



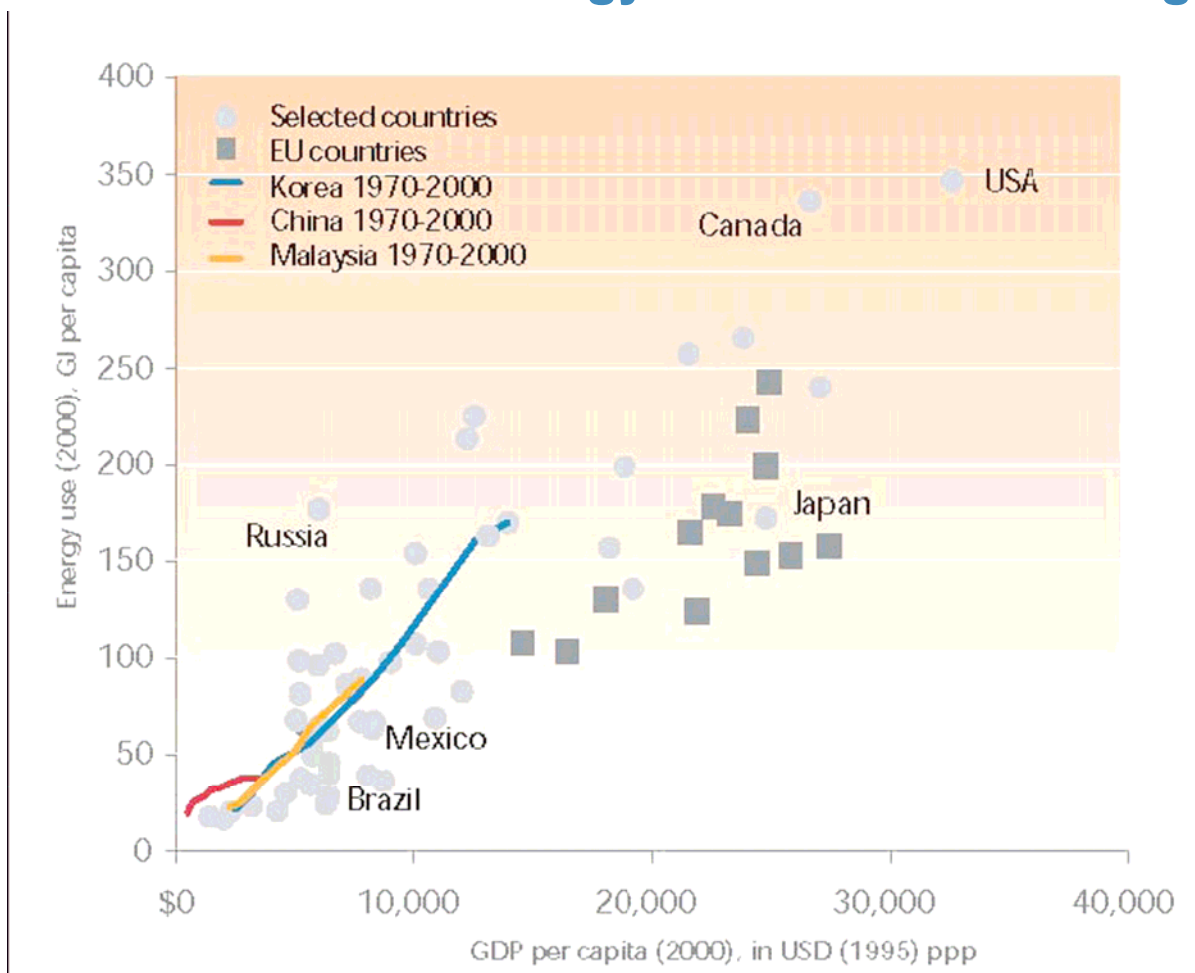
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## **Coal with Carbon Capture and Storage – Contributing to Sustainable Development**

