



International Gas Union



Gas as the Energy of Choice

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Secretary General of IGU

The 12th African Oil, Gas & Minerals, Trade and Finance Conference and Exhibition

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Malabo, Equatorial Guinea



- **The International Gas Union**
- **Globalisation of the gas market**
- **Climate and benefits of gas**
- **The role of gas in Africa**
- **Conclusions**





IGU – serving the gas industry world wide



- World wide non–profit organisation since 1931
- Promotes technical and economic progress of the gas industry
- Geopolitics and strategy higher on the agenda
- African members: Algeria, Tunisia, Libya, Nigeria, Cameroon, South Africa, Egypt
- More African members welcome!
- Membership € 4,500/year





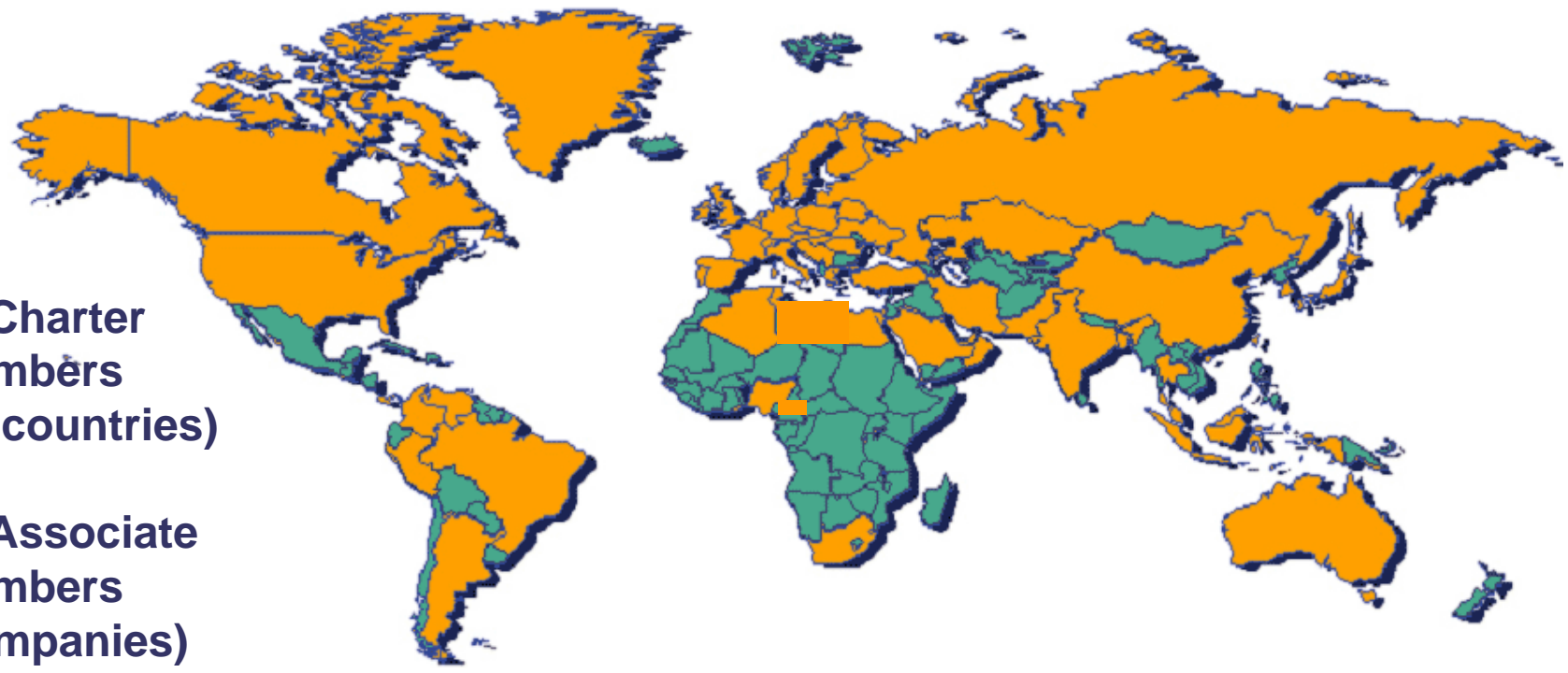
IGU represents around 95% of global gas sales



