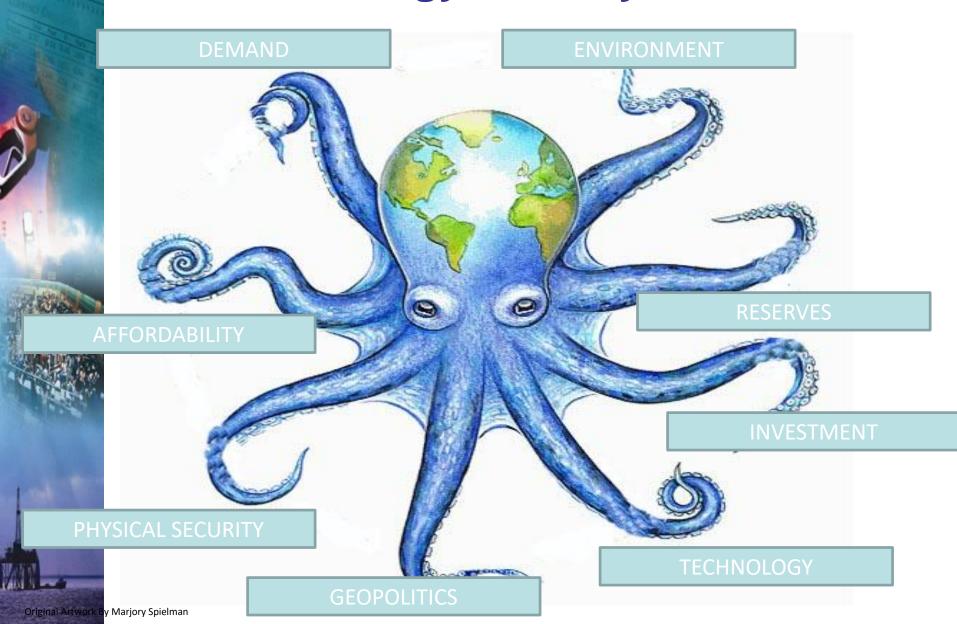


# Energy Security in an International Context: The Challenges

Herzliya Conference
January 2008
Ann Eggington
Office of Global Energy Dialogue
International Energy Agency

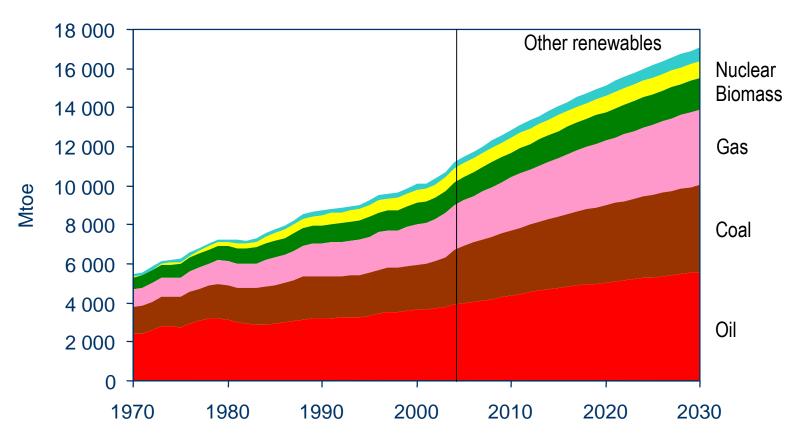


#### **Energy Security**





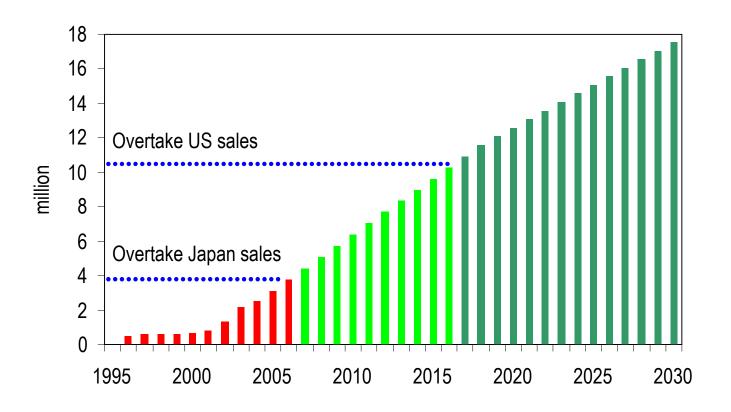
## Reference Scenario: World Primary Energy Demand



