



# **The Implications of the “Oil Market Events of 2005”**

**Claude Mandil**

**Executive Director  
International Energy Agency**

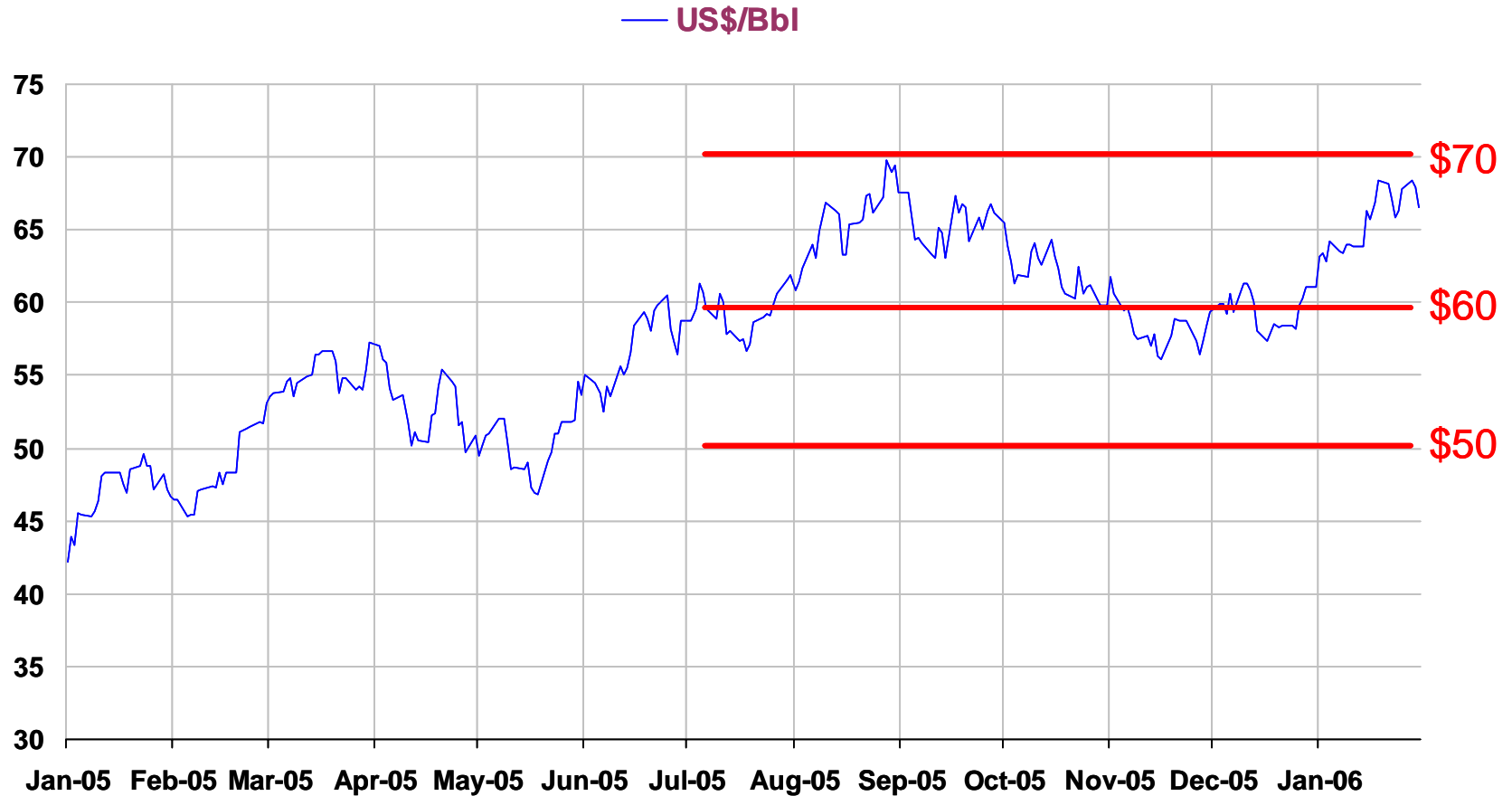
*The Institute of Economic Affairs' 23<sup>rd</sup>  
Annual State of the Economy Conference  
London, 6 February 2006*