 **Members**  **Non Members**

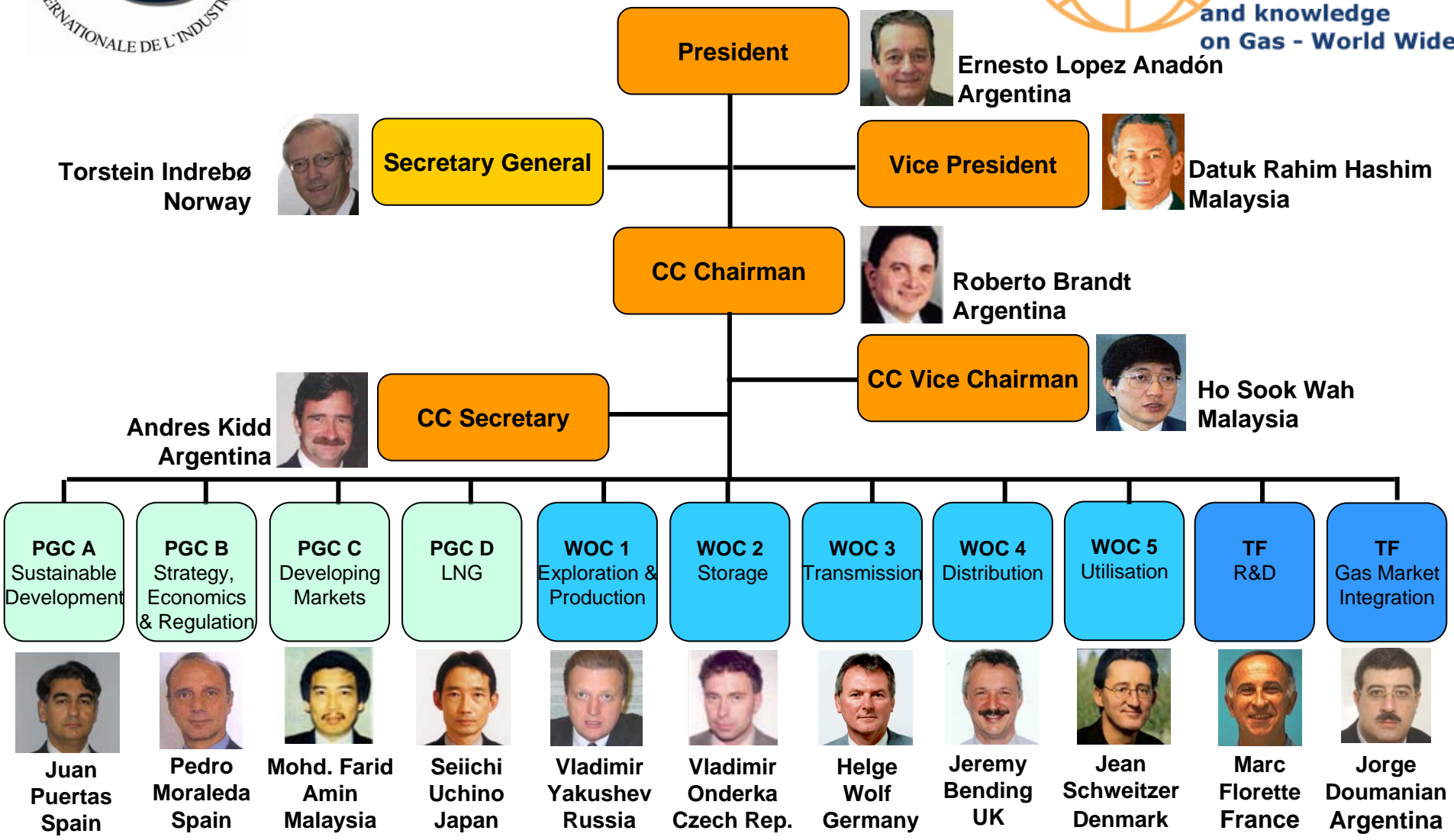
**72 Charter members
(71 countries)**

**32 Associate members
(companies)**





The organisational structure of IGU

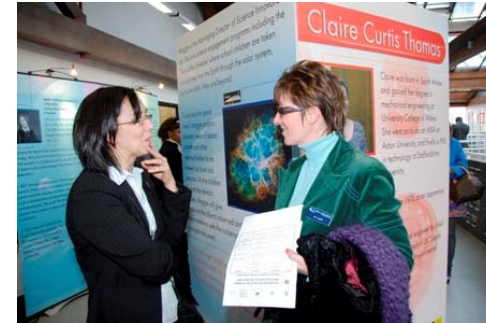




IGU offers many benefits to its members



Networking



Promotion



Knowledge



Information



Agenda

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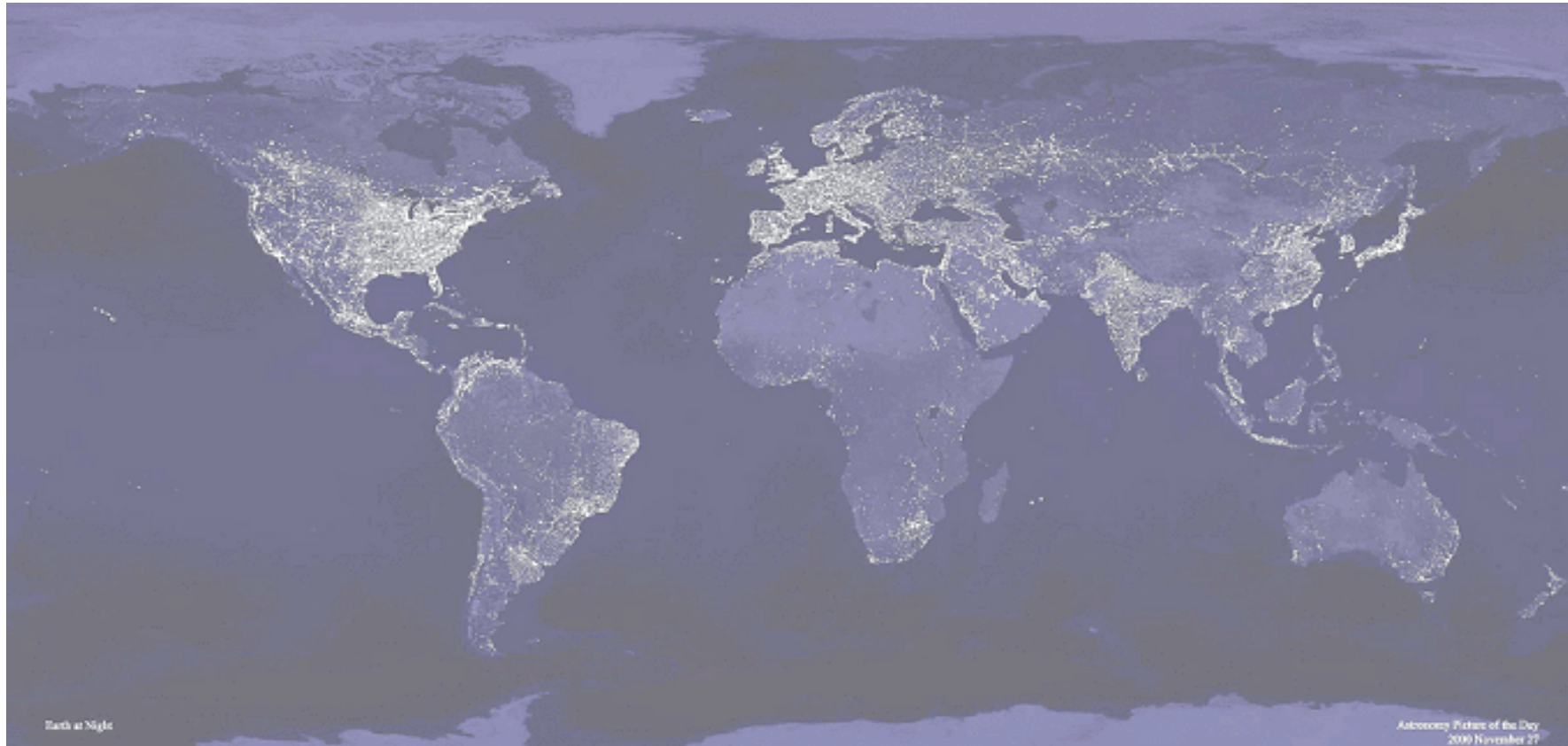




The mission is the challenge



Secure, reliable, affordable energy services with minimal environmental impact



Earth at Night

Astronomy Picture of the Day
2010 November 27

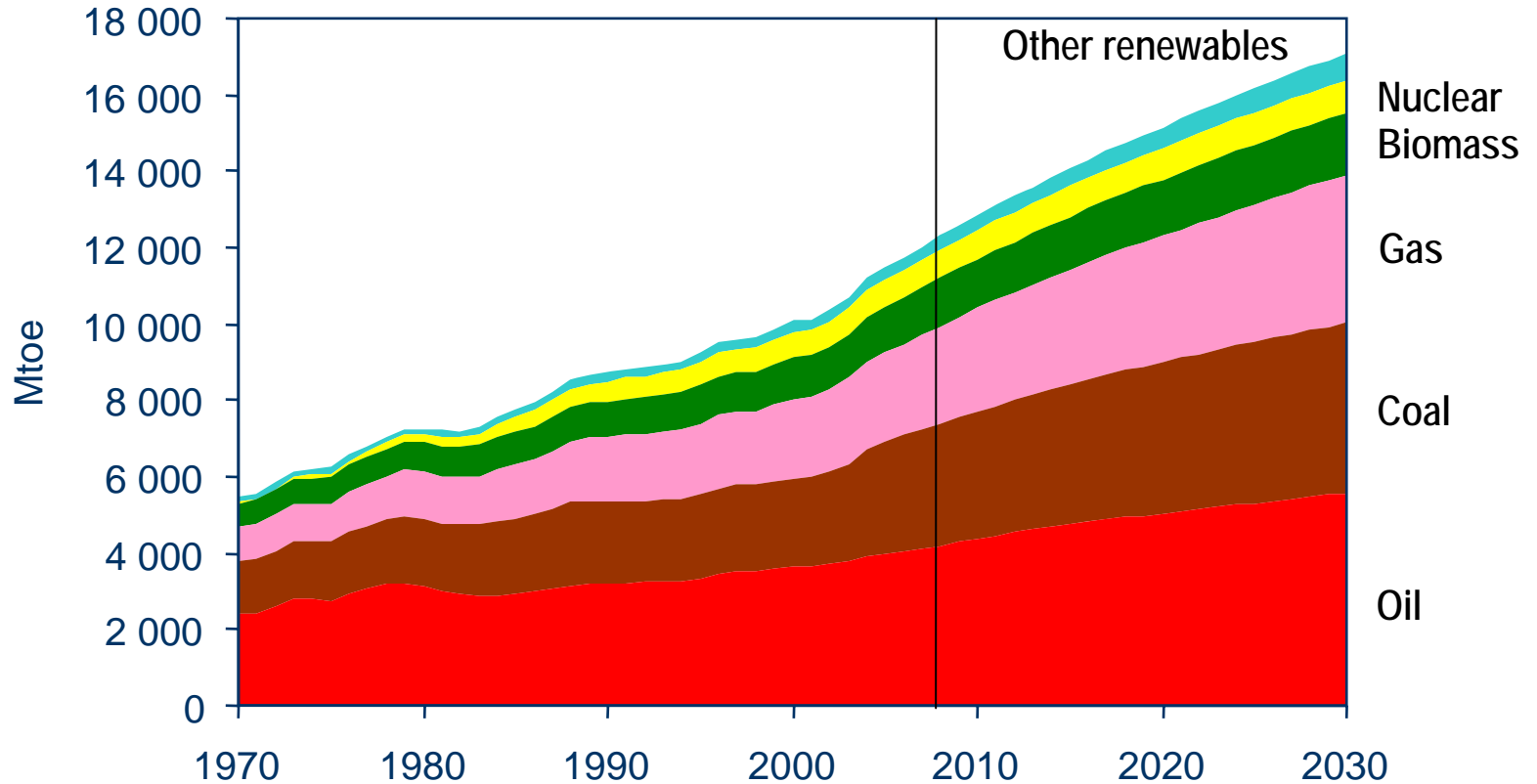
"Safe forecasting"