Global demand grows by more than half over the next quarter of a century, with coal use rising most in absolute terms

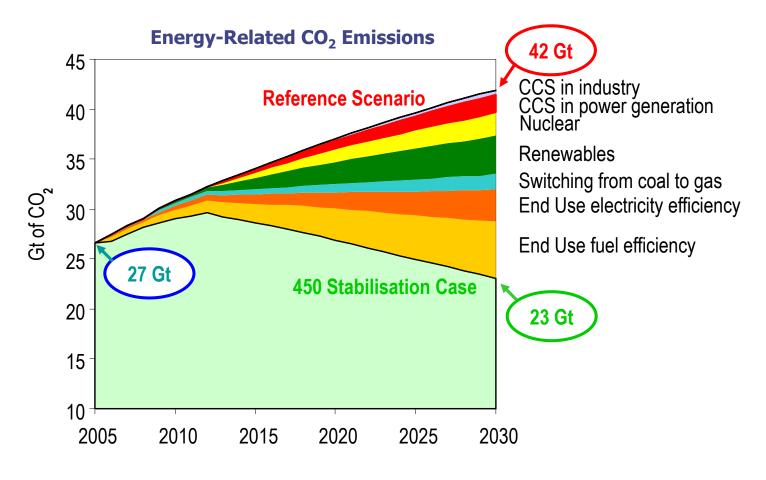


### Reference Scenario: New Light-Duty Vehicle Sales in China



China's oil imports jump from 3.5 mb/d in 2006 to 13 mb/d in 2030 – as car ownership increase 7-fold to 140 per 1 000 people

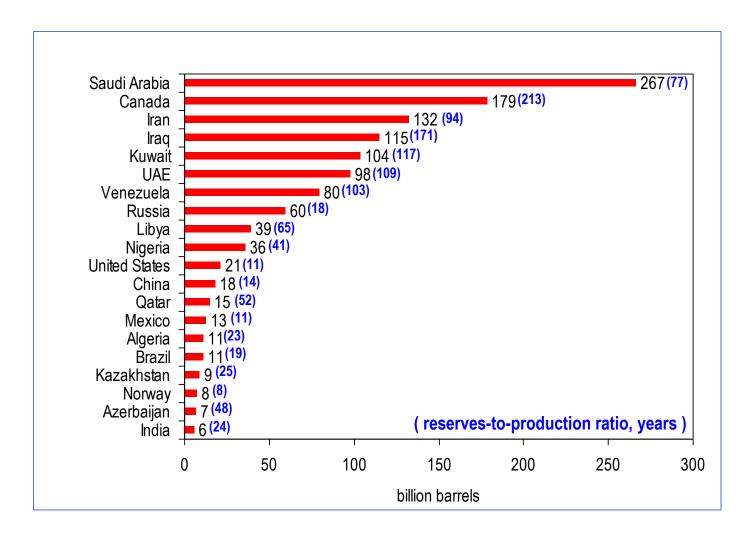
## CO<sub>2</sub> Emissions - 450 Stabilisation Case



By 2030, emissions are reduced to some 23 Gt, a reduction of 19 Gt compared with the Reference Scenario

