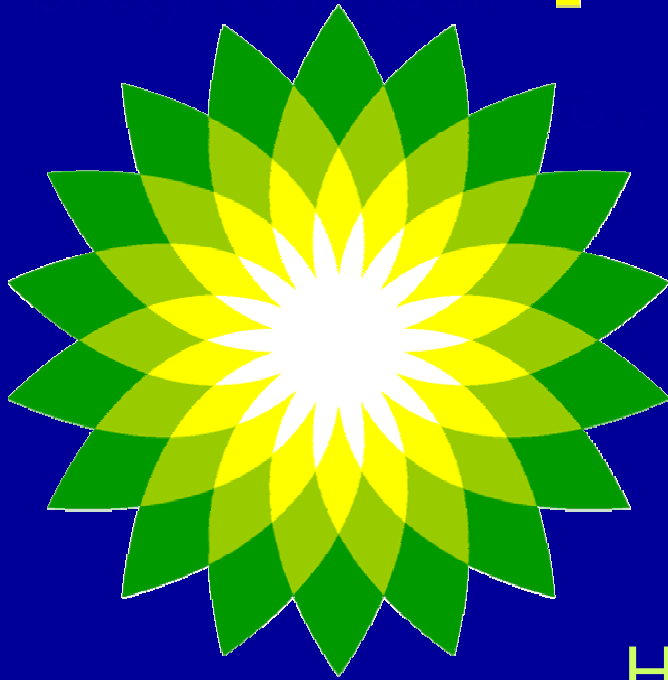
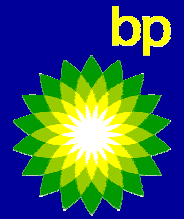




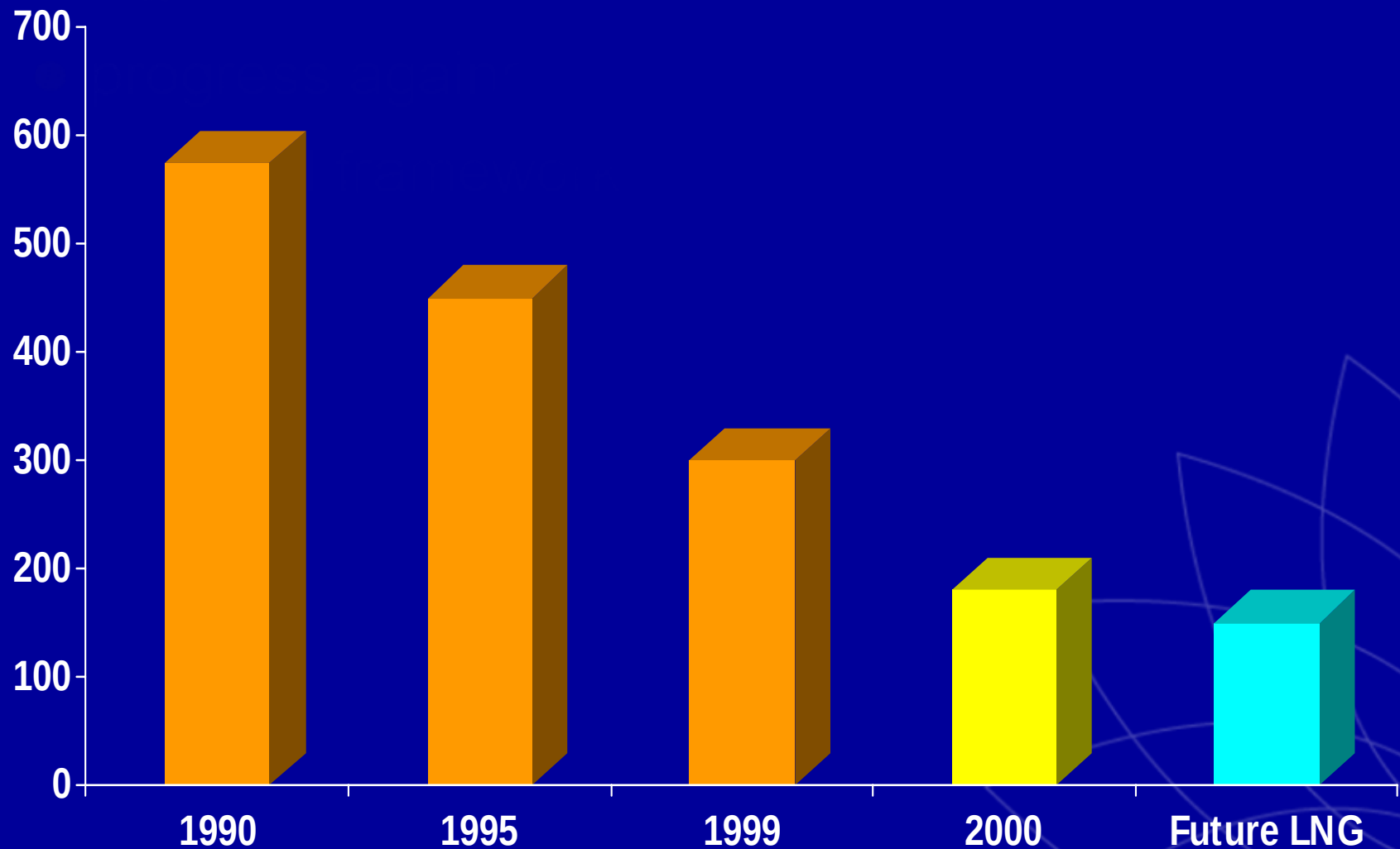
LNG –
An Alternative Way to Markets –
Escaping Transit Risks ?

