## **The Oil Market:** *Challenges and Uncertainties*

#### Lucia van Geuns Clingendael International Energy Programme

13 January 2006



## Structure of presentation

- Introduction
- World energy demand / supply (focus on oil)
  - Security of supply
  - Geopolitics
- Conclusions



## Importance of the availability of energy

- World economy carbon-based (oil, gas and coal)
- Availability of affordable energy vital for economic growth and stability
- Energy is a strategic commodity, but also a military commodity



## Why is energy security important?

- Energy is the backbone of our economies
- Import dependency is increasing
- Imports of oil (and gas) increasingly comes from a small number of countries
- Transition to other fuel mix takes time

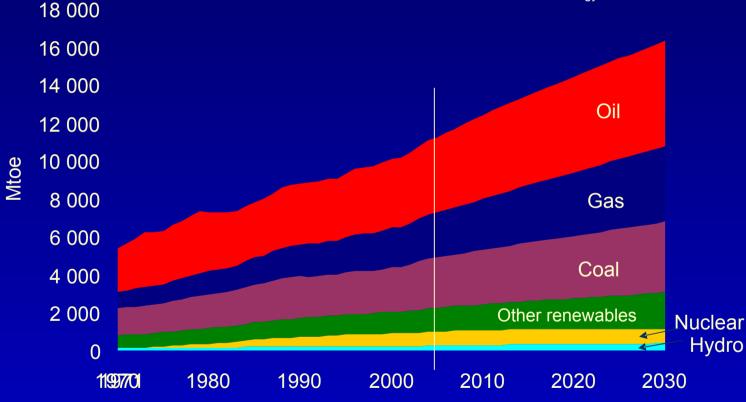


# Demand, Supply and a Tight Market



## **World Primary Energy Demand**

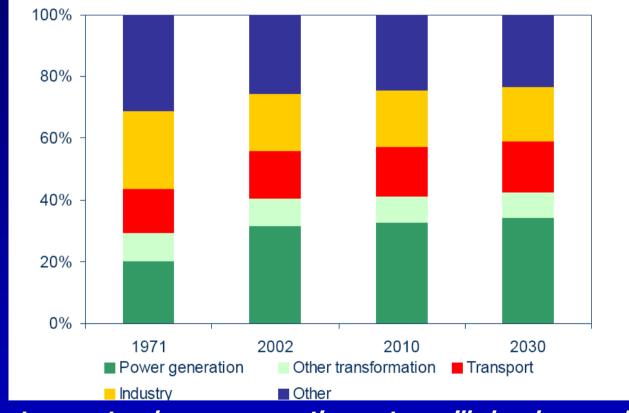




*Oil and gas together account for more than 60% of the growth in energy demand between now and 2030 in the Reference Scenario* 



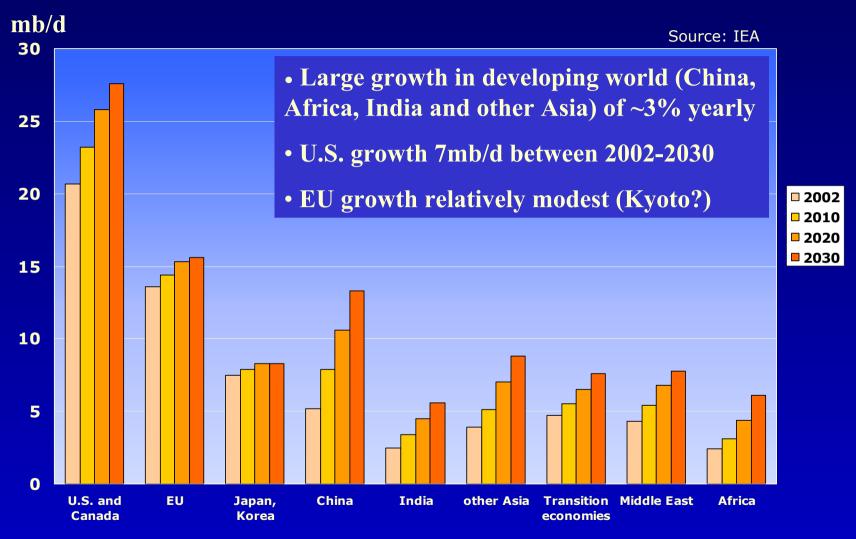
#### World Primary Energy Demand by Sector Source: IEA World Energy Outlook 2004



