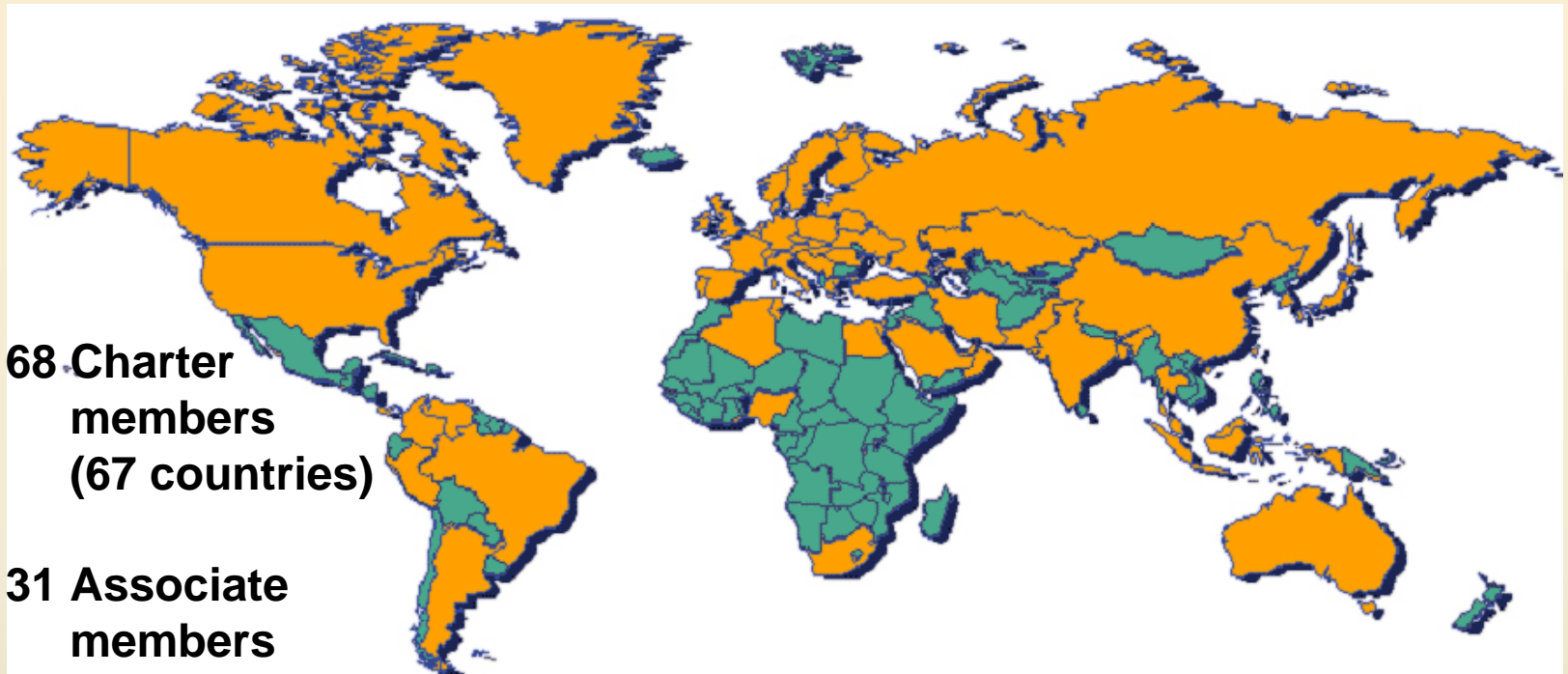
Barbara A. Schmid
7th Energy Regulation & Investment Conference
Budapest, Hungary, April 21-22, 2008

Agenda

- About IGU
- Overall Gas Outlook
- Supply Security
- Demand Security
- Managing the Risk