Fiona Nicholls  
General Manager External Relations,  
Rio Tinto Coal Australia

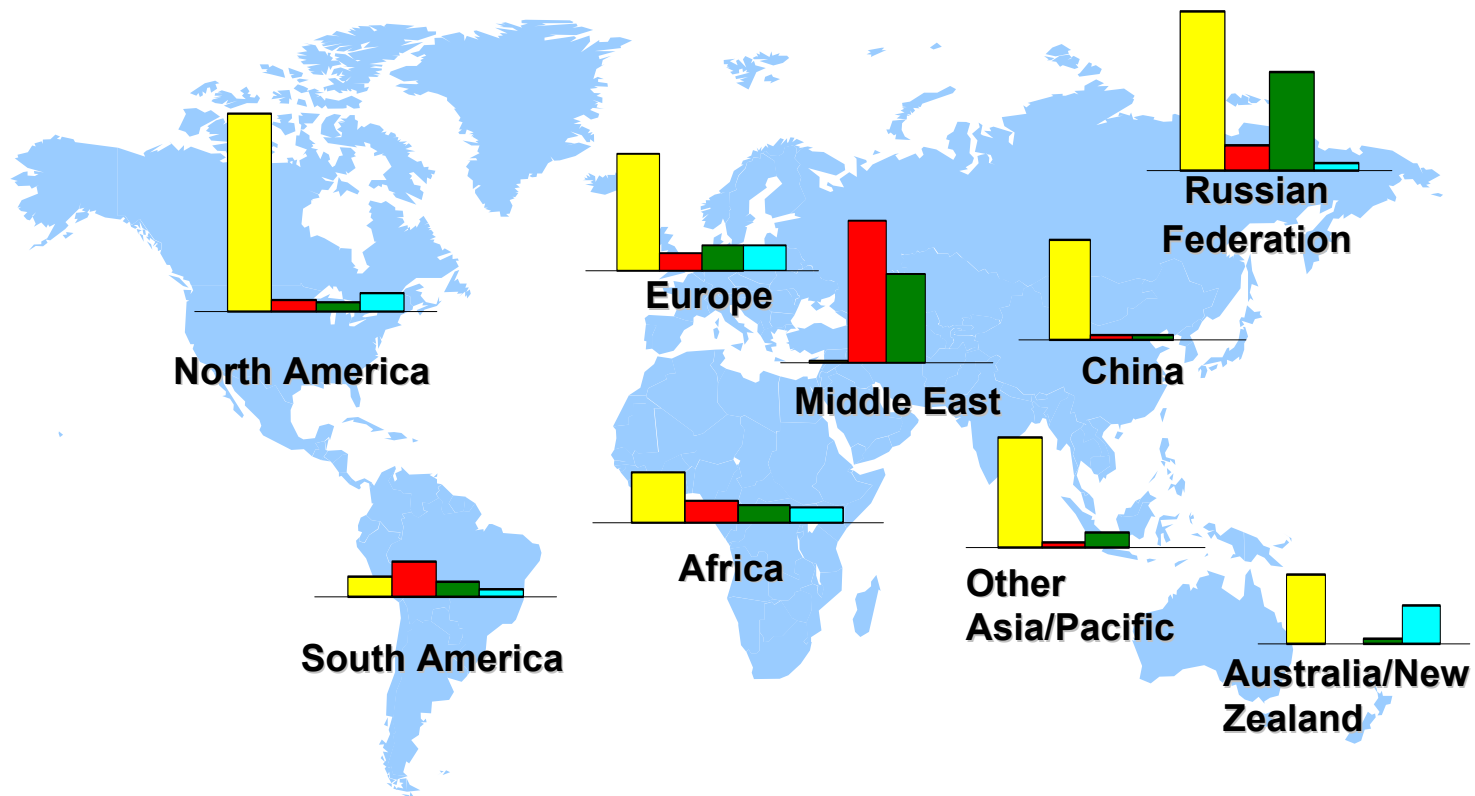
United Nations Framework Convention on Climate Change  
Third Workshop under the dialogue on long-term cooperative action to address climate change by enhancing implementation of the convention  
Bonn 16<sup>th</sup> May 2007