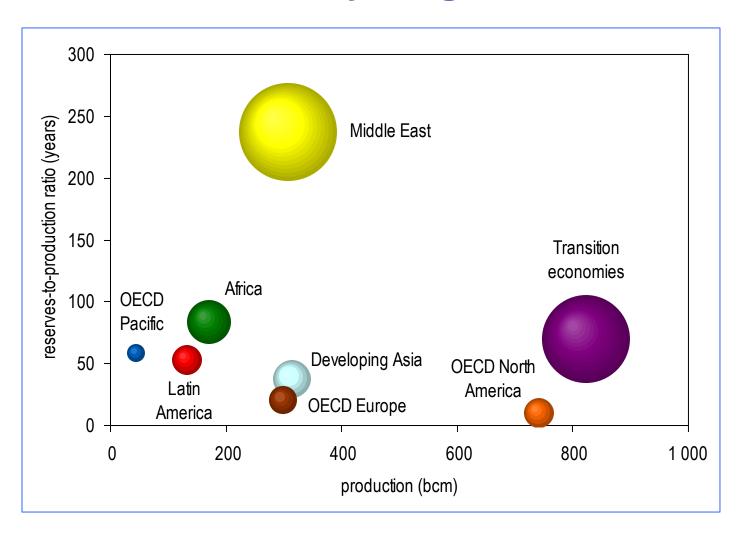


#### Proven Oil Reserves by Region, end-2005





## Proven Gas Reserves and Production by Region





### A Rocky Time for Energy Markets

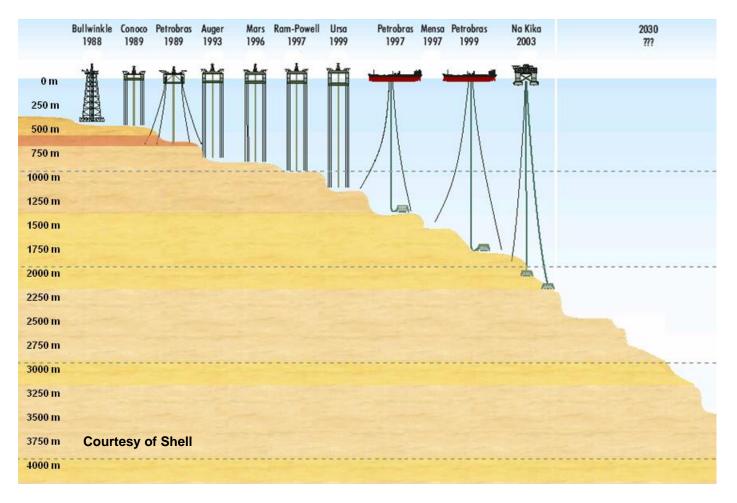




#### **TOWARDS A SOLUTION**

- Improved transparency
- Technology
- Energy efficiency
- AND...

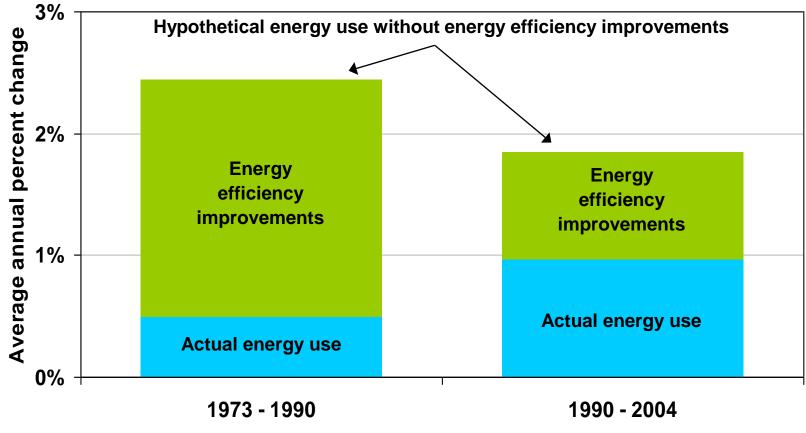
#### **Ongoing Evolution of Deepwater Technology**



The industry's track record in pushing the limits of technology to access deepwater resources is impressive – and will continue towards reservoirs in greater depths and farther away from the coastline.