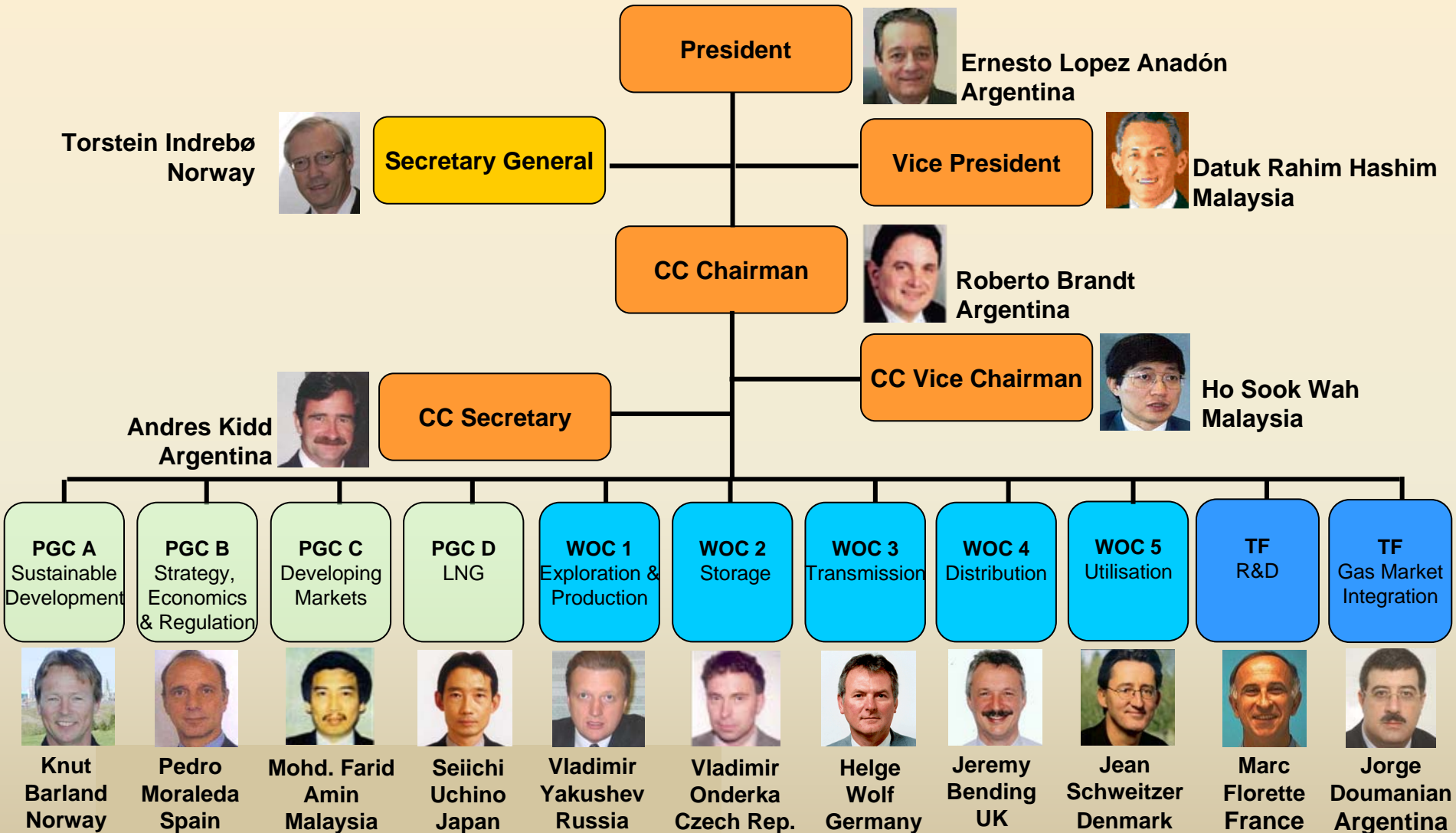
IGU represents around 95% of all gas sales

Members Non Members



Also gas companies can become member and benefit from IGU's vast networking possibilities

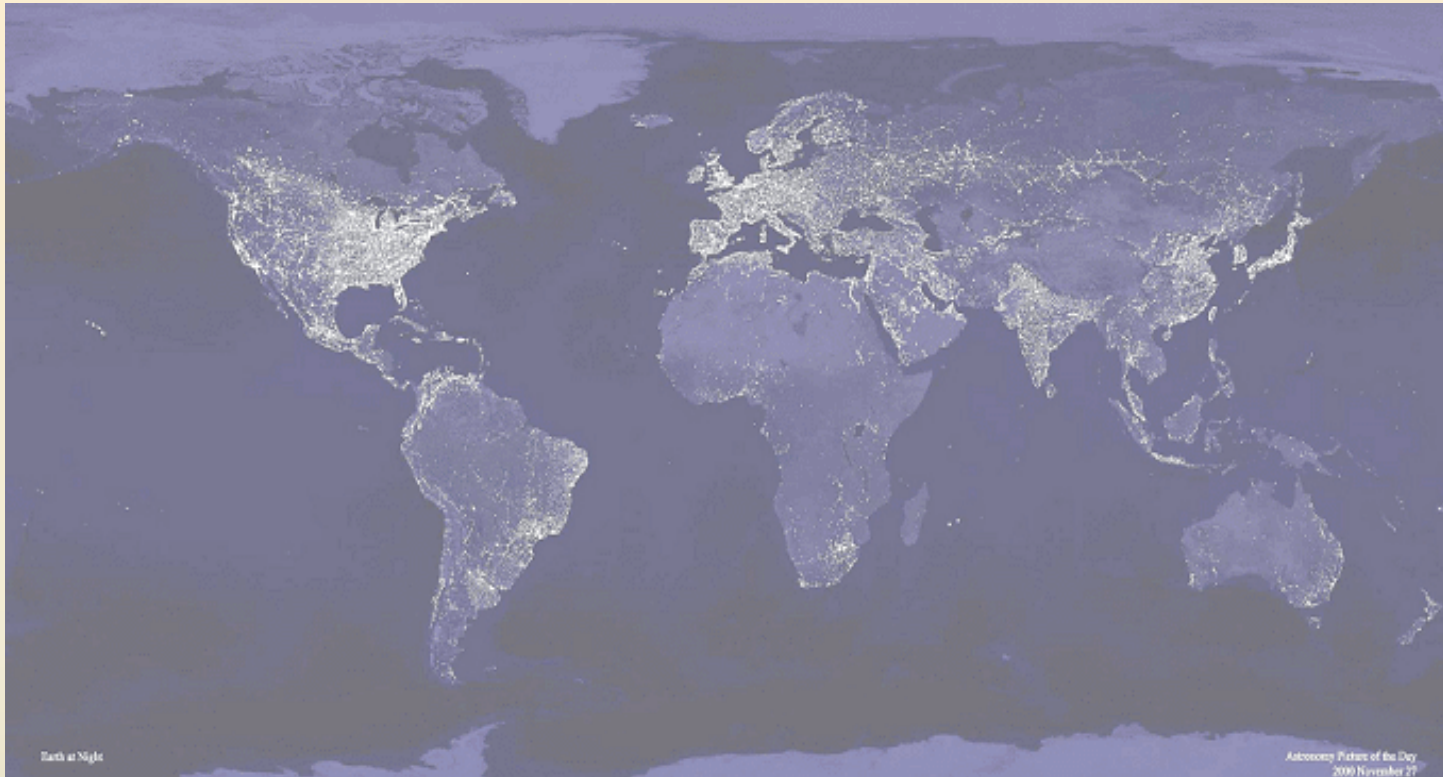
Experts from all over the world are represented in the technical team