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





IEA forecasts growing gas demand in the future



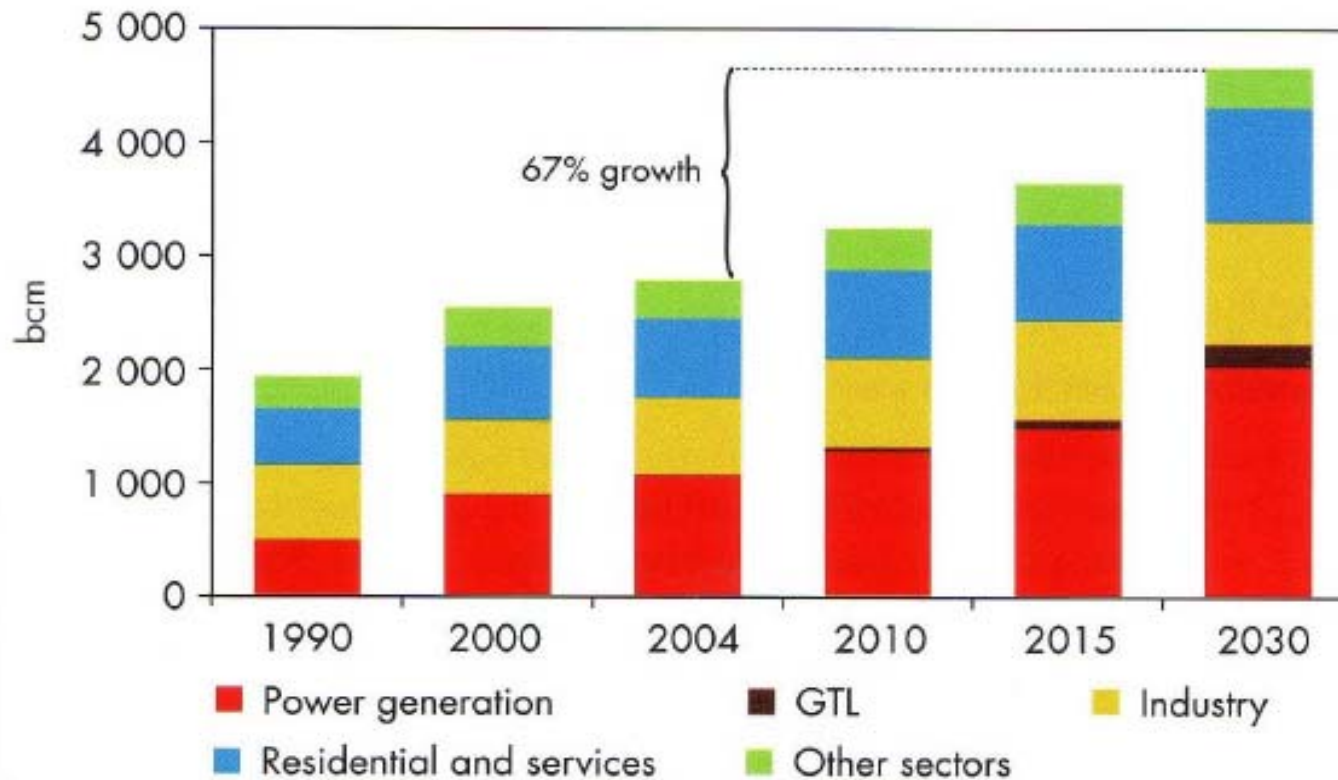
Source: OECD/IEA - 2007



Power generation driving the gas market



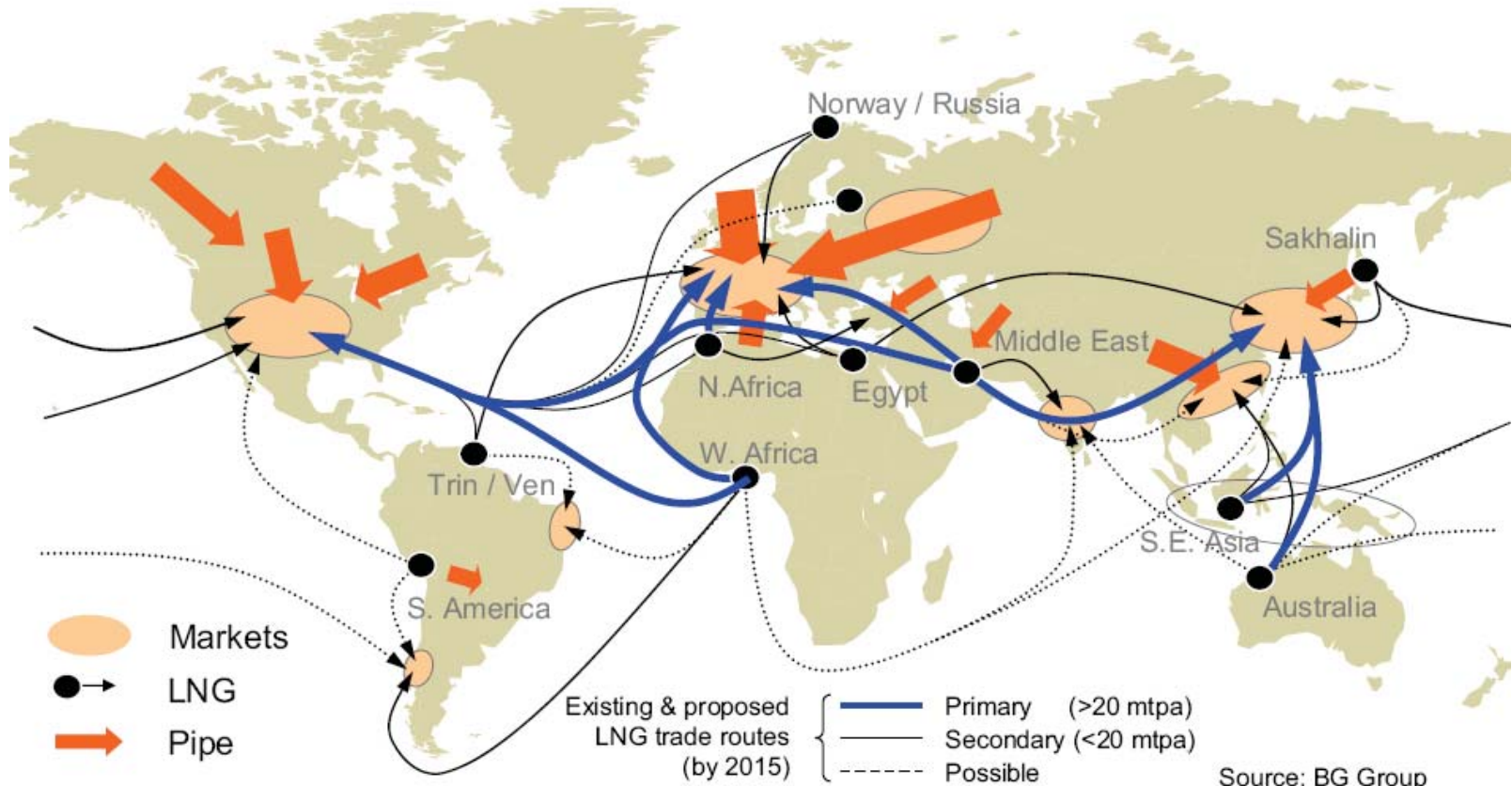
News, Views and knowledge on Gas - World Wide



Source: IEA, WEO 2006, Reference scenario



A global gas trade is evolving



- **NOCs hold the majority of gas reserves**
- **Concentrated on few hands, Russia, Iran
Qatar, Saudi Arabia**
- **IOCs control 6% of world gas
reserves**