#### The transport and power-generation sectors will absorb a growing share of global energy



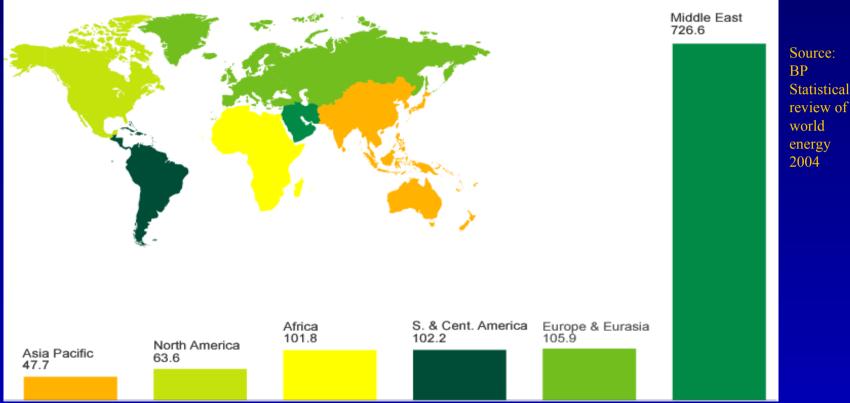
### **Oil demand in selected regions**





## World proved oil reserves, 2004

#### Thousand million barrels

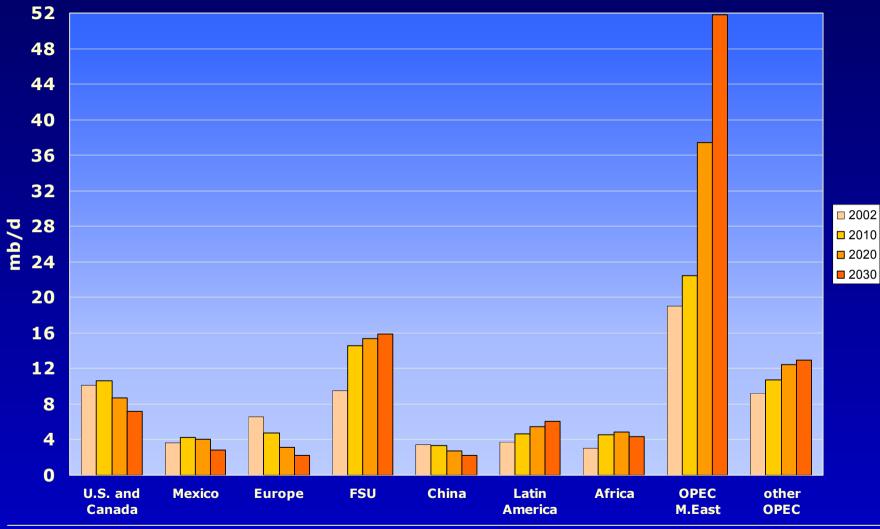


## Five countries around the Gulf: Iran, Irak, Kuwait, Saoedi-Arabia and UAE contain 65% of the world proved oil reserves



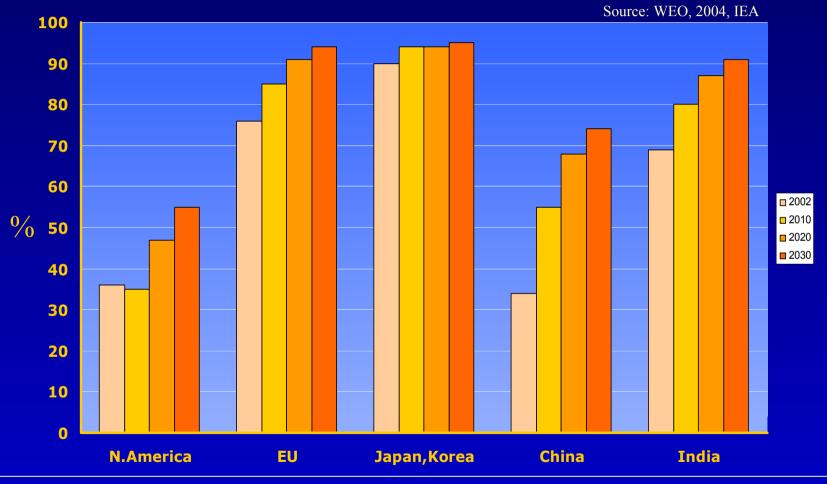
### World oil supply by region

Source: IEA





### **Oil Import Dependence**



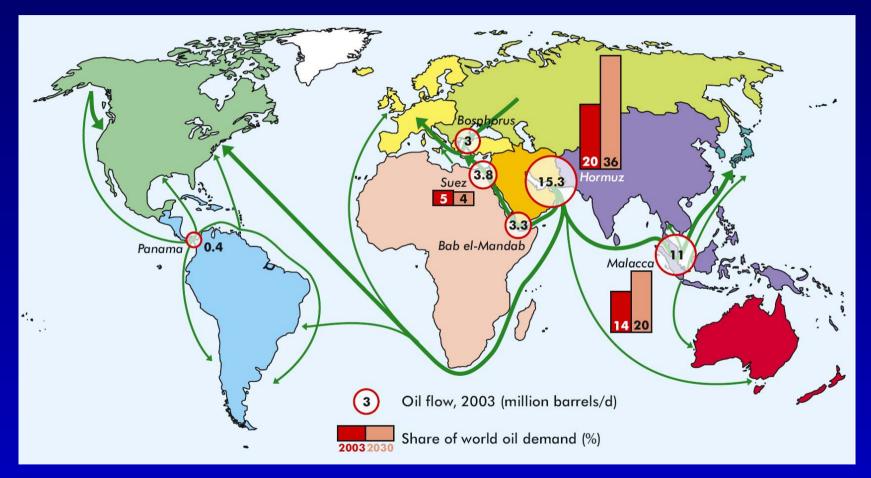


# Security of supply concerns

- Decreasing indigenous supplies
- Increasing imports
- Choke points in trade routes
- Competition with other consumer countries
- Limited ability to diversify and produce indigenous sustainable energies
- Concerns about political stability producing nations