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Our world needs energy

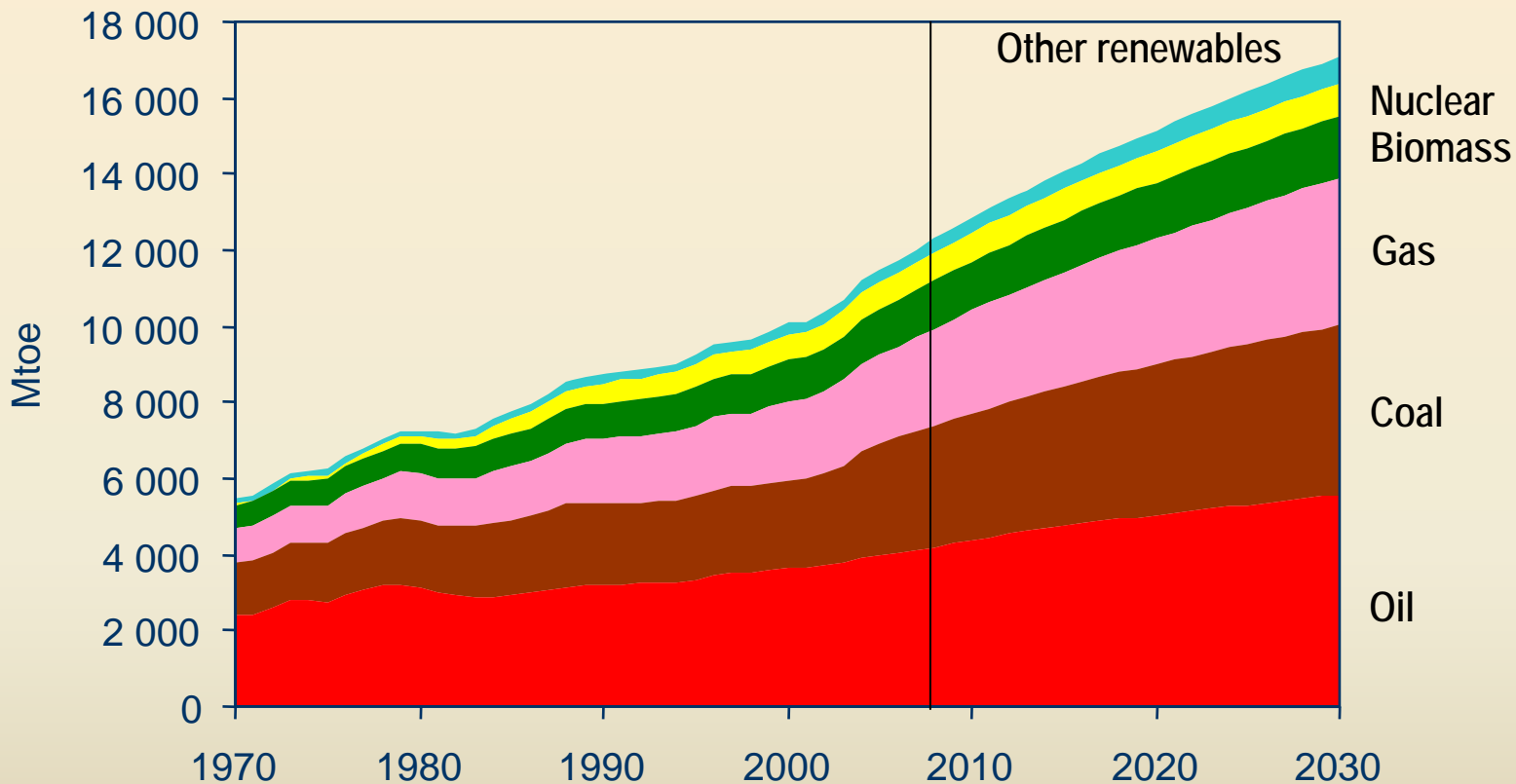


Secure, reliable, affordable energy services
with minimal environmental impact

Safe Forecasting

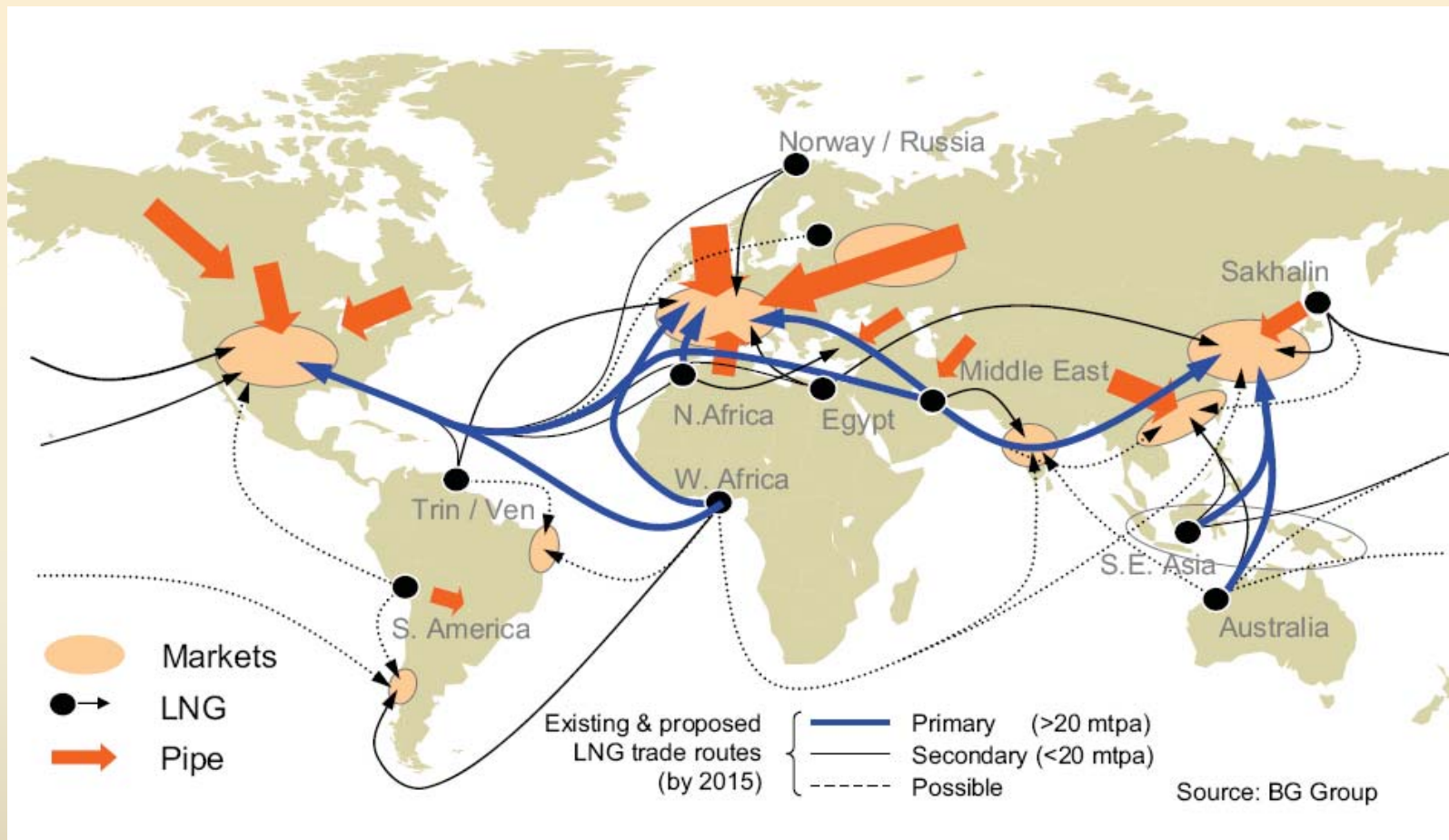
- Population growth from 6 to 9 billion in 2050
- Urbanisation continues
- Increased level of global prosperity
- Environmental consequences
- Times of "easy oil & gas" over
- Fossil fuels will dominate next decades