# A Year in Review



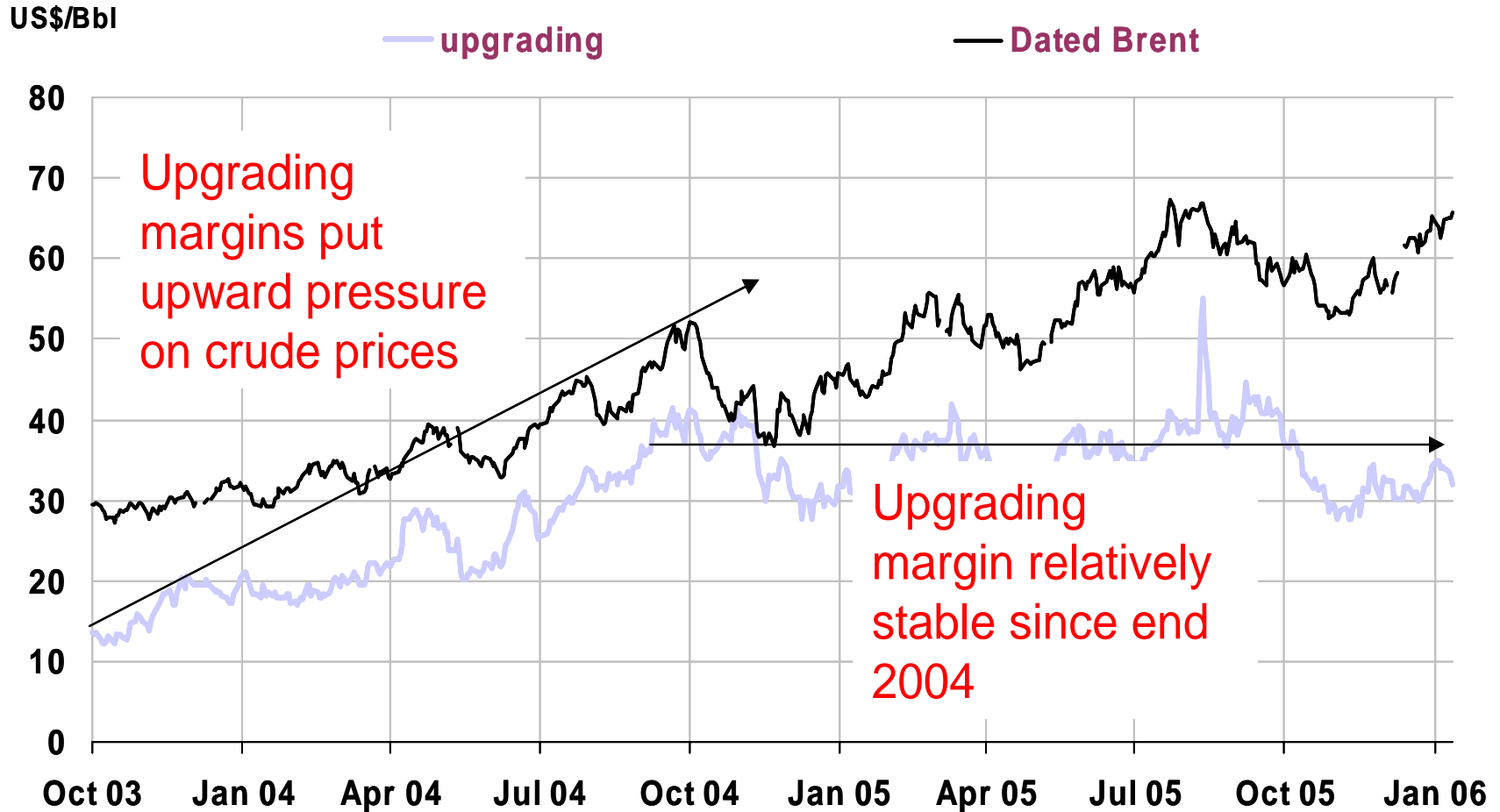
# Crude Prices Back Above \$65



- Crude Prices nearing August 05 peaks
- Cold weather, strong gasoline and supply-side issues support crude prices