### Oil flows and major choke points, 2003

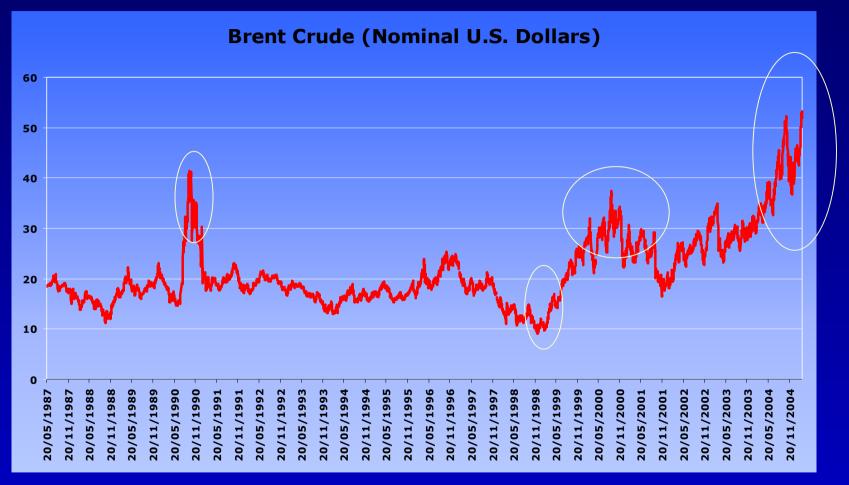


#### Source: WEO, 2004, IEA



#### Development of the Oil Price (1987-2004)

Source: EIA





#### 2004-2005: Tight markets

• Low investments:

low oil price in late 1990s now results in production and refining capacity constraints

• Strong demand growth:

driven by China, India and U.S.

• Low spare capacity:

traditional swing capacity OPEC 2-3 mbd, but now close to 1 mbd compared to 83-84 mbd of supply

• Timing of some new production unclear:

West Africa, Saudi Arabia, Caspian



# Supply is tight

- Tight markets allow every small and shortlived disruption to have a major impact on prices
- Tight markets give market power to the smallest producer
- Tight markets invite disgruntled groups in producing countries to target oil sector to exert maximum pressure on government

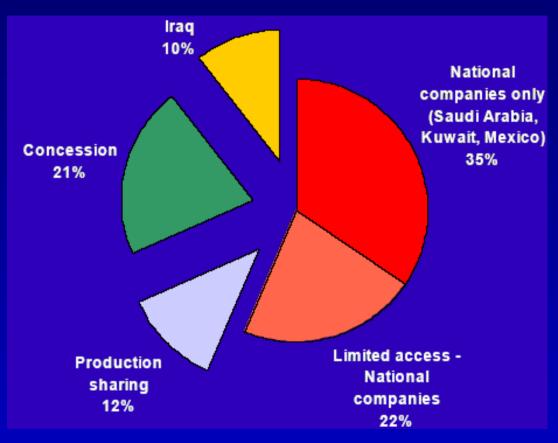


## Vulnerability

- In addition to tight crude capacities, refining capacity is tight too: short term performance of market system creates underinvestment, also in main consumer markets
- Interlinkages among oil, gas and electricity sector and countries create vulnerabilities in security of delivery
- Security of supply also starts at home!



#### **Access to oil reserves**



Foreign private companies have direct access to only a third of remaining oil reserves

source: IEA, WEIO 2003



## New Competition?

 Chinese and Indian companies are competing for reserves with majors but they do not have a profit motive (in the short term) but a (government) assignment to secure flows to China/India



## Changing Geopolitical Landscape

- End of Cold-War
- Break-up of Soviet Union
- Rise of China and India
- Competition for resources
- Globalisation or an alternative future?
- Paradigm Shift in Oil and Gas Markets: from buyers to sellers markets



### **But...**

- Oil prices likely to stay relatively high in the coming years due to capacity constraints
- Greater competition among companies for reserves/production
- Greater competition among consuming countries to secure flows
- Geopolitical risks high



## Conclusions

- Fossil fuels dominant source of energy for decades
- Investments necessary to meet growing demand
- Changes in the way business is conducted: Oil through the market or oil through political strategic manouevring?
- Geopolitical uncertainty could feed distrust among consumers and prevent co-operation as a policy option
- EU political actor?





#### www.clingendael.nl/ciep