IEA forecasts growing gas demand in the future



Source: OECD/IEA - 2007

A global gas trade is evolving

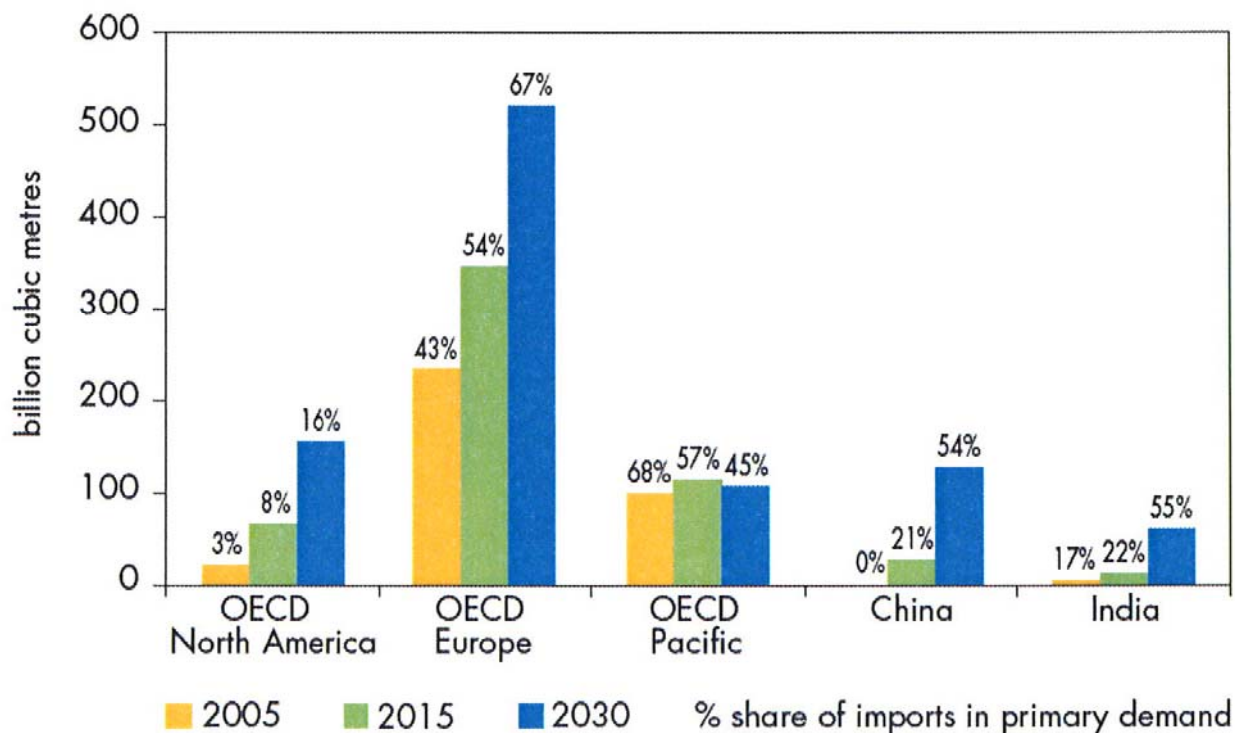


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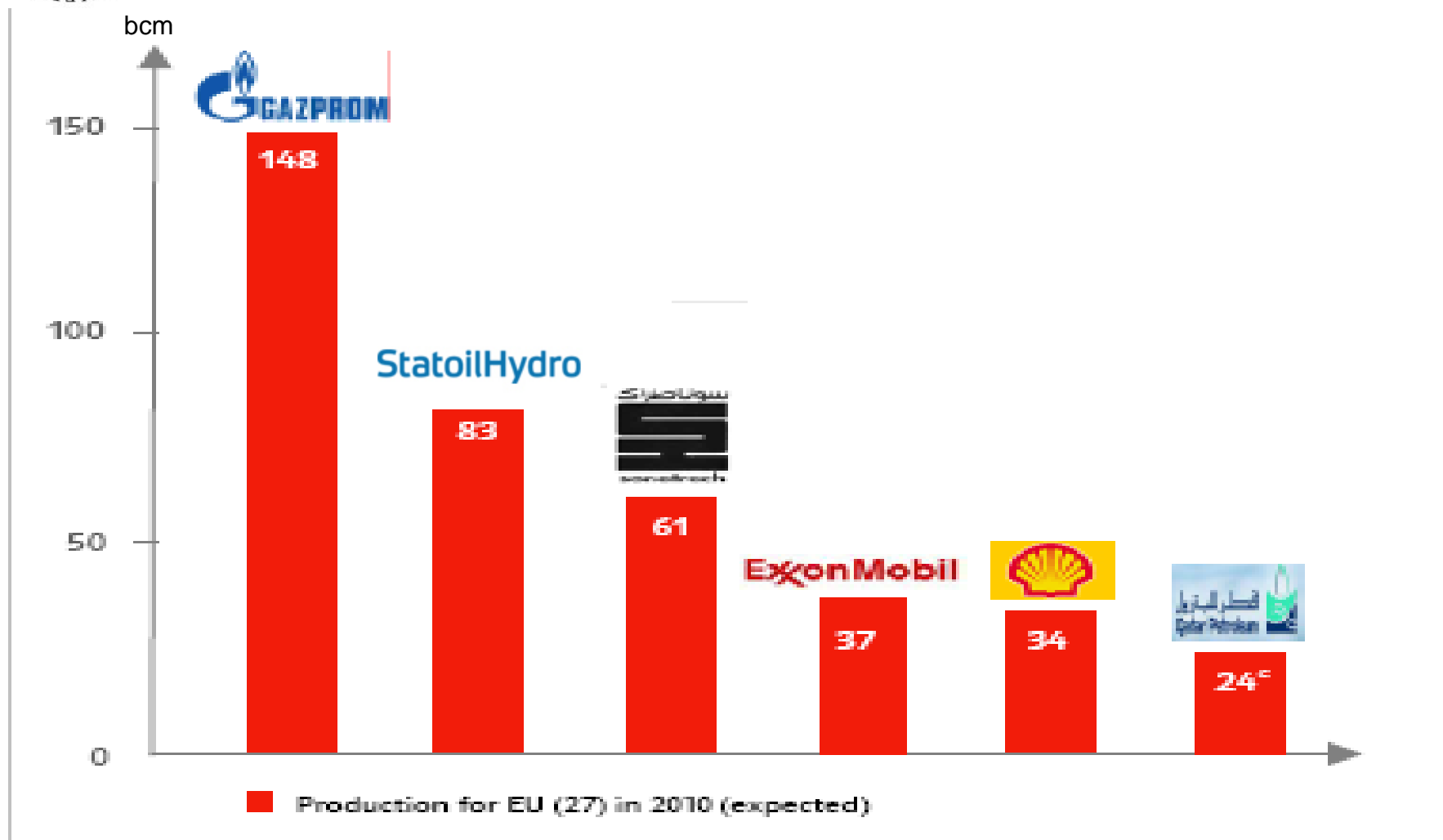
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Import dependency is rising

Figure 1.9: Net Imports of Natural Gas by Major Region in the Reference Scenario



Six main producers supply approx. 69% of the gas needed in the EU27 in 2010



Source: 2005 Company Reports; estimated figures based on general business information

^c Gas supplies of Qatar Petroleum to the EU 27 include deliveries from majority interests in Qatargas (approx. 70%) and RasGas (approx. 70%)

Who gets access to resources?