Source: Source: BP Statistical



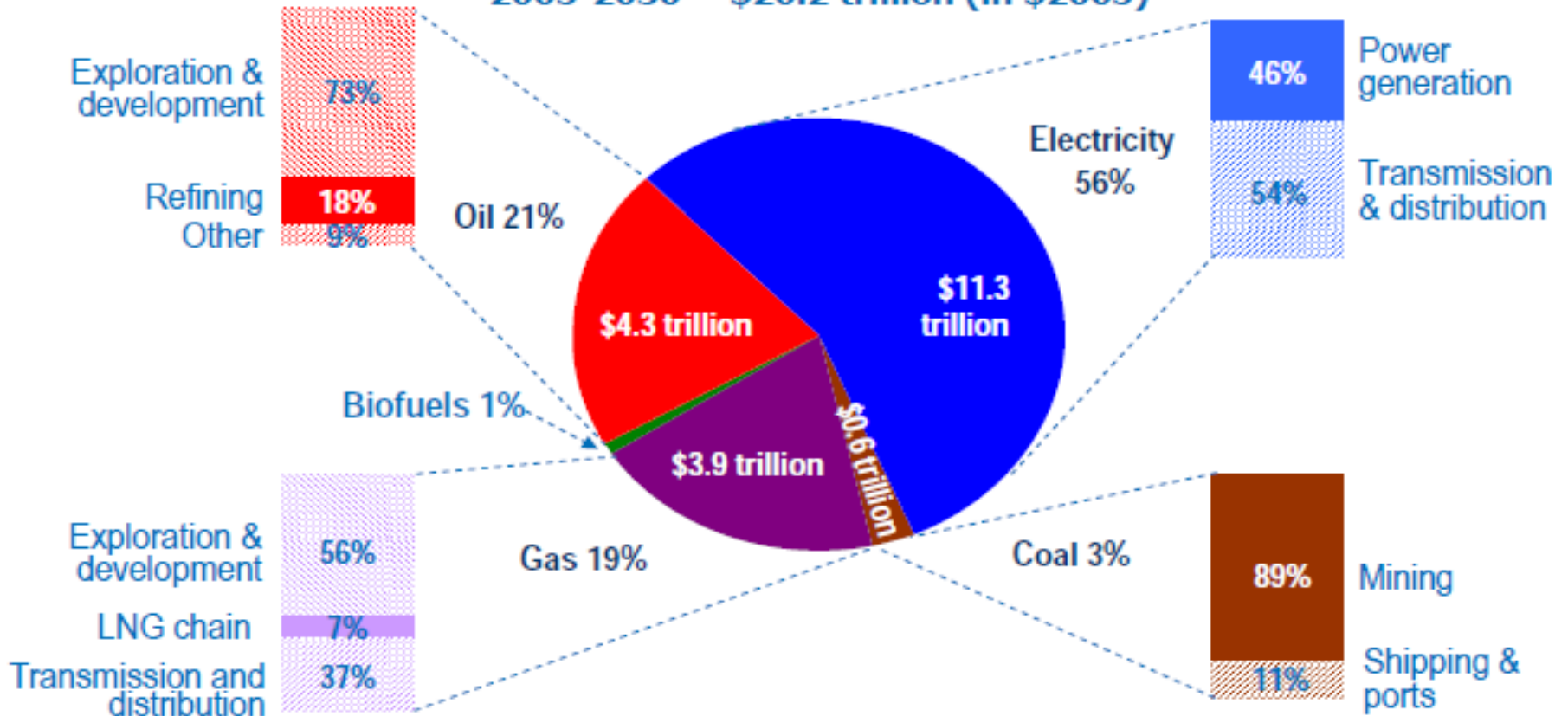
National policies



- Domestic demand vs. export markets
- Investment levels
- Acreage availability
- Environmental concerns



Cumulative Investment in Energy-Supply Infrastructure, 2005-2030 = \$20.2 trillion (in \$2005)





Risk management is critical



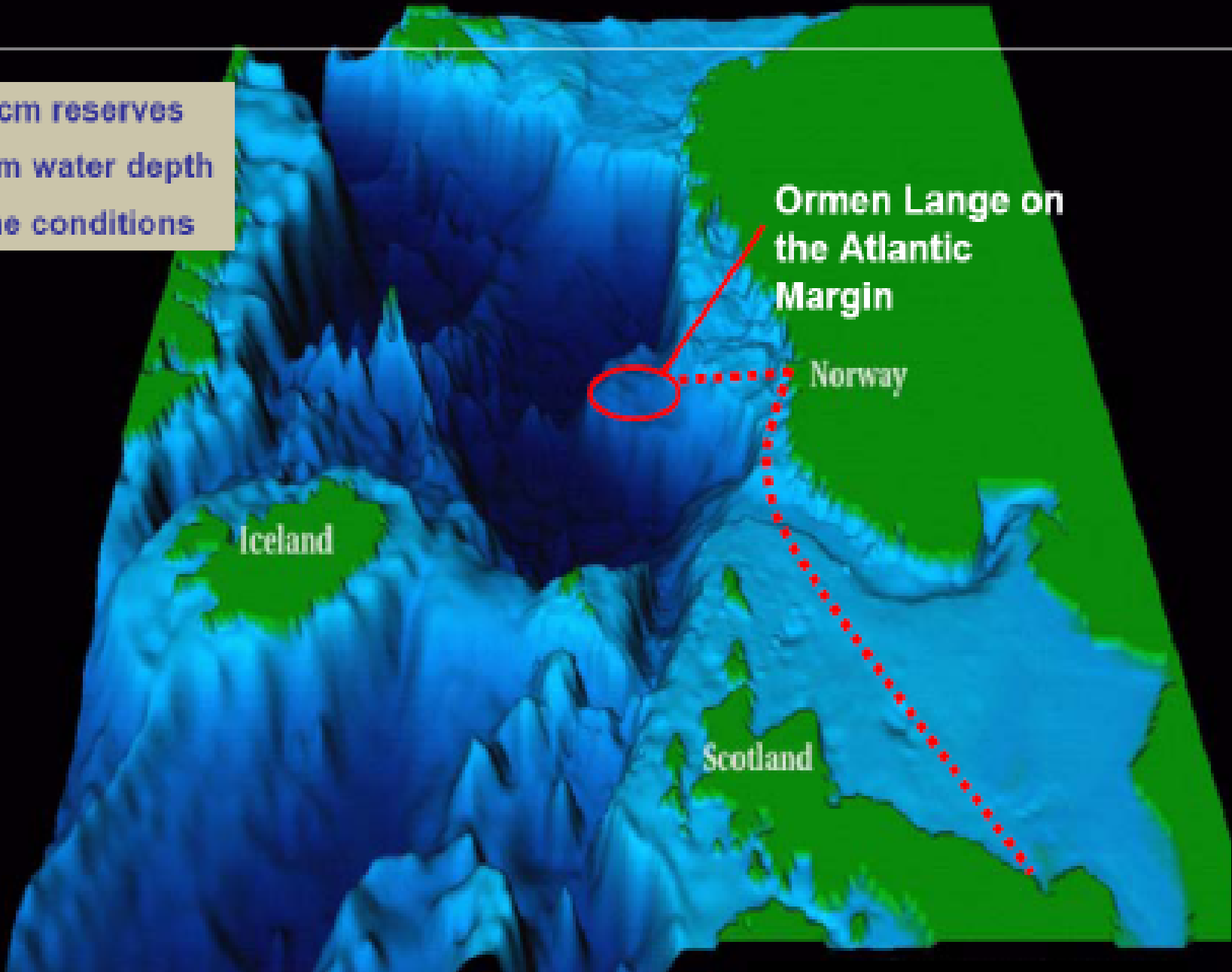
- Long term perspective 20-40 years
- Long term contracts vs spot sales
- Regulation of business
- Project risk: cost and schedule
- Environmental policies
- Gas pricing (indexation: Oil, Henry Hub, NBP)