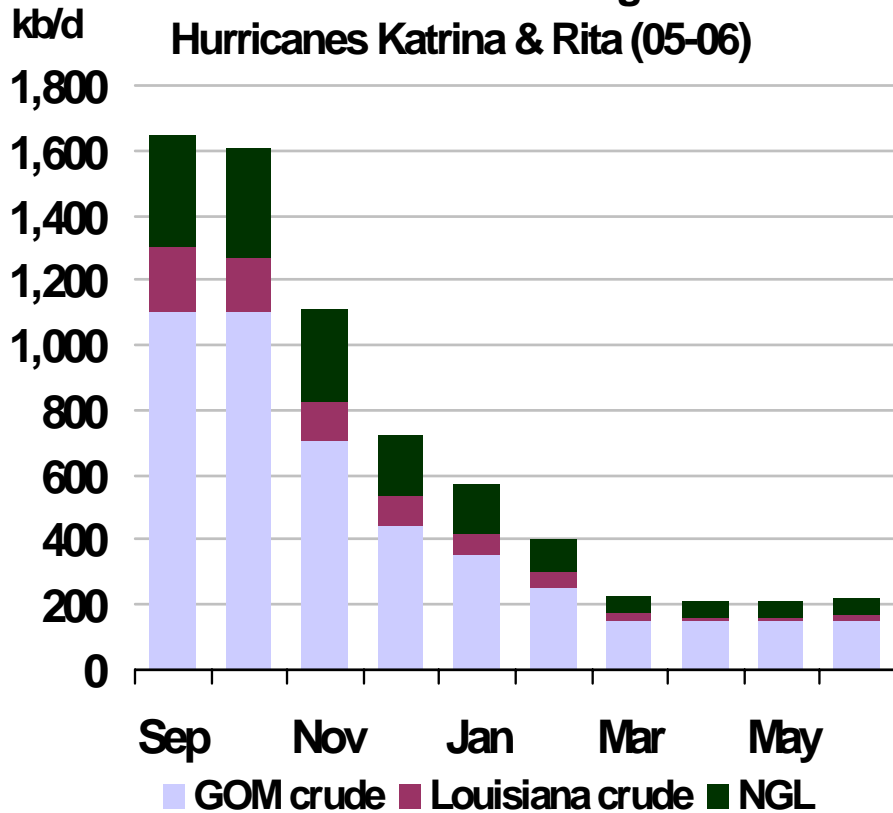


# Upgrading Spread (Light vs. Heavy Products) Remains Wide

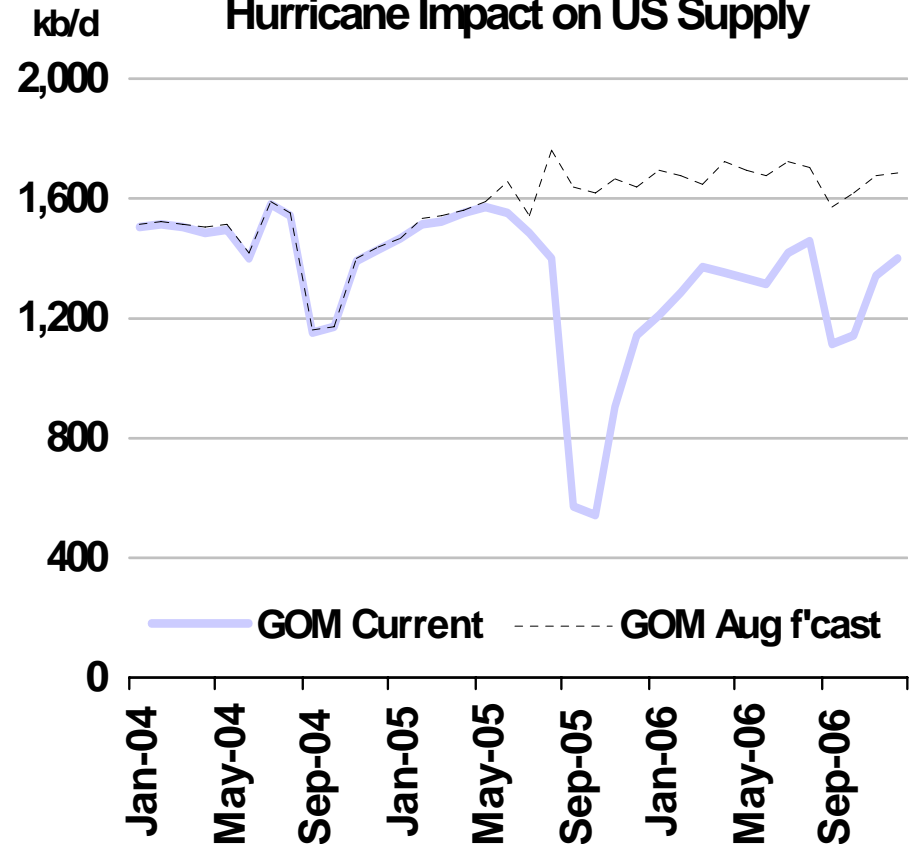


# Hurricanes Katrina & Rita

Assumed Production Outages from Hurricanes Katrina & Rita (05-06)