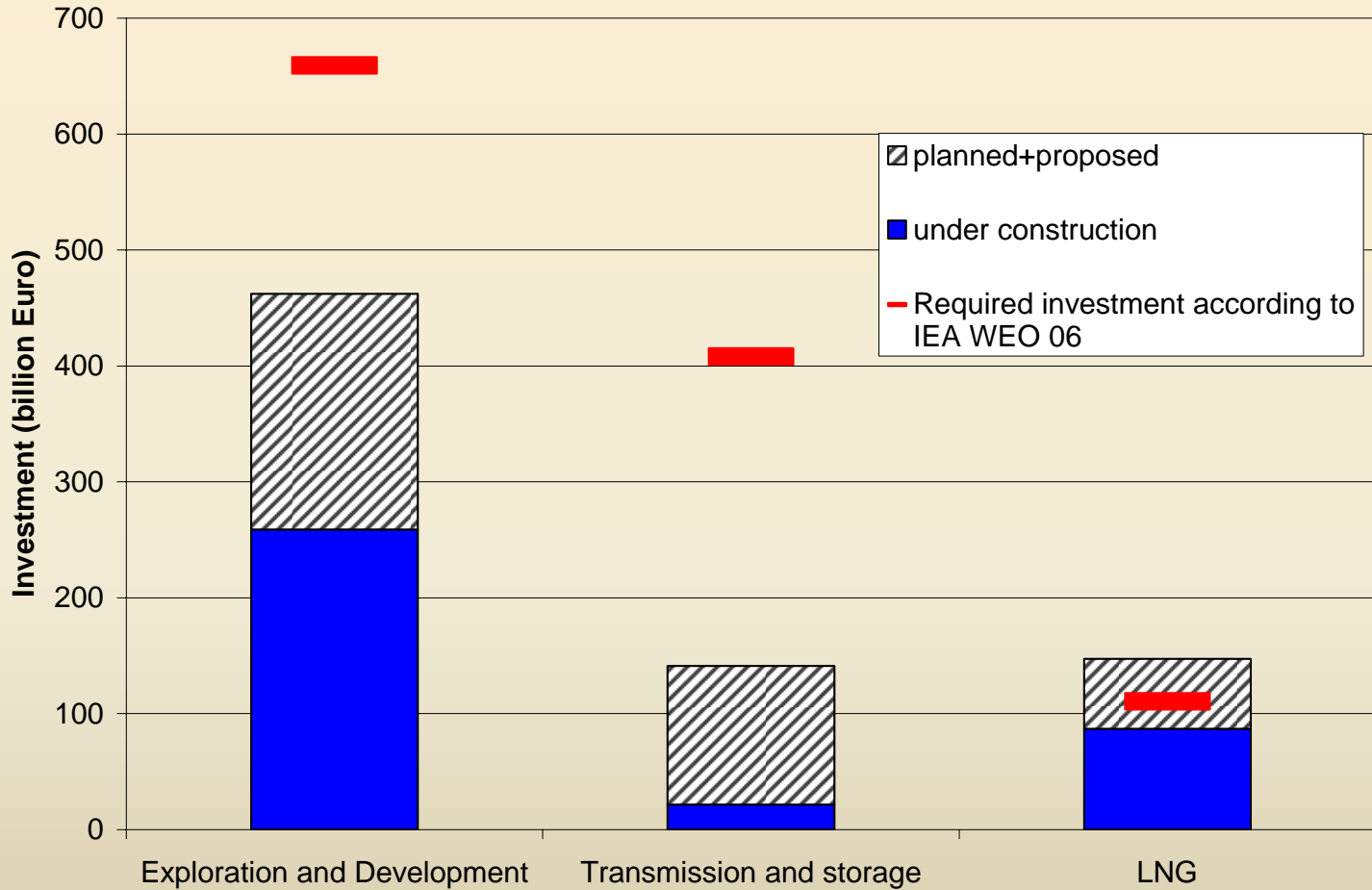


- Domestic demand versus export markets
- National policies – investment levels
- National policies – acreage
- National policies - environmental concerns