Ormen Lange – the new gas giant for Europe

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



Agenda

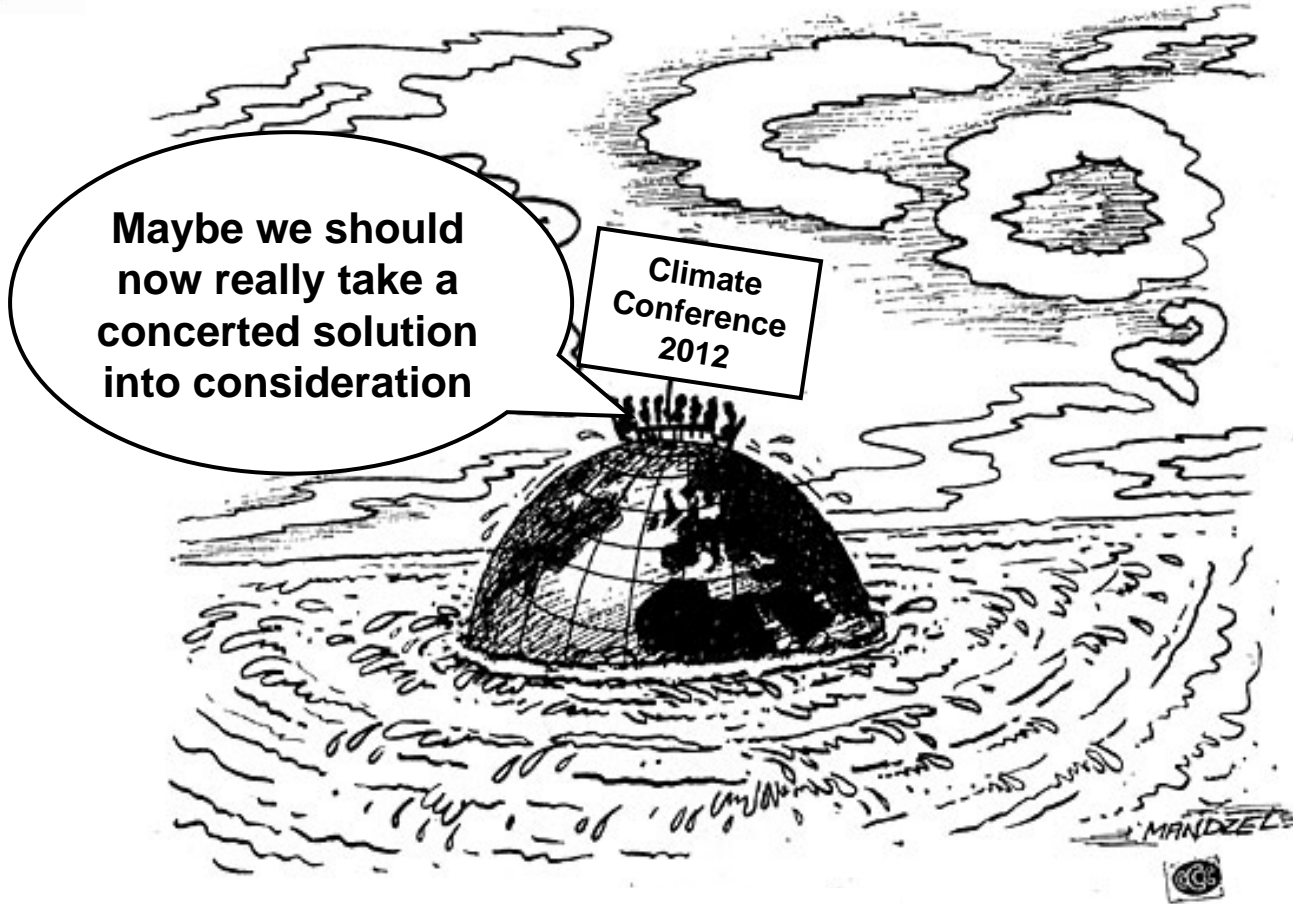
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Emissions are growing...



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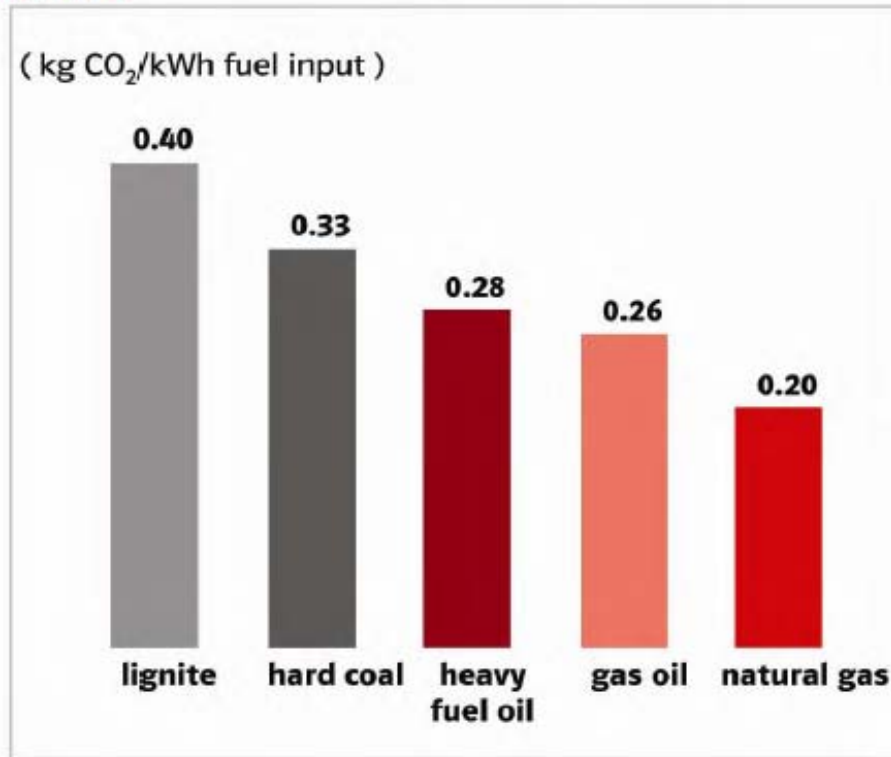


Gas should play a major role!