## Countries use more energy as their economies grow

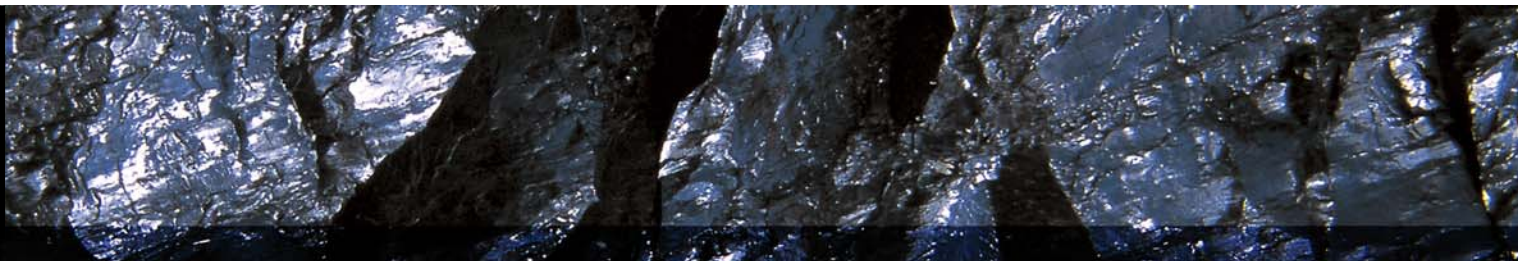


## World energy reserves 2005

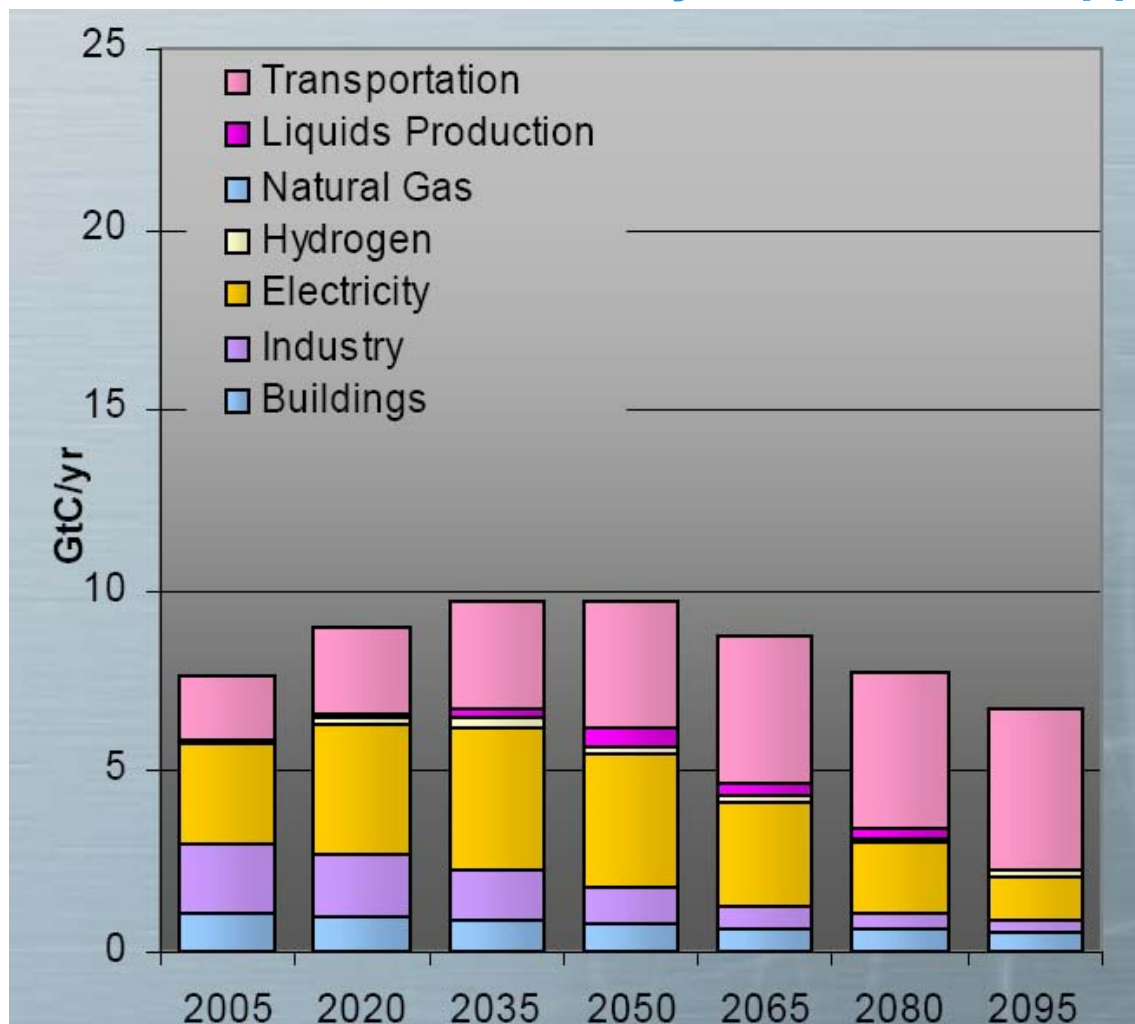
Coal ■ Oil ■ Gas ■ Uranium\* ■



Sources: BP Statistical Review 2005; WEC Survey of Energy Resources 2001; Reasonably Assured Sources plus inferred resources to US\$80/kg U 1/1/03 from OECD NEA & IAEA Uranium 2003; Resources, Production & Demand updated 2005; \*energy equivalence of uranium assumed to be ~20,000 times that of coal