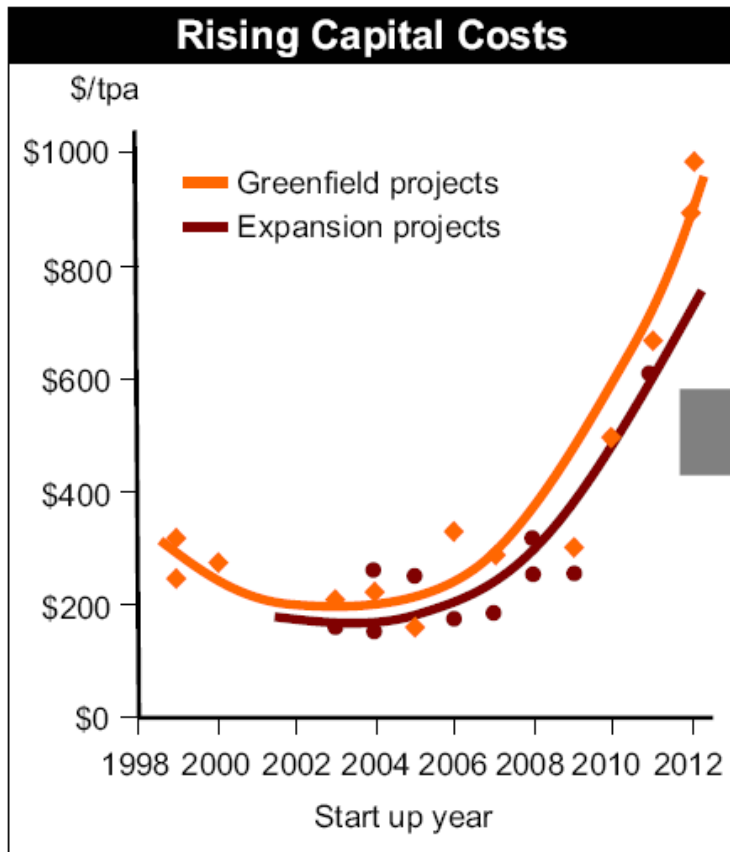
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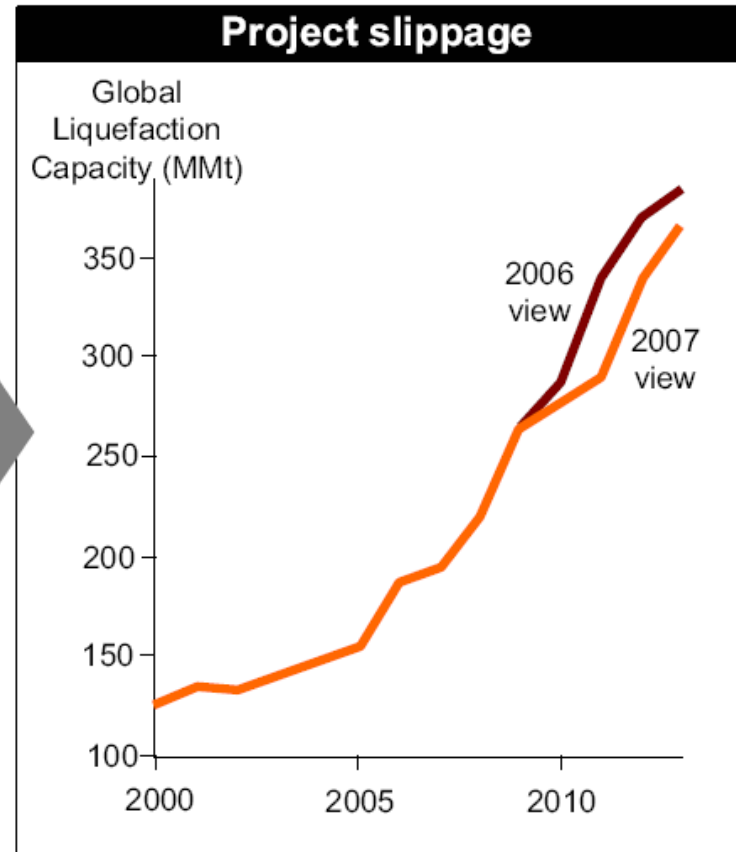
Risk of global underinvestment in the gas sector to 2015