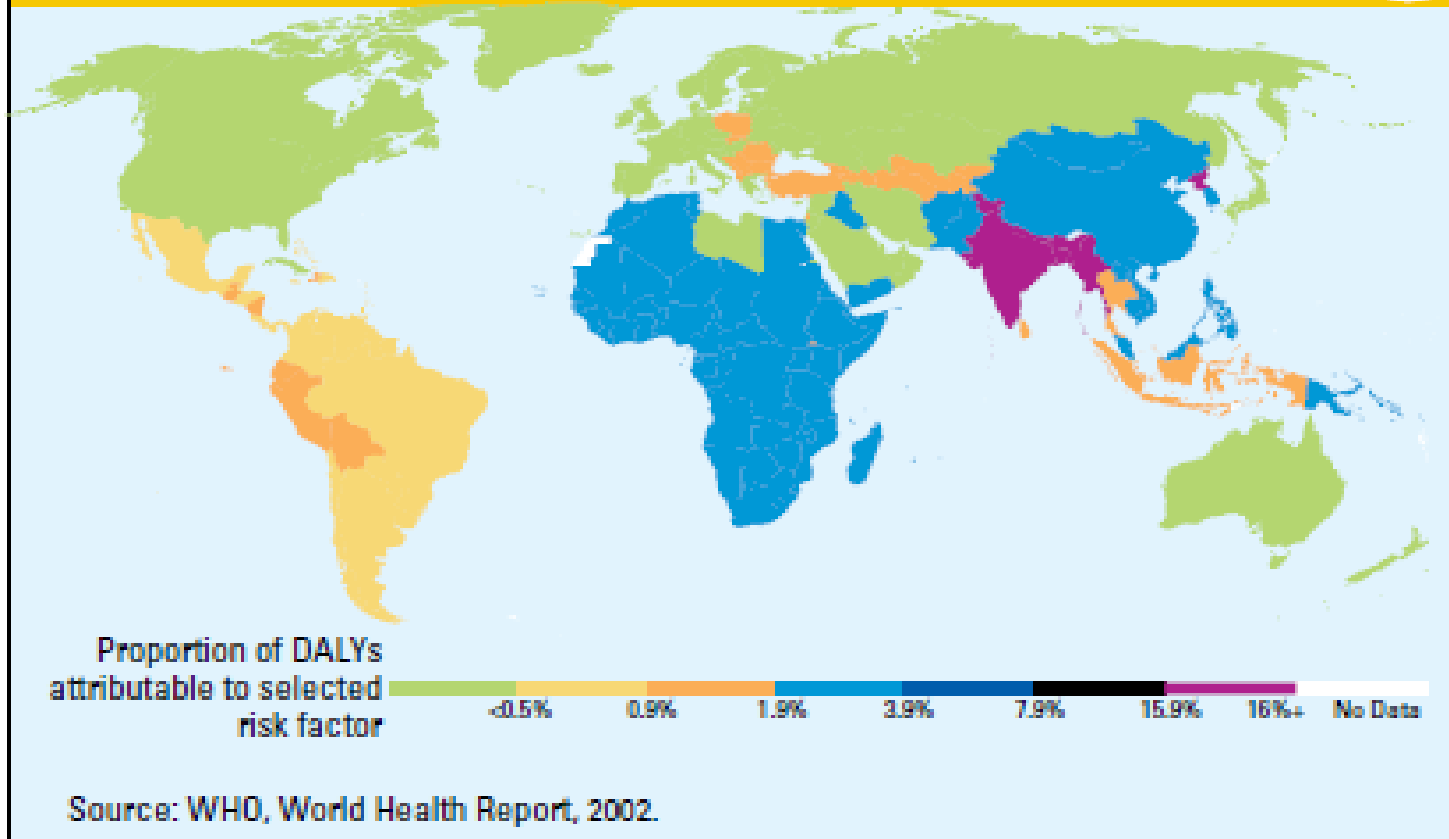
Natural gas – lowest carbon content

CO₂ formed by the combustion of fossil fuels:



Indoor environment benefits from gas

Indoor Smoke from Solid Fuels



Plus factors of gas

- Low carbon dioxide releases
- Efficient with combined heat and power systems
- Use in transportation sector benefits city air quality
- Natural gas complements wind and solar energy
- Gas – part of the solution a sustainable world of energy



Source: With courtesy of E.ON
Ruhrgas



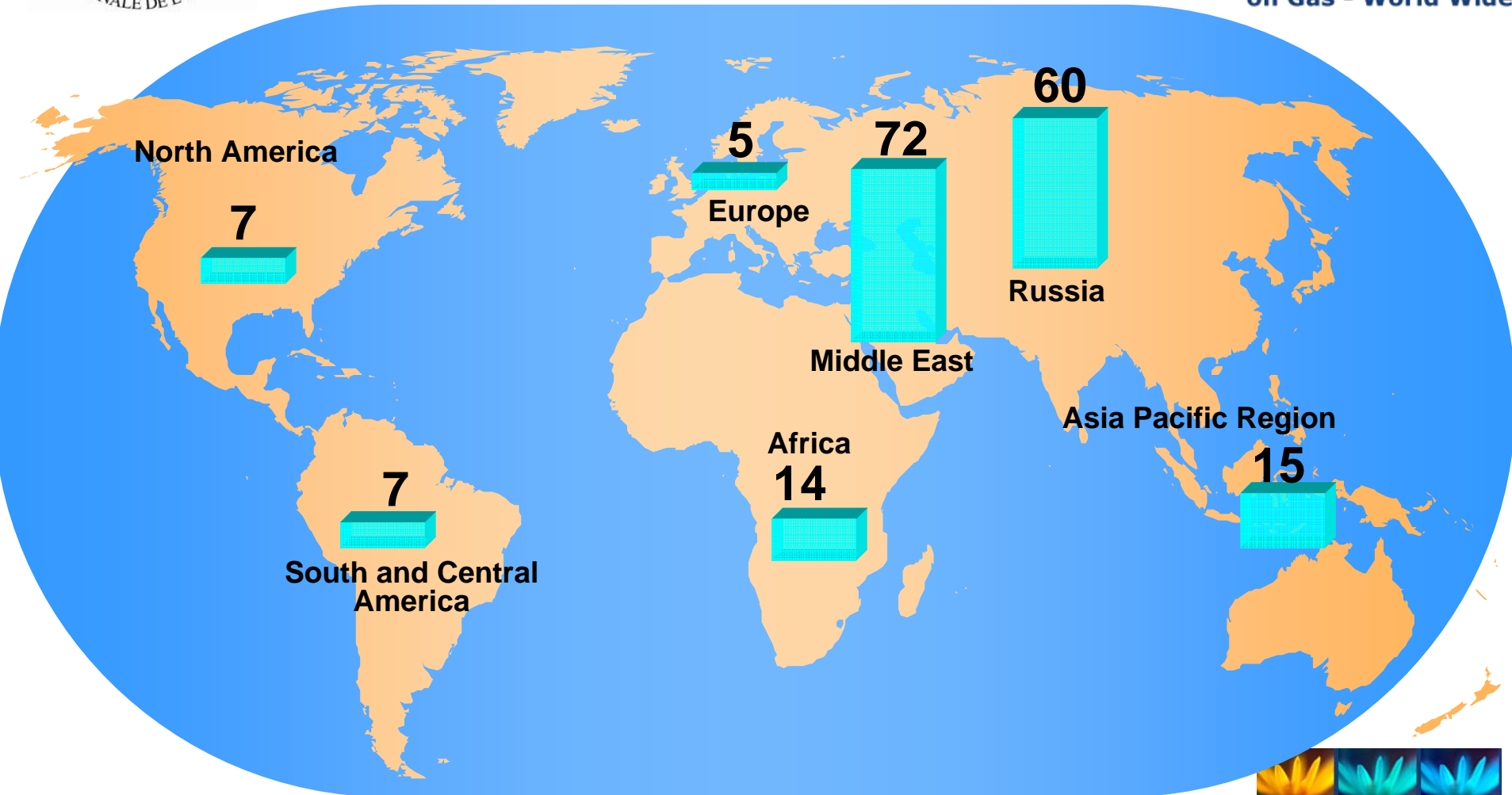
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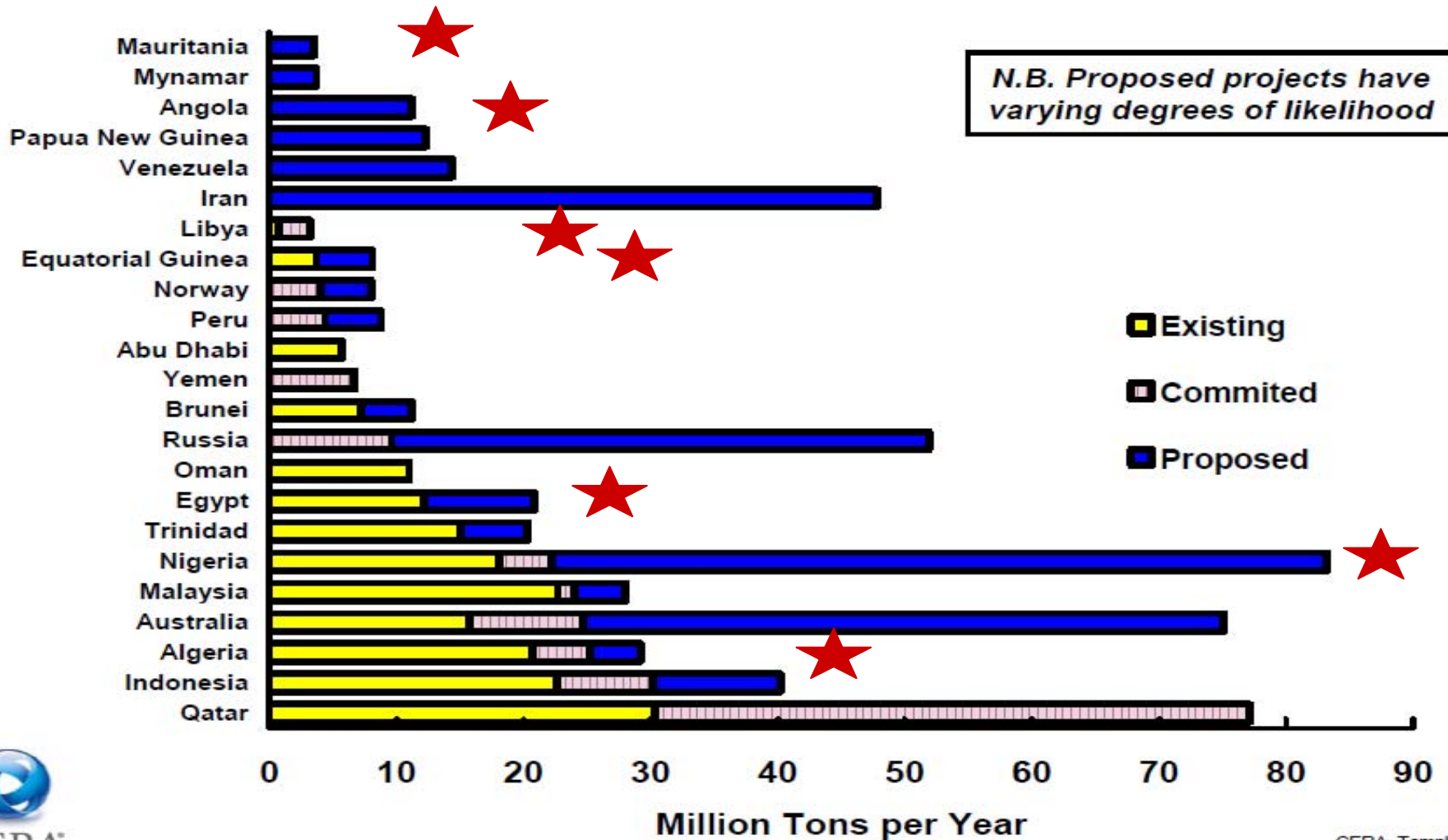