Howard Rogers
Head of Fundamental Analysis
BP Gas, Power & Renewables

Liquefaction costs transformed

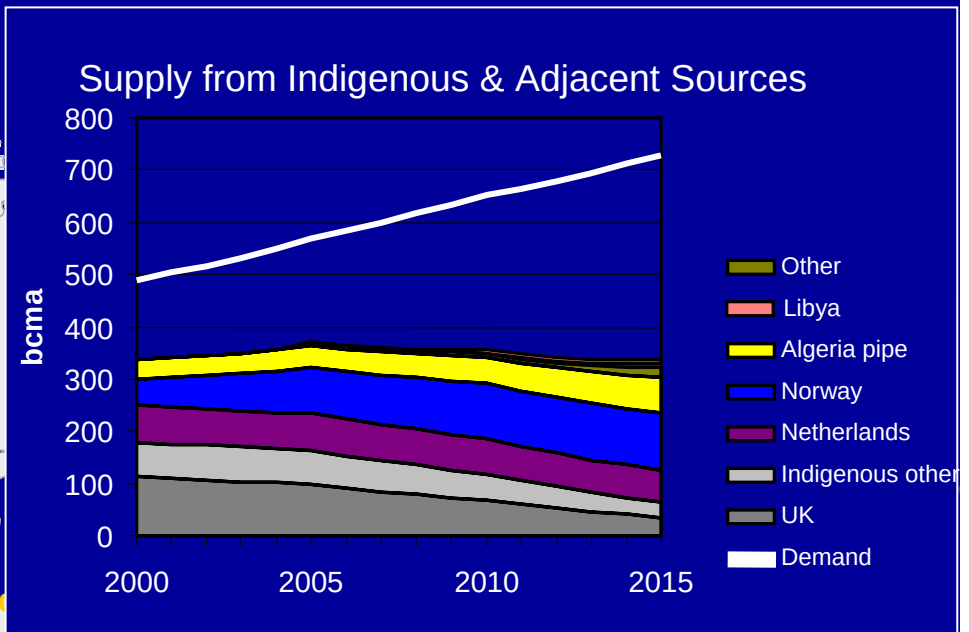
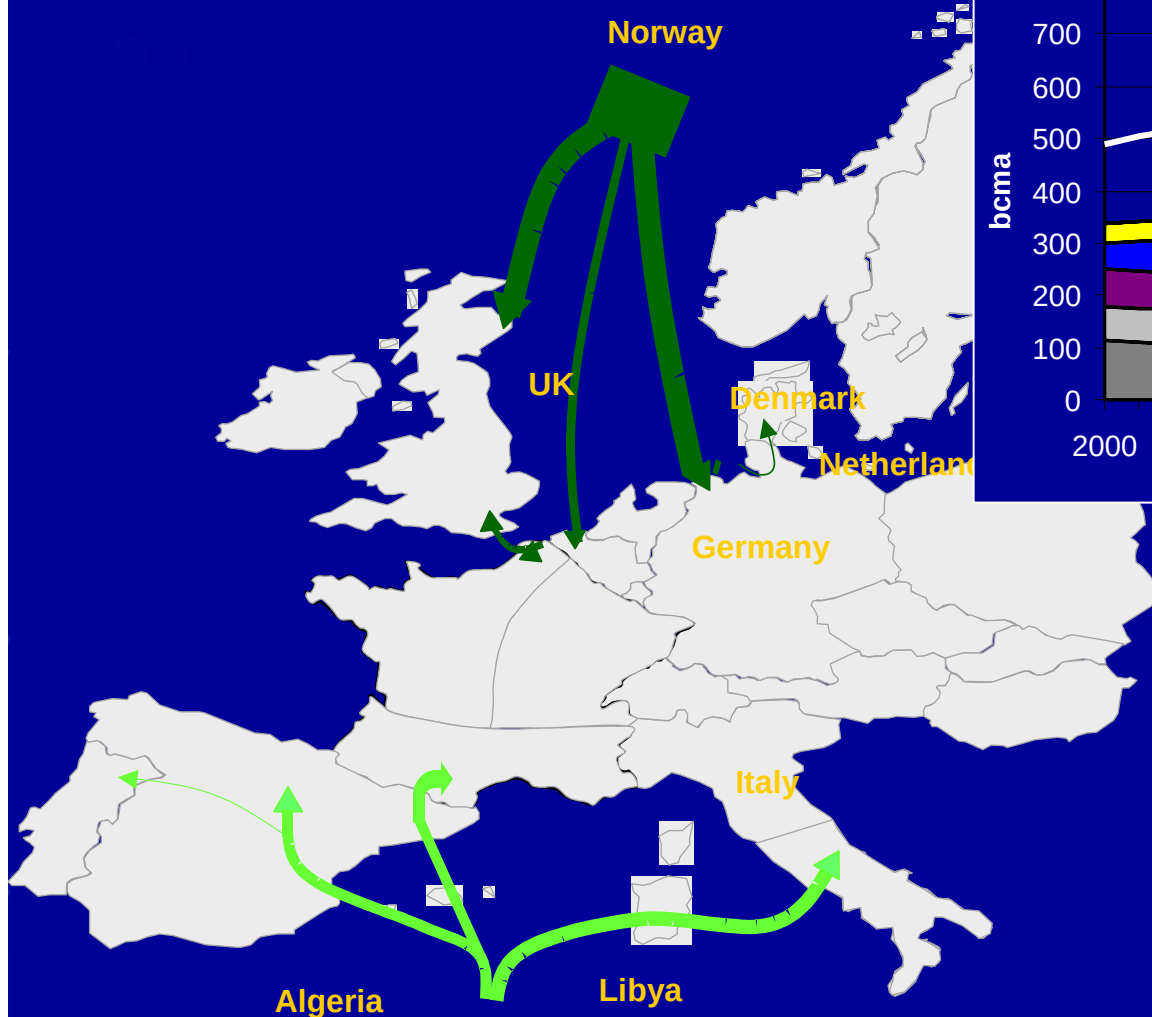
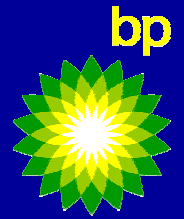