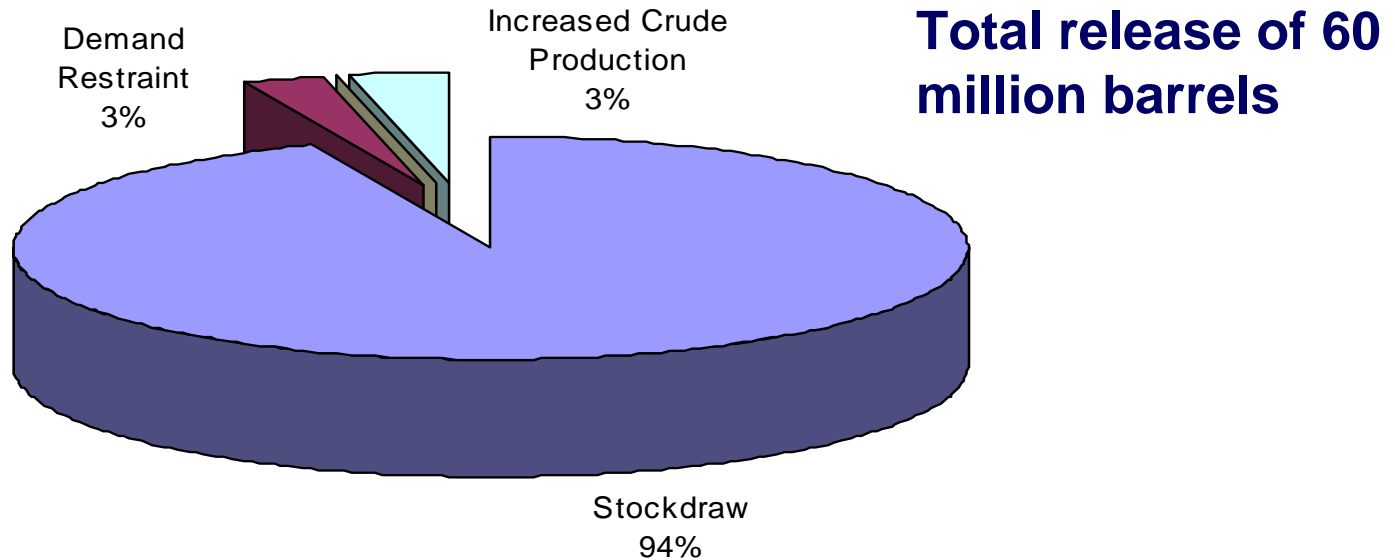


Hurricane Impact on US Supply



*The hurricanes compounded an already bad year for OECD oil production*

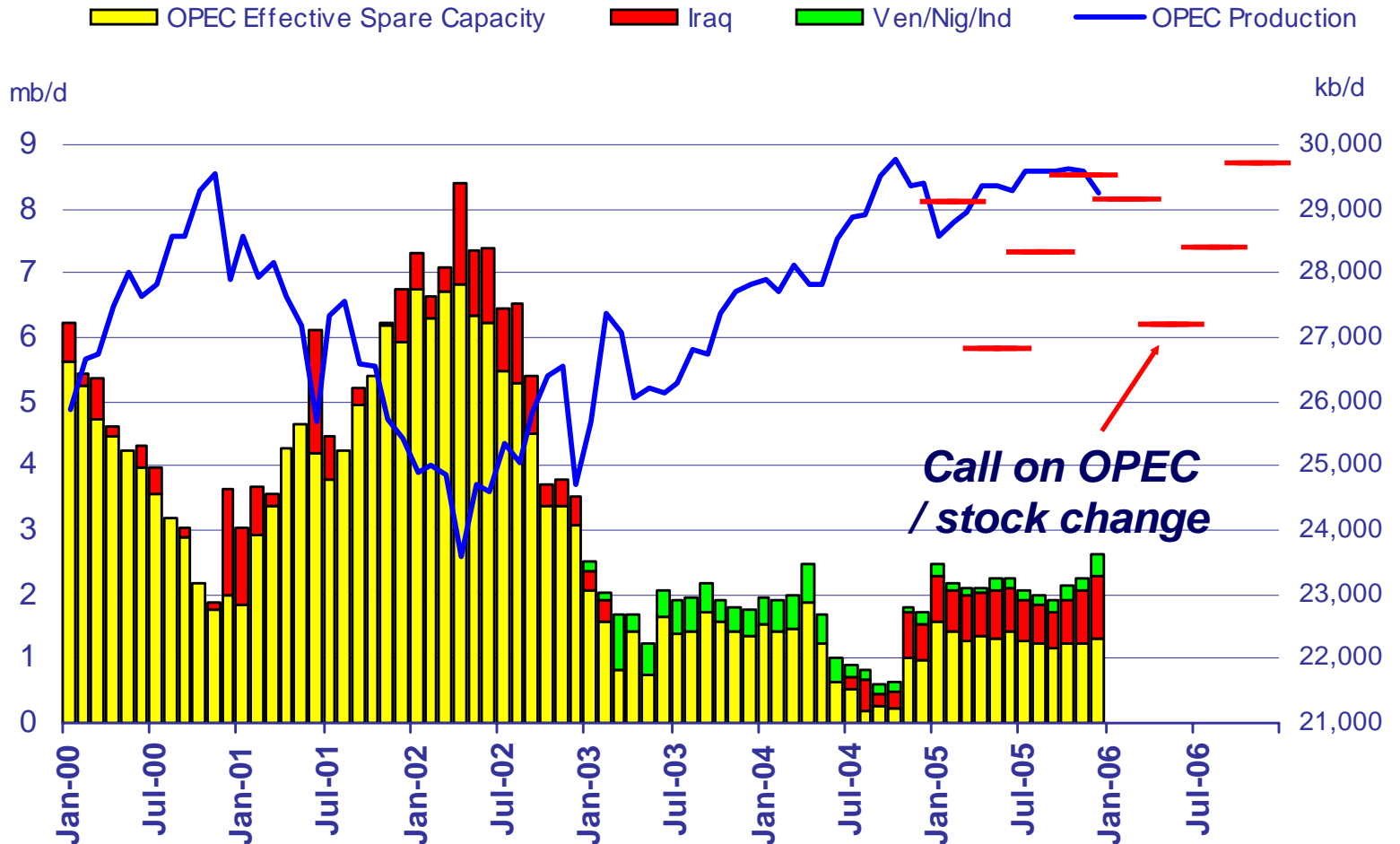
# The IEA Collective Action



***The hurricanes were offset by the IEA collective action, lower demand, refinery flexibility and additional production***