Rising costs for LNG Projects



Source: Poten & Partners

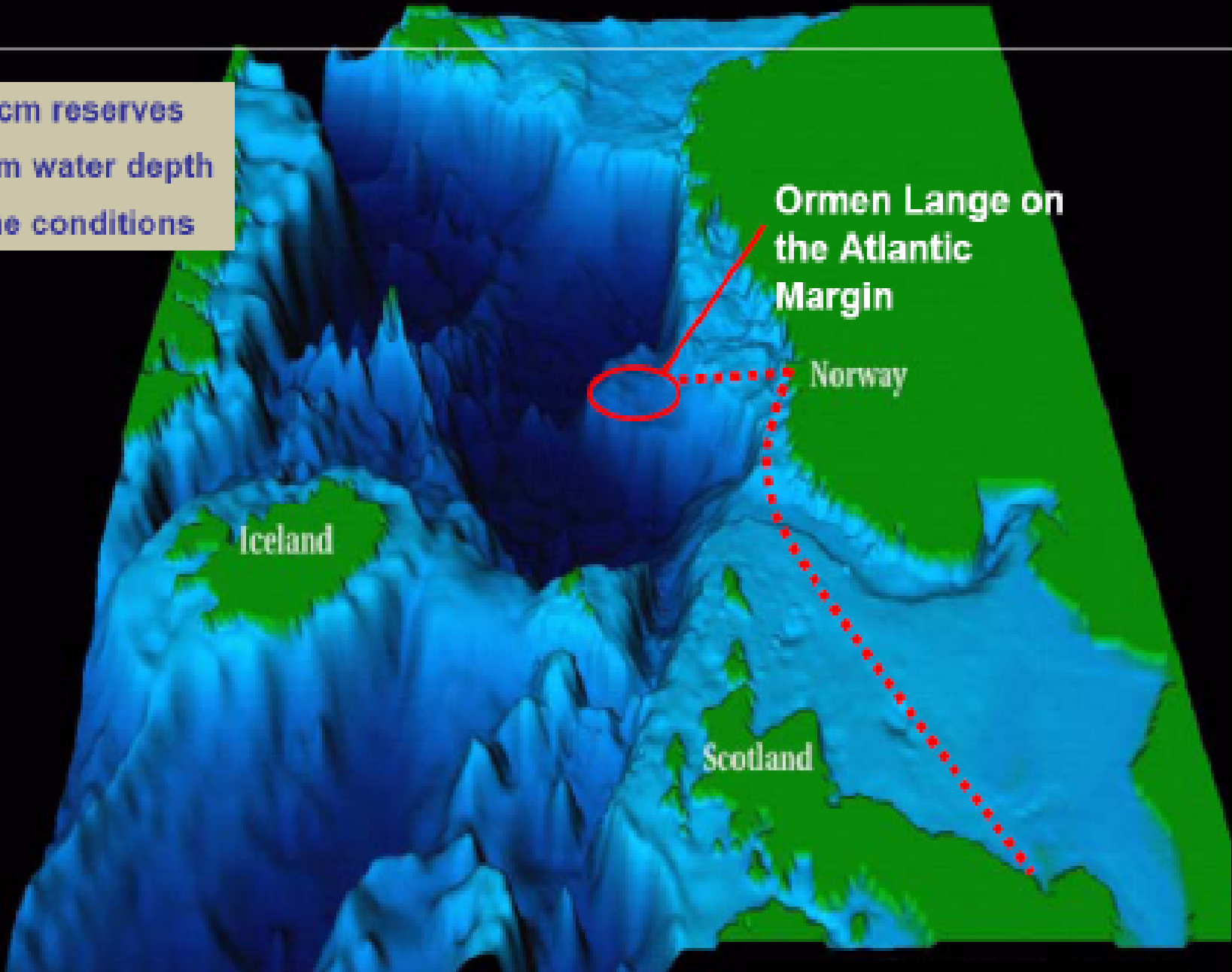


Source: Poten & Partners



Ormen Lange – the new gas giant for Europe

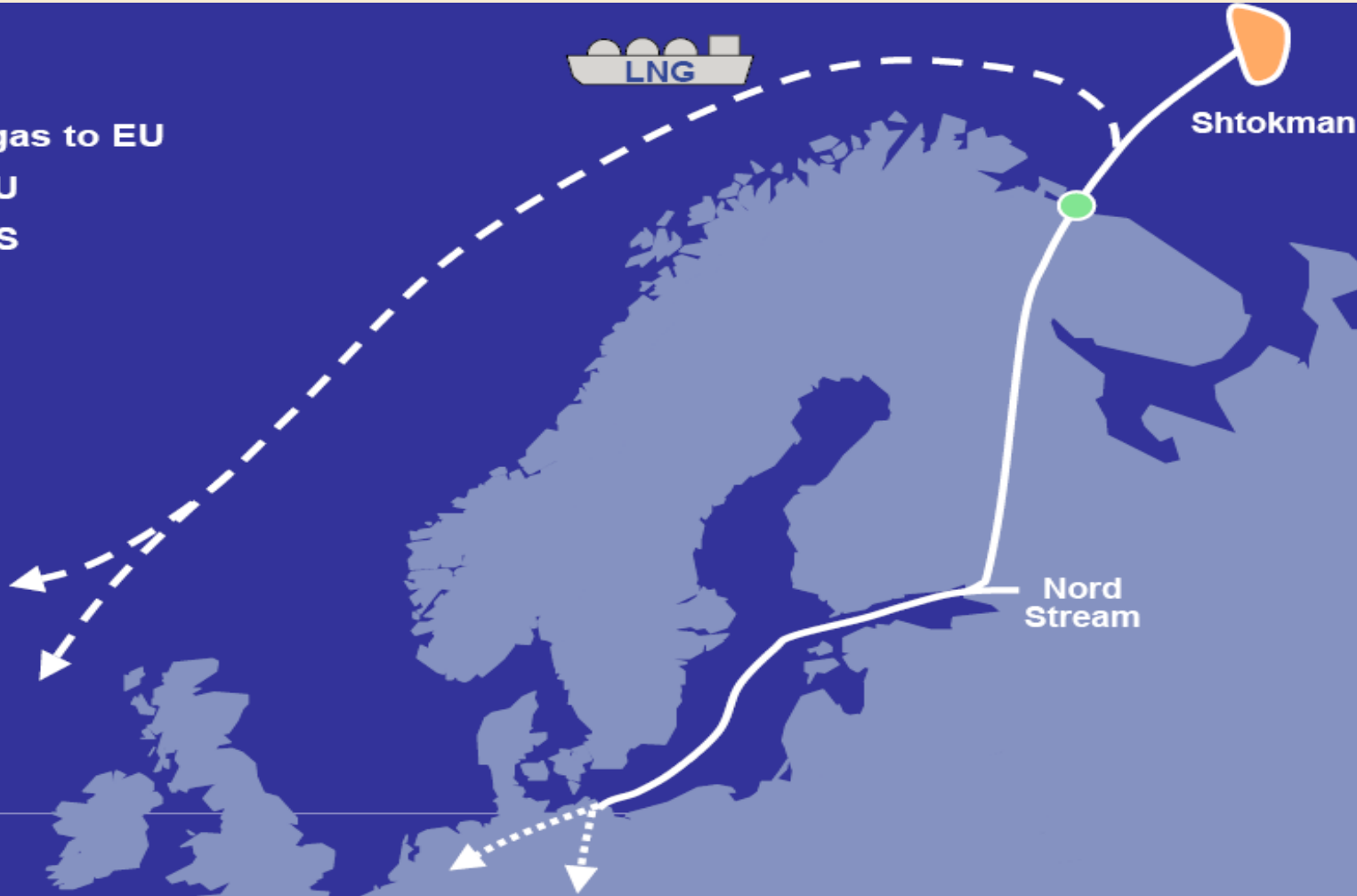
- ~400 bcm reserves
- ~1000 m water depth
- Extreme conditions



The Shtokman-project - risk management critical



- Pipeline gas to EU
- LNG to EU
- LNG to US



Nabucco - Connecting Caspian Region with Western European Markets



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Evaluation of long term horizon of projects (20-40 years)

- Regulation of business
- Cost control: Return on investments
- Environmental policies
- Development of gas price (indexation: Oil, Henry Hub, NBP)



**Thank you
for your attention!**

See you in Buenos Aires!

**24rd World Gas Conference
and Exhibition
October 5 – 9 2009**