\$ per tonne of capacity



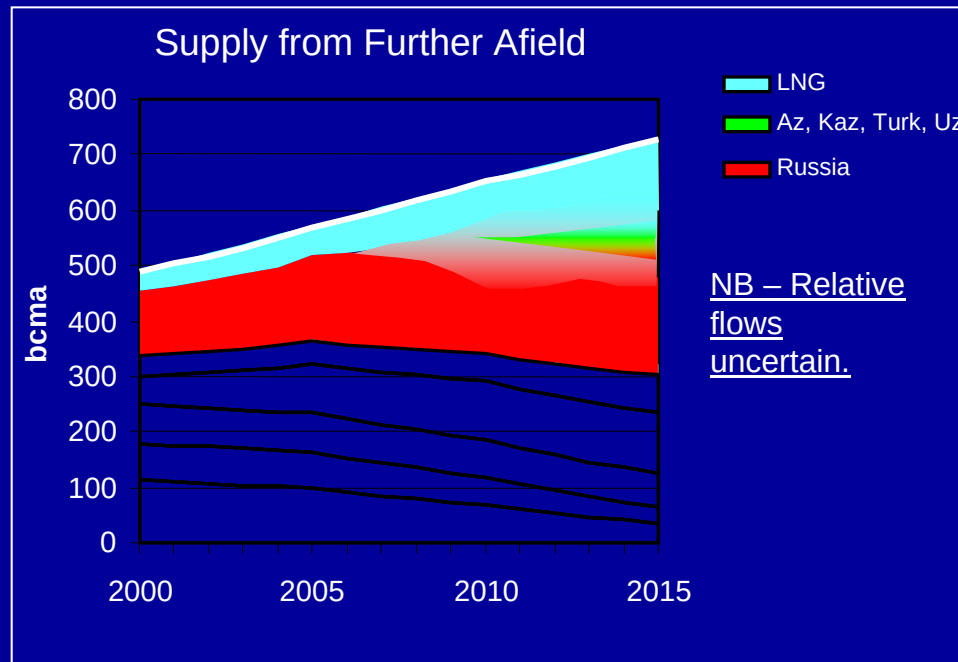
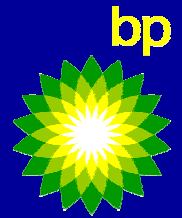
Europe: future supplies

- Indigenous & Adjacent

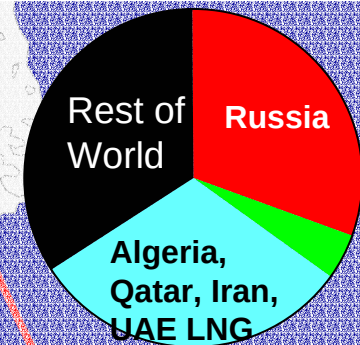


Europe: future supplies

- Further Afield



Share of Global Reserves



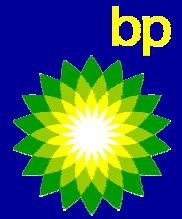
Russia

Azerbaijan,
Turkmenistan,
Uzbekistan,
Kazakhstan

Algeria,
Qatar, Iran,
UAE LNG

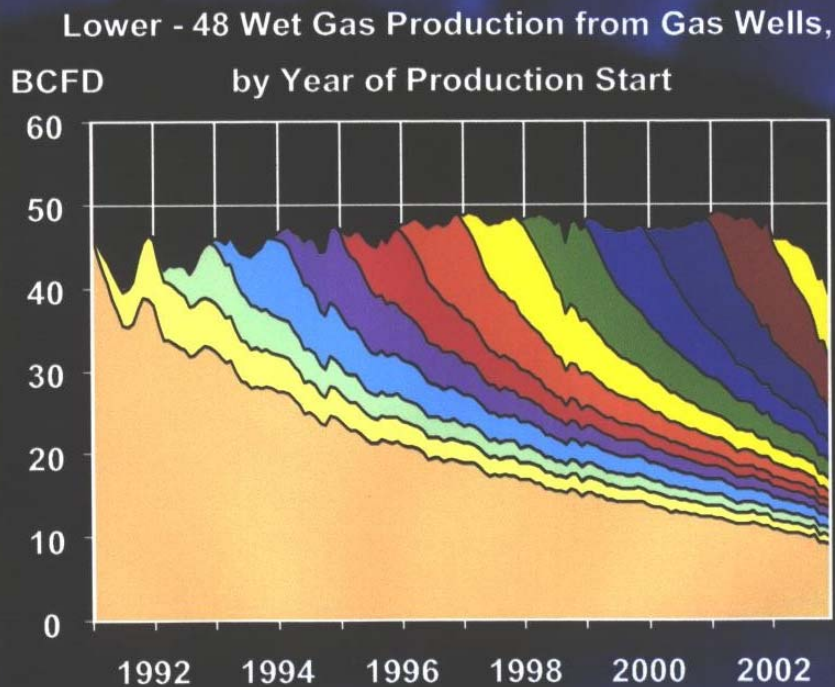
Outcome will be a combination of these supply sources with LNG increasingly in a position to complement pipeline supply in the European market.