### Promote energy efficiency: The essential first step



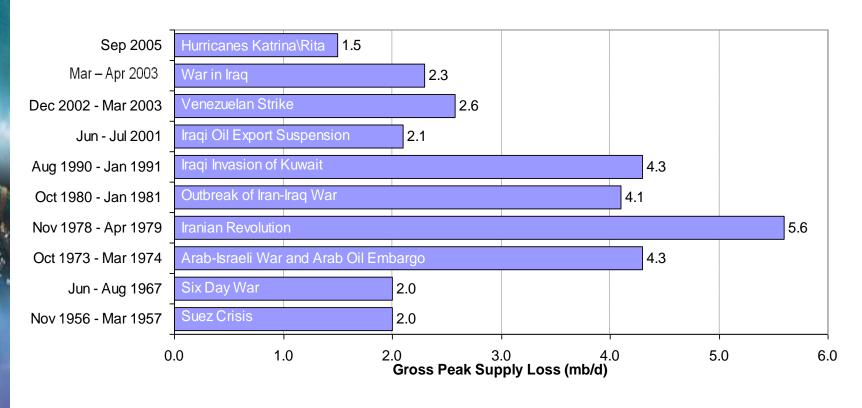
Since 1990, the rate of energy efficiency improvement in IEA countries has been less than 1% per year – much lower than in previous decades.

We must - and we can - do better!

Source: Energy Use in the New Millennium (IEA, 2007)



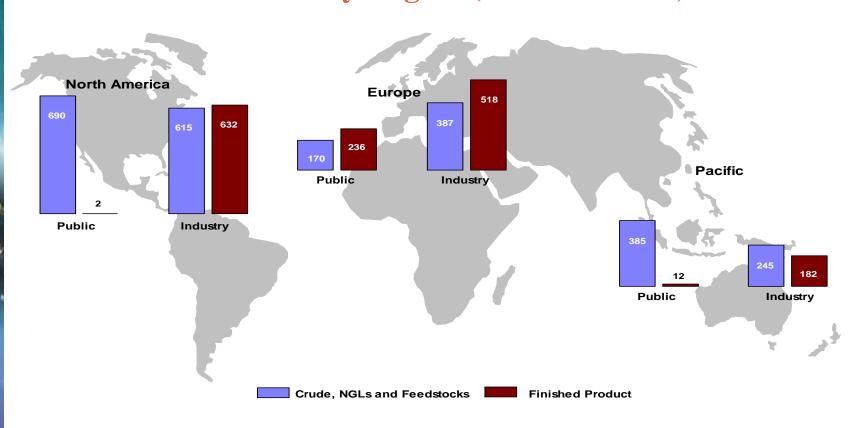
#### **Major World Oil Supply Disruptions**





### Stockholding in IEA Countries Current stocks

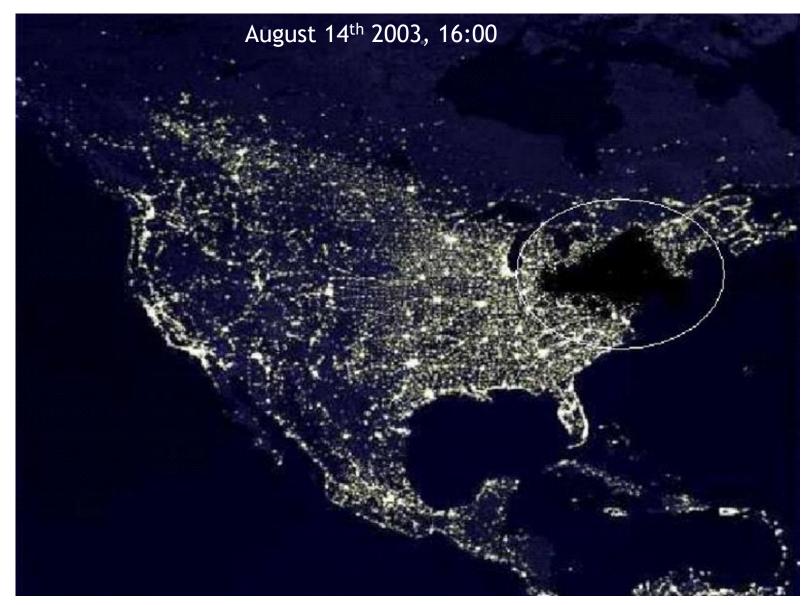
**Total IEA Stocks by Region (end June 2007)** 



**Unit: million barrels** 



#### North American Blackout





#### Italy left in the Dark