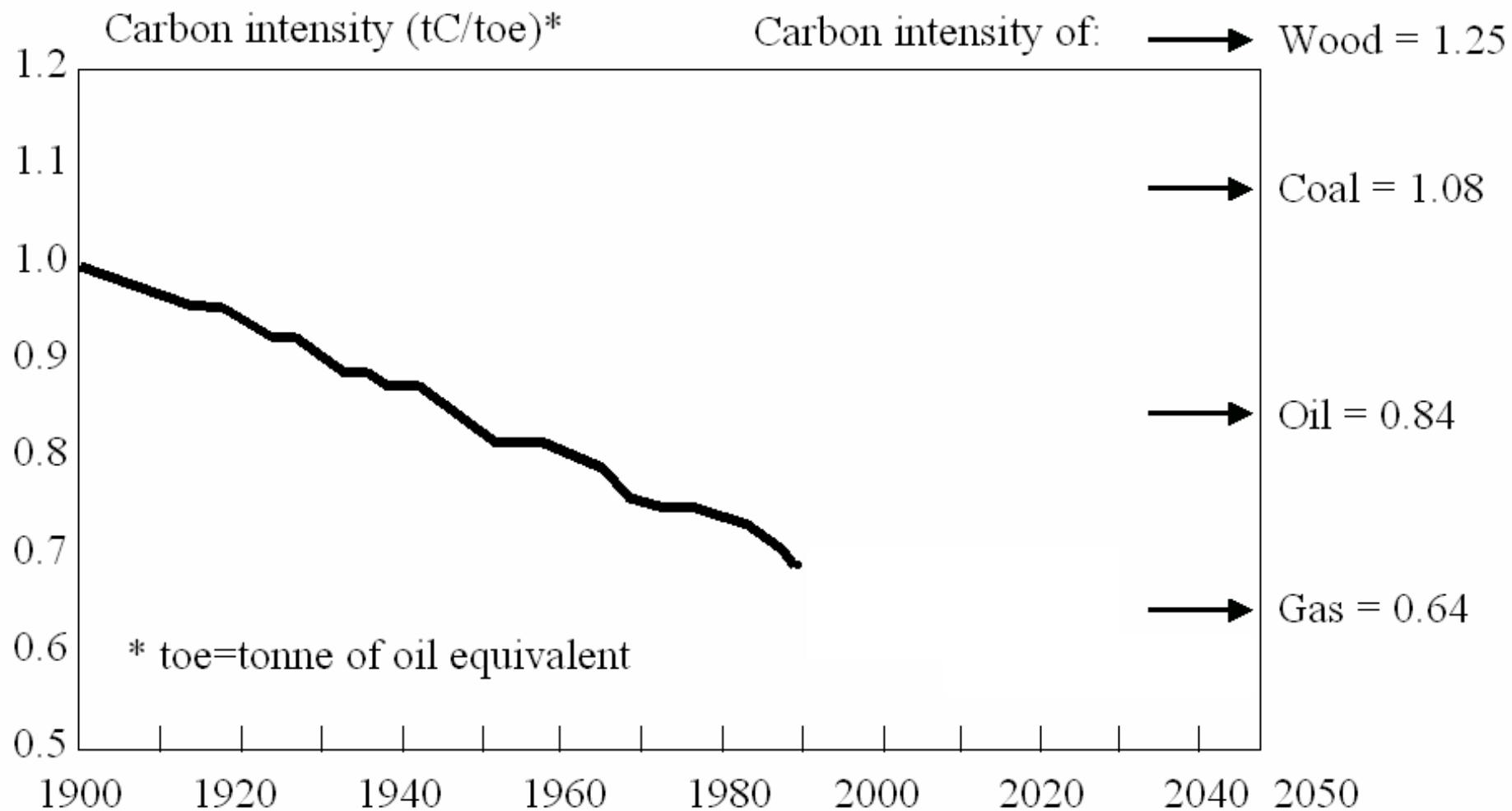


## Emissions reductions necessary to achieve 550ppm CO<sub>2</sub>