North America: Growing Maturity of Resource Base

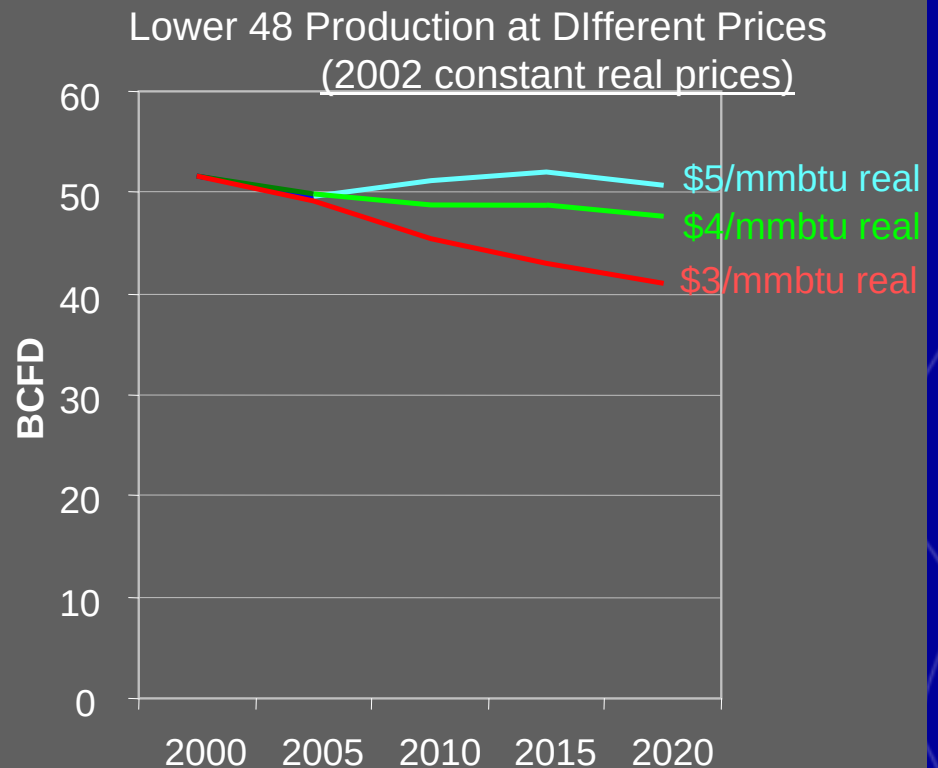


**Contribution of discrete annual
production tranches through time.**

Aggregate Lower 48 Supply vs Price

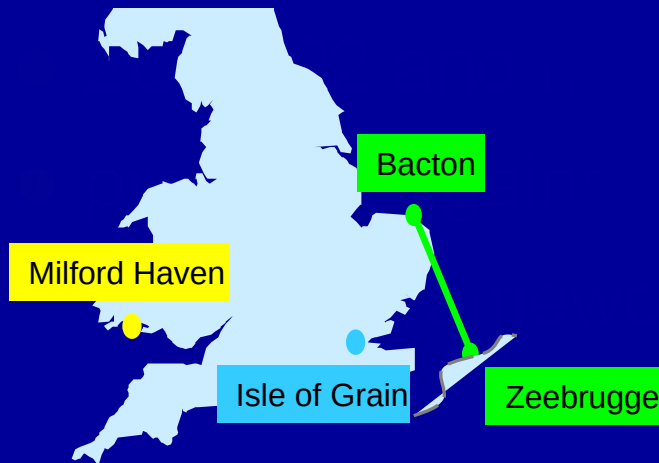
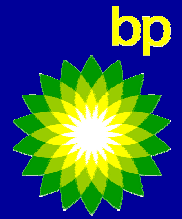


Source: Base data from IHS



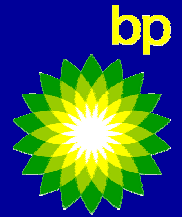
Source: Input to National Petroleum Council Report, 2003

Isle-of-Grain LNG



- Short lead time gives timing advantage.
- 2005 Start-up addresses tight UK supply/demand balance in 2005-2008.
- Capacity position enables early mover in the next generation of import projects.

Summary



- LNG trade-flow to grow strongly in Atlantic Basin – subject to infrastructure.
- This provides Europe with supply diversity - and allows prices to reach levels where demand is stimulated and gas is competitive with coal in power gen.
- Creation of deep pool of demand through linkage to N America reduces volume risks of new pipeline projects.
- A more positive construct for the future.