Location of world proven gas reserves (180 trillion m³)

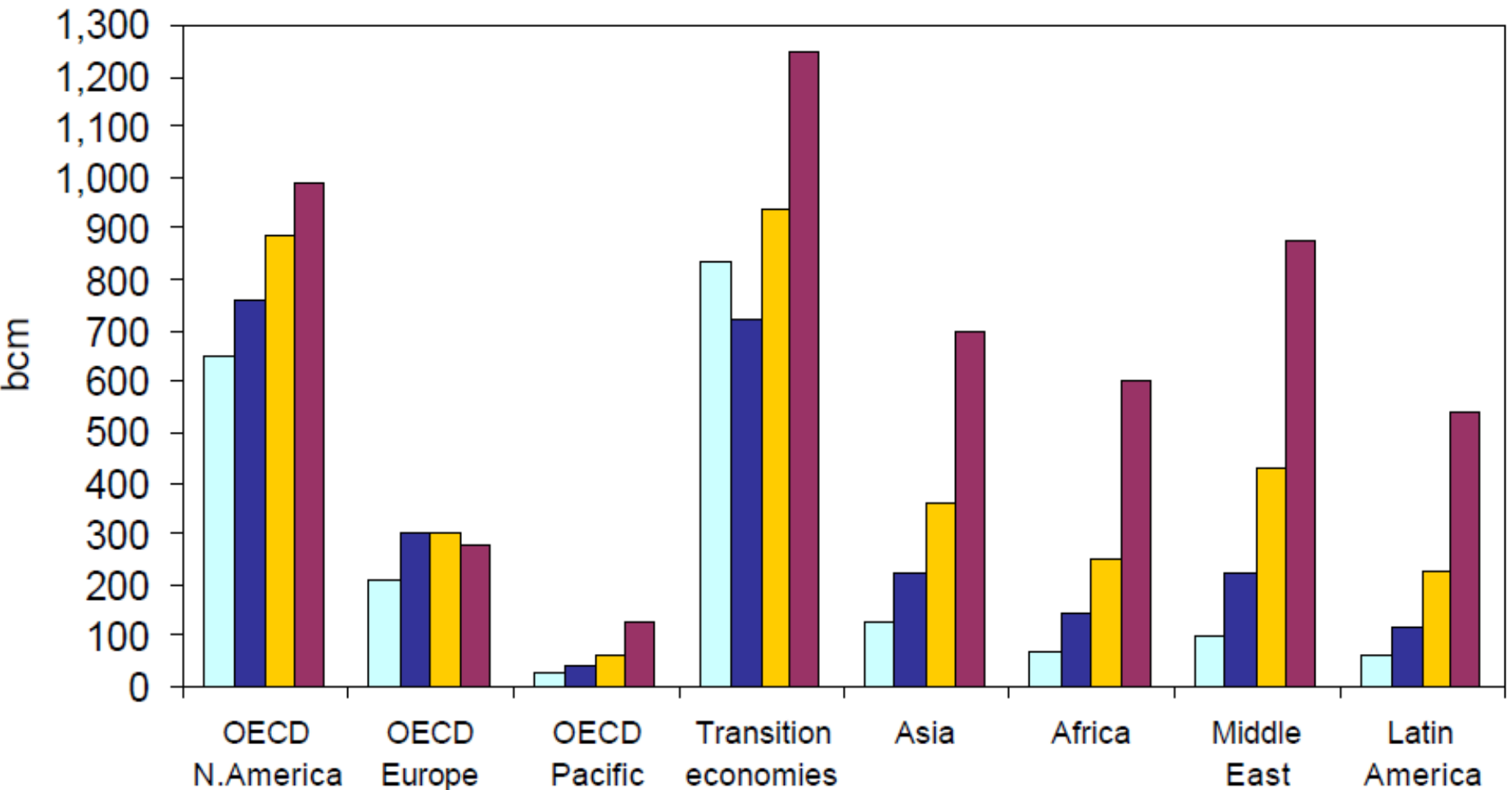
in 1000 bcm



LNG Capacity by Status and Country



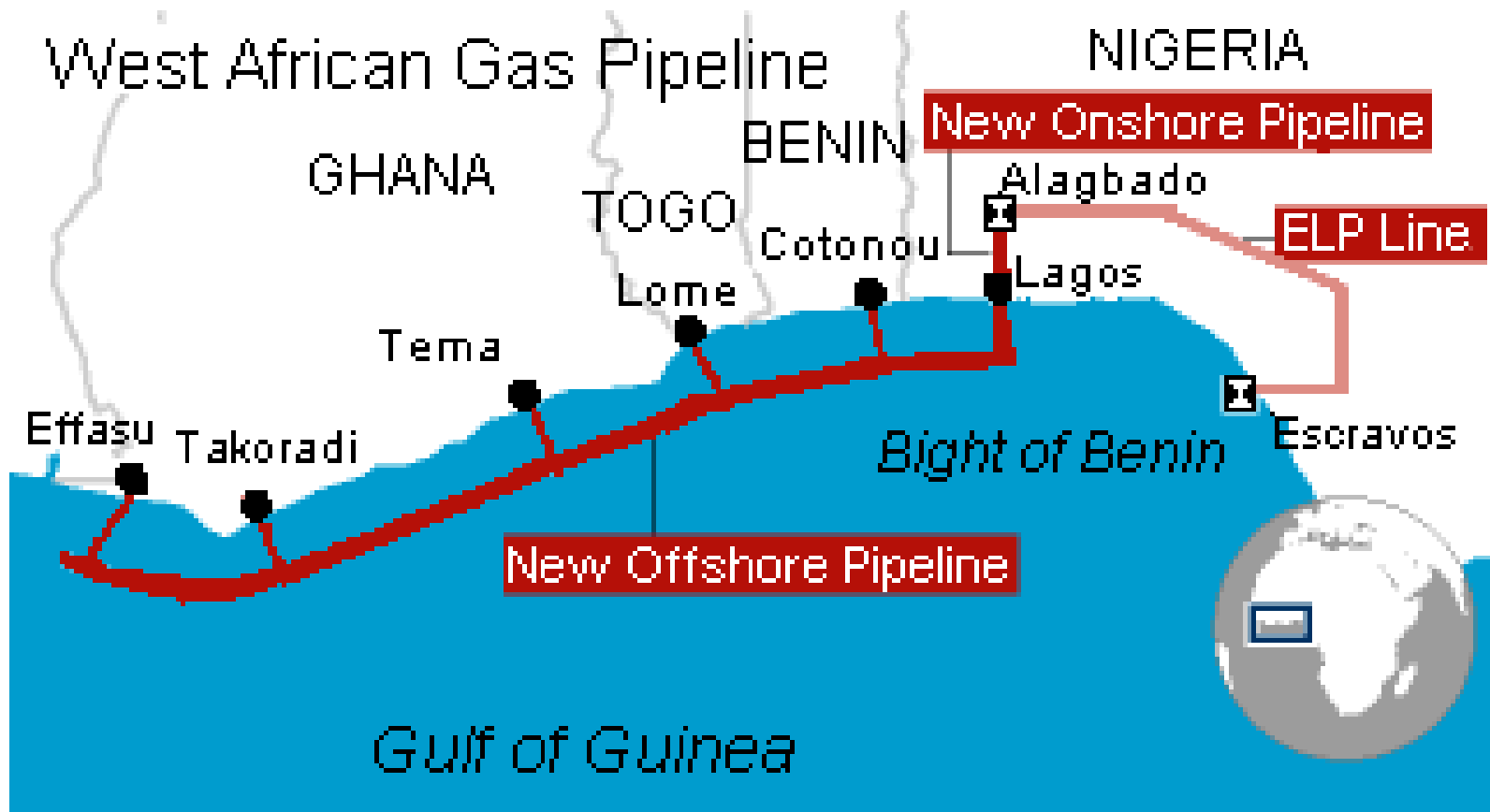
Gas Production by Region

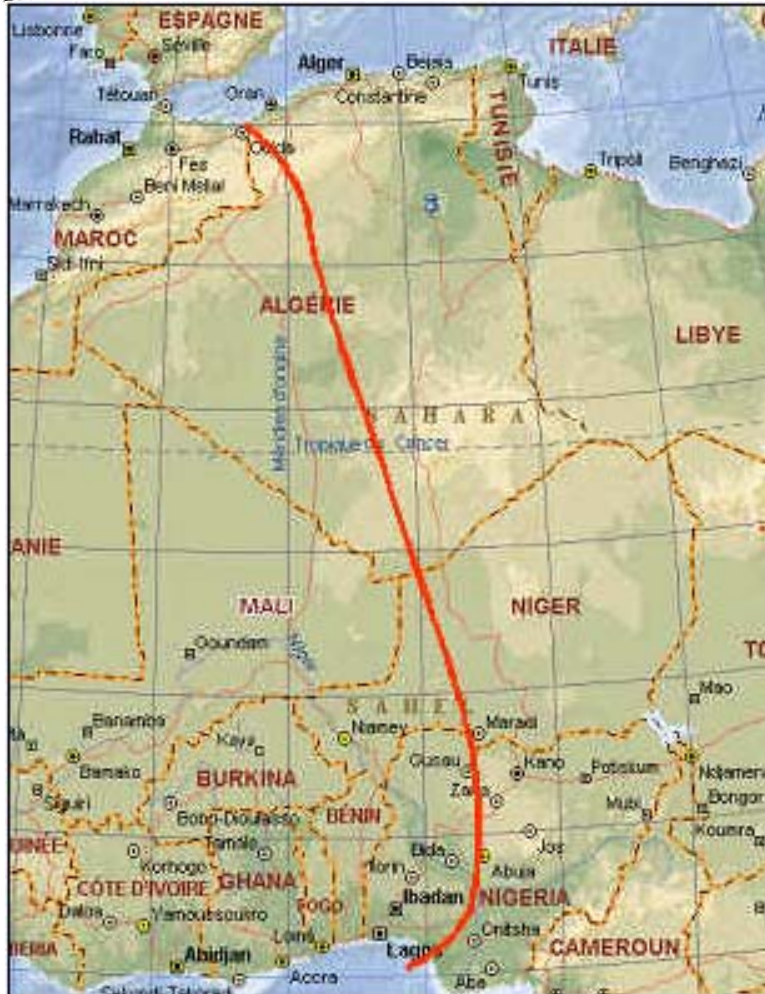


Source: IEA

1990 2000 2010 2030

West African Gas Pipeline





● Trans – Saharan Gas Pipeline

Distance 4,300 km

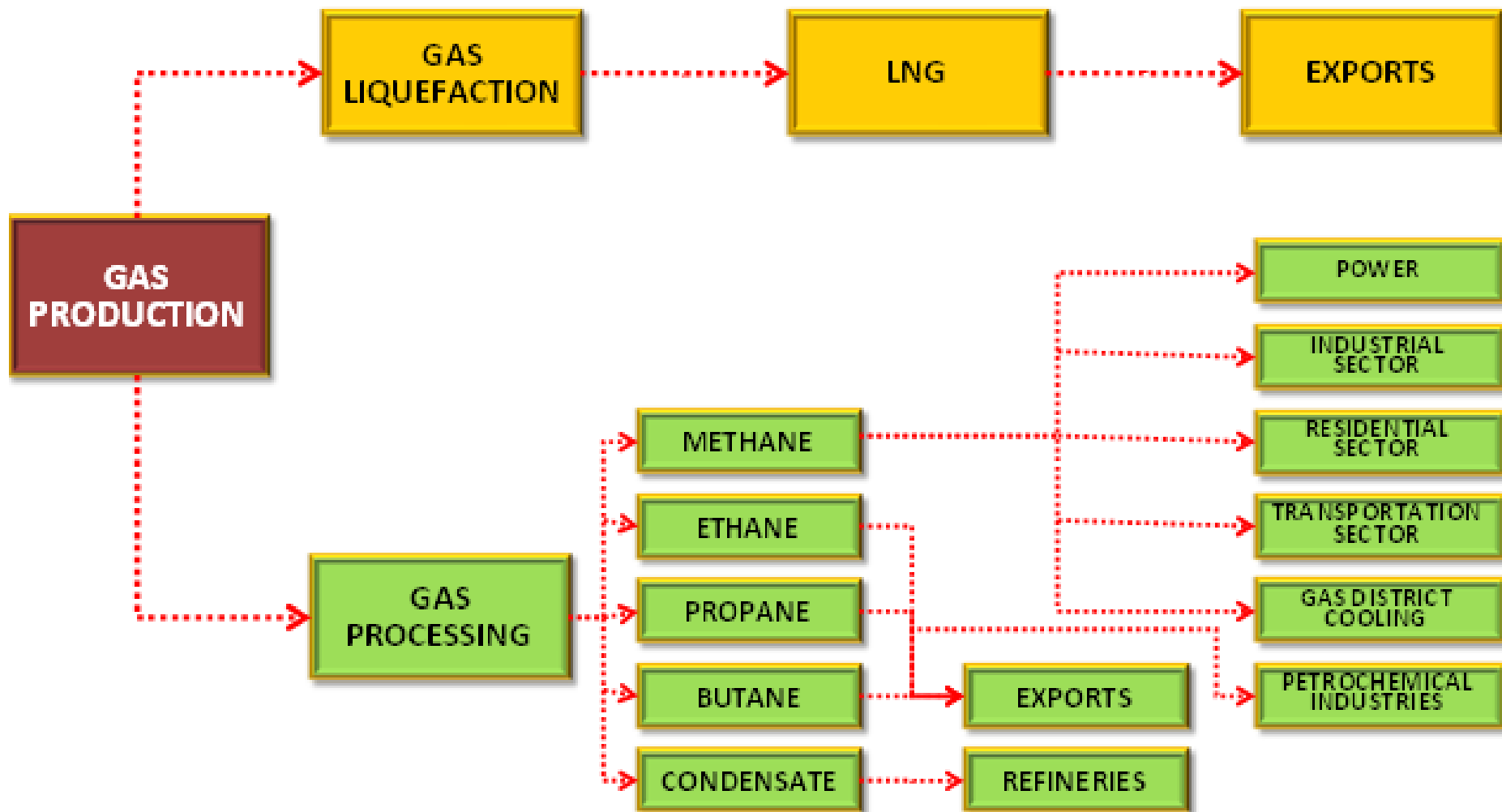
Nigeria – 1,050 km

Niger – 750 km

Algeria - 2,500 km



Natural Gas offers options for development



- **Potential for being a growth machine**
- **Long term energy supplies – a competitive advantage**
- **Provides: Knowledge, competence, employment**
- **Governments policies and resource management**

Africa rich in energy and opportunities



Conclusions

- Global increase in demand for gas
- Environmental friendly
- LNG technology unlocks gas resources
- Abundant reserves, safe and reliable
- Basis for sustainable economic growth
- Africa well positioned for the gas play



Natural gas

– part of the long term energy solution



**Thank you
for your attention!**

See you in Buenos Aires!

**24rd World Gas Conference
and Exhibition**

October 5 – 9 2009





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