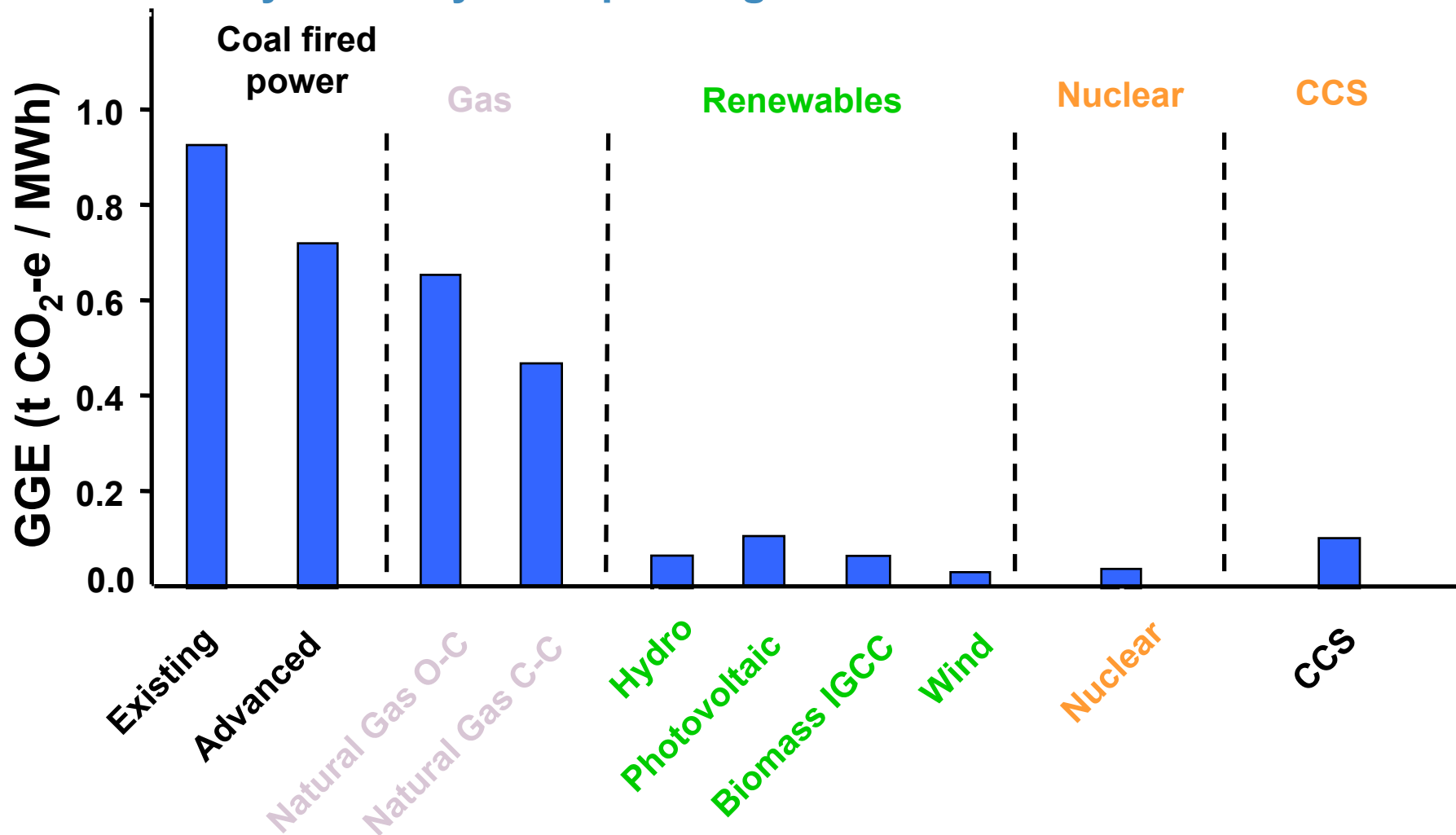




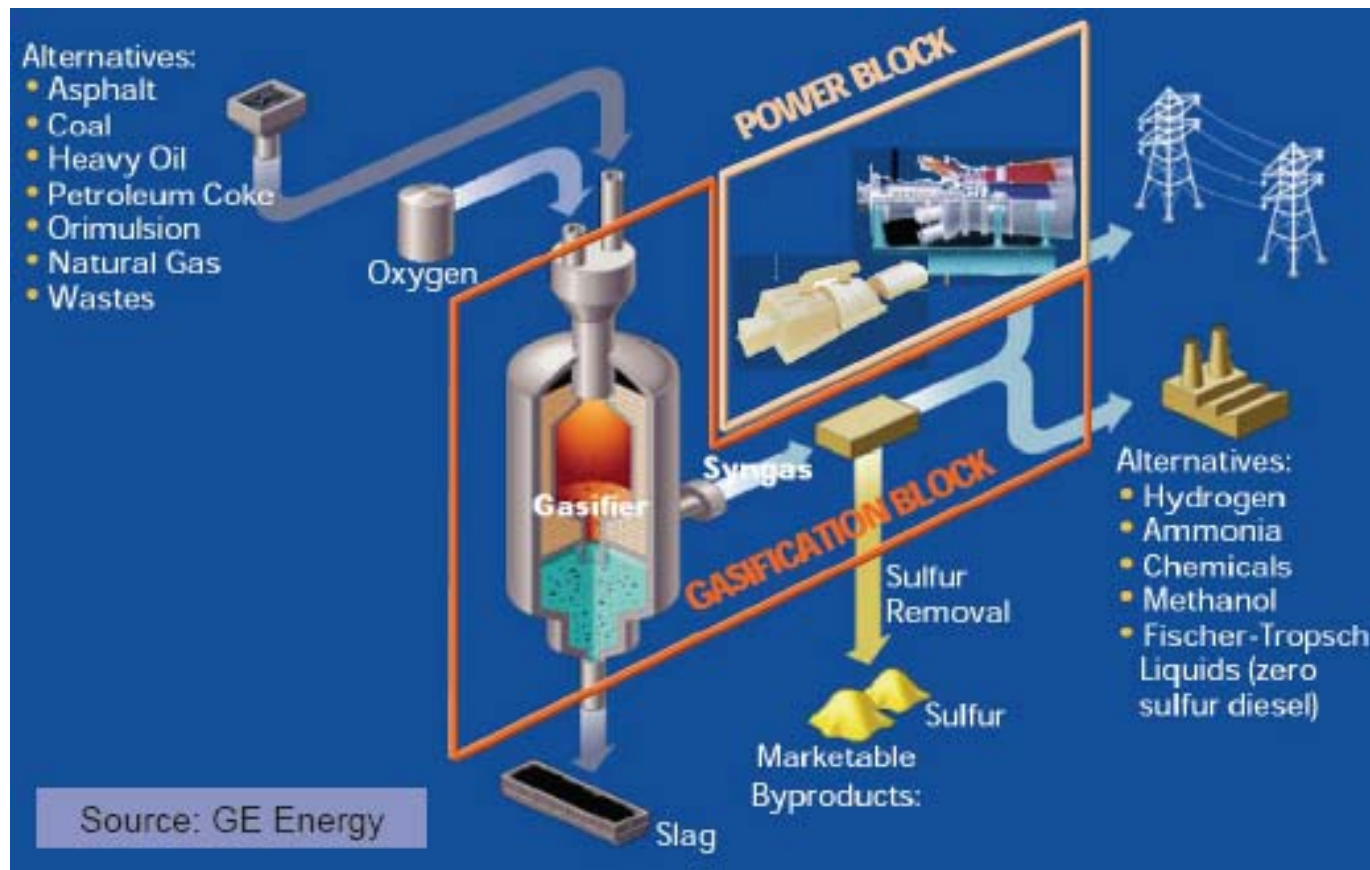
## Carbon Intensity of world primary energy



## Life Cycle Analysis of power generation emissions



## Coal gasification offers an efficient means of separating and capturing CO<sub>2</sub>

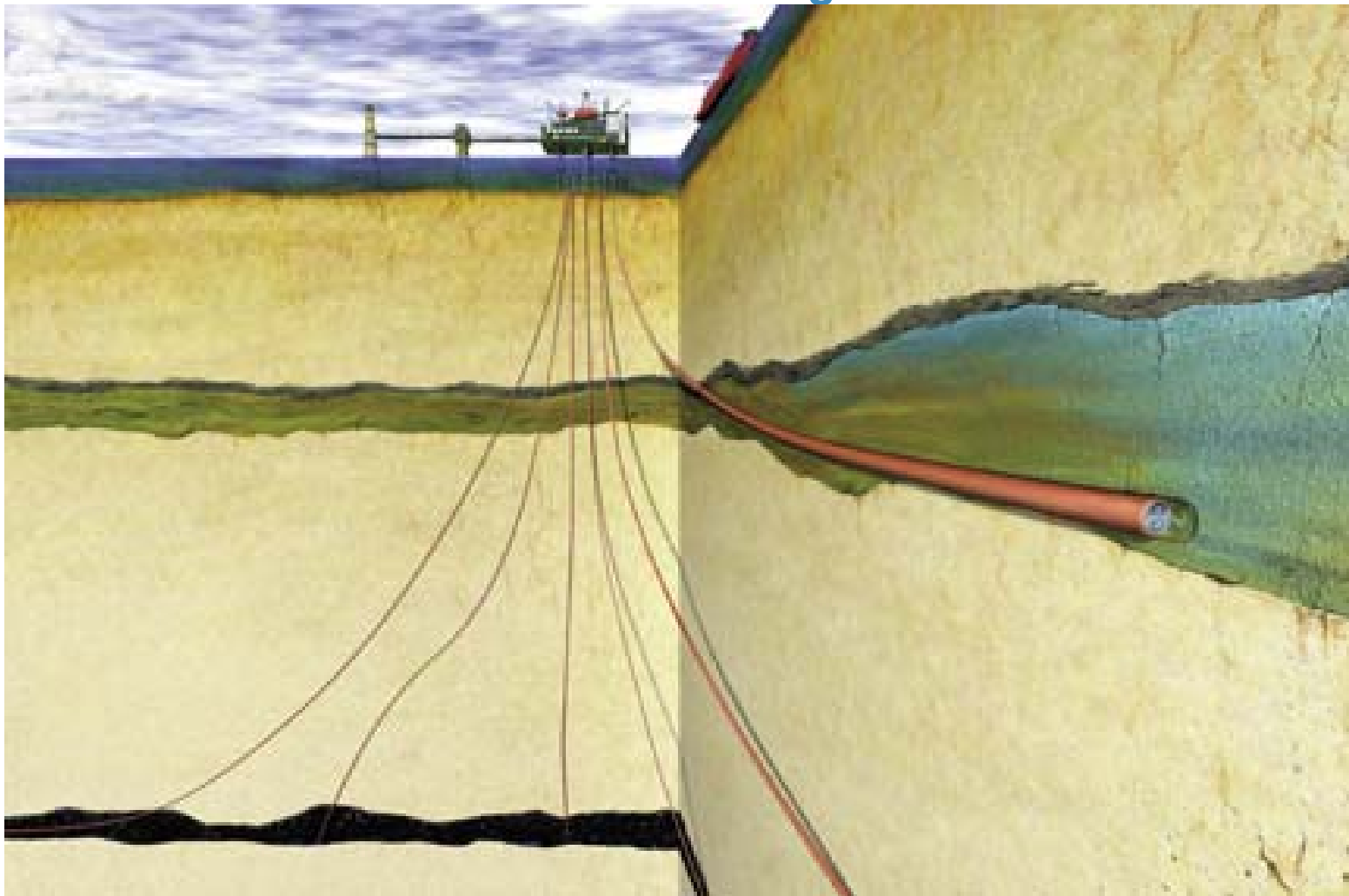




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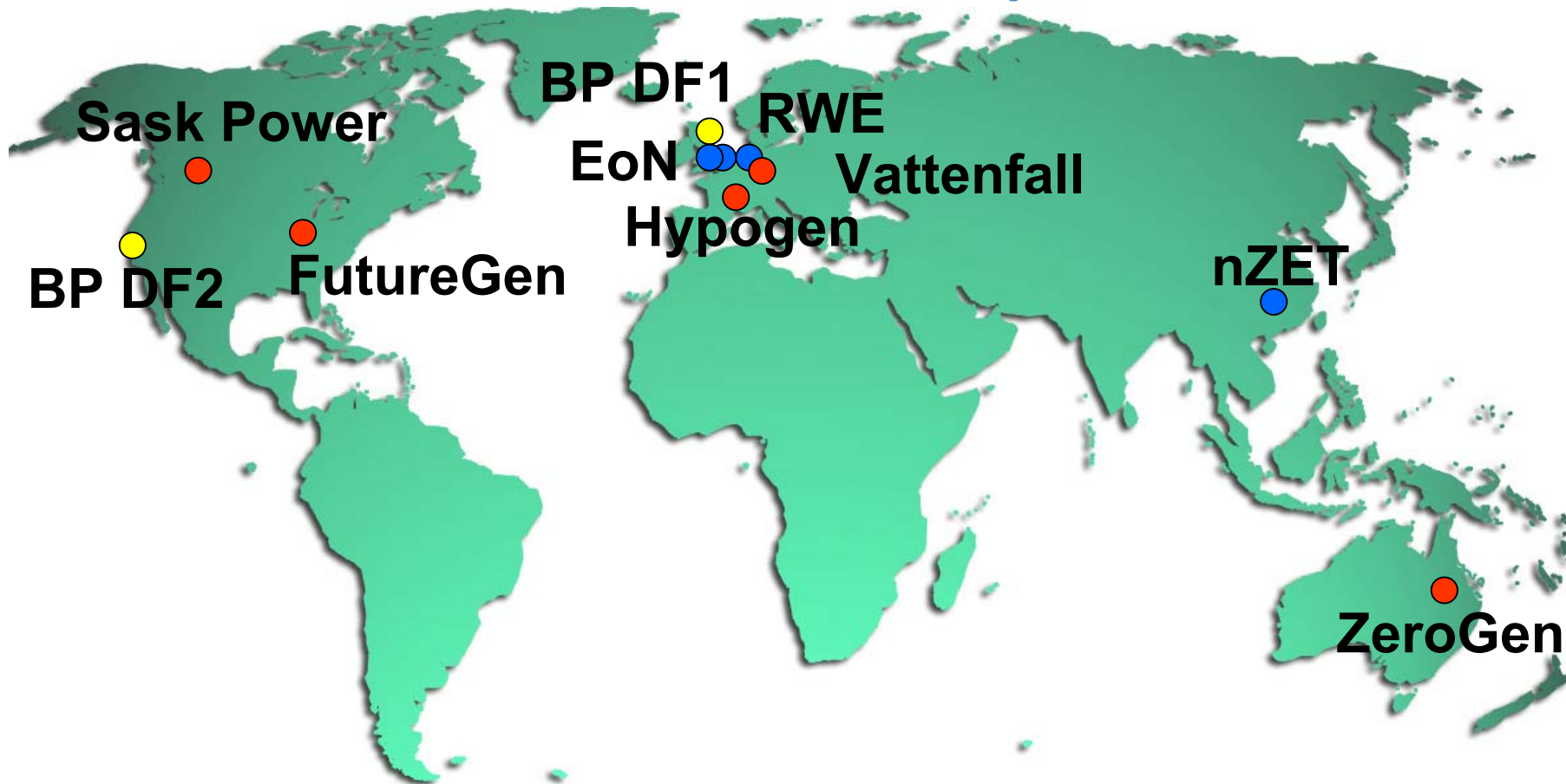


## Carbon Storage

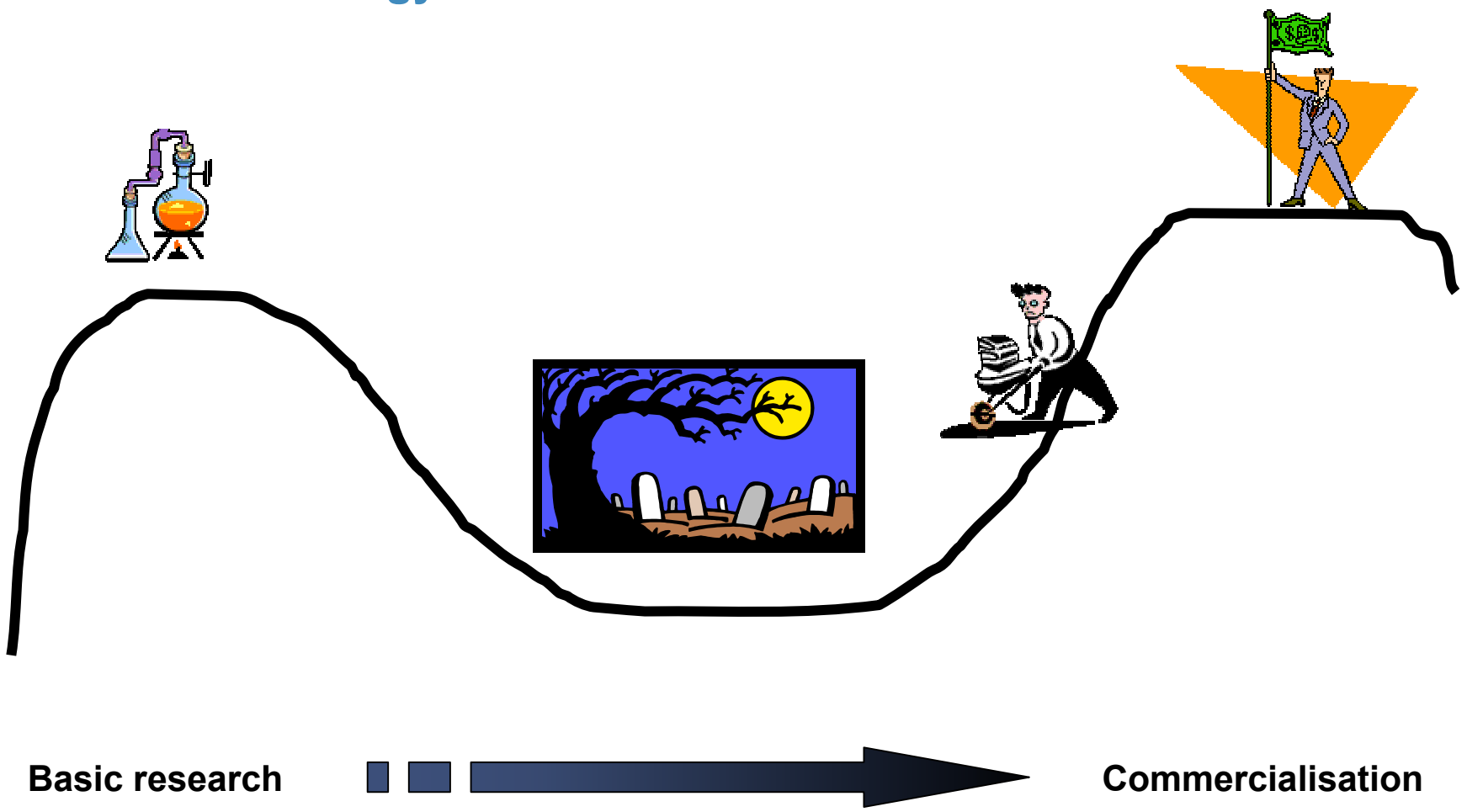




## Power Sector CCS Projects



## Technology Innovation Chain



## **Policy Framework to encourage deployment of Coal Technologies**

### **An Integrated Low Emission Technology Strategy**

Including a comprehensive suite of policies:

- Apply to all forms of energy technologies
- Reduce barriers for first of a kind technology
- Promote community acceptance
- Address infrastructure requirements
- Provides the regulatory framework
- Establish effective market signals
- Protect intellectual property
- International co-operation



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