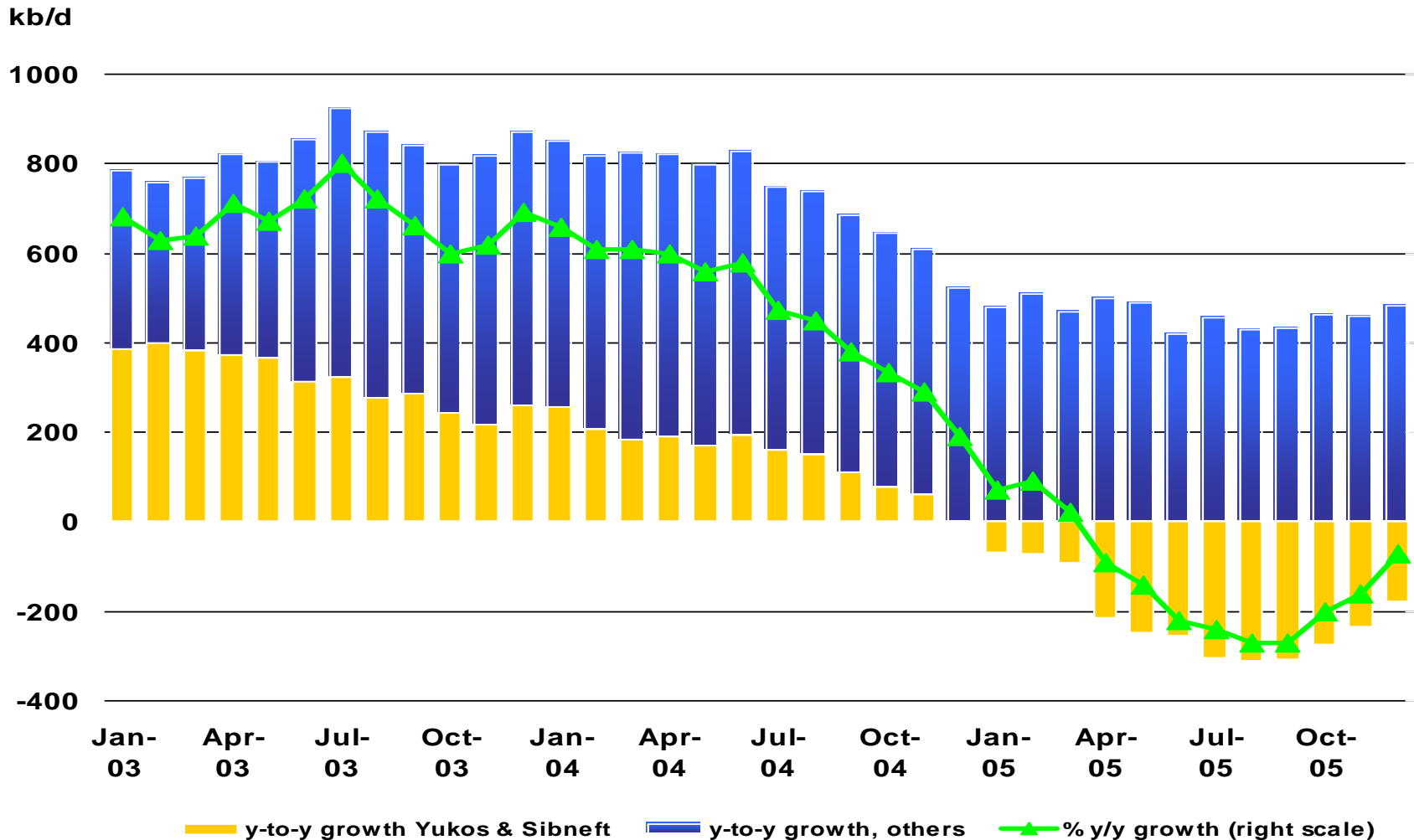
# OPEC Now Producing Flat Out



***OPEC Effective spare capacity around 1.3 mb/d, physical or market limits now facing all producers***

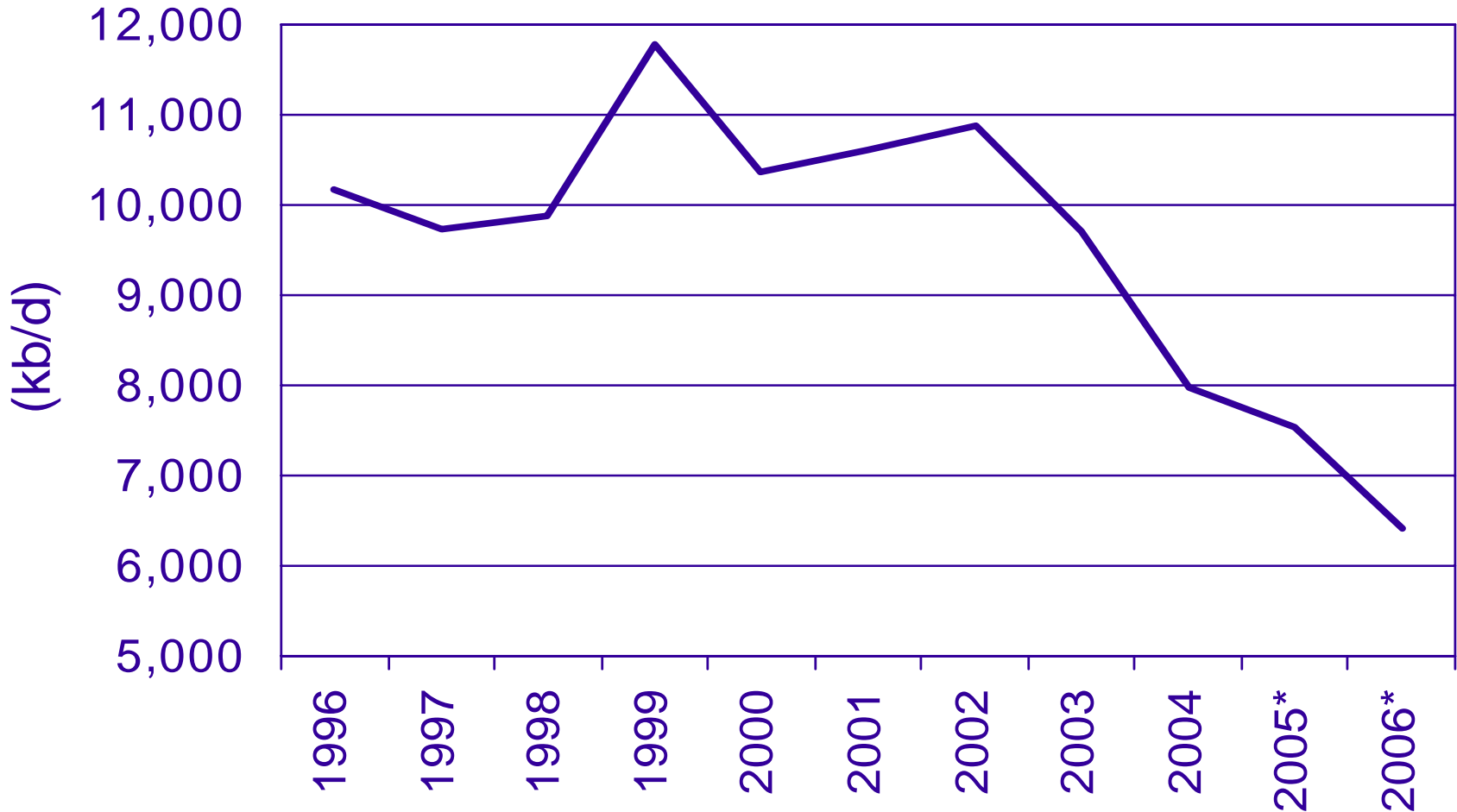


# Russia's Growth Slowdown Bottoming Out?





# Global refinery spare capacity



***Refinery spare capacity on a downward trend since 2002***



# The International Energy Forum Secretariat

- **New premises inaugurated in Riyadh on 19 Nov**
- **Purpose is to institutionalise dialogue between producers and consumers**
- **King Abdullah launched the JODI World Database - a milestone for data transparency**
- **King Abdullah and Minister Ali Al-Naimi called for a “a road map for demand in consuming nations”**

# Launch of the JODI World Database



King Abdullah launches the database of world oil producers and consumers in Riyadh on Saturday. Riyadh Governor Prince Salman and Oil Minister Ali Al-Naimi, left, are also seen. (SPA)



# Near-term Outlook



# Reason to be Cheerful in 2006 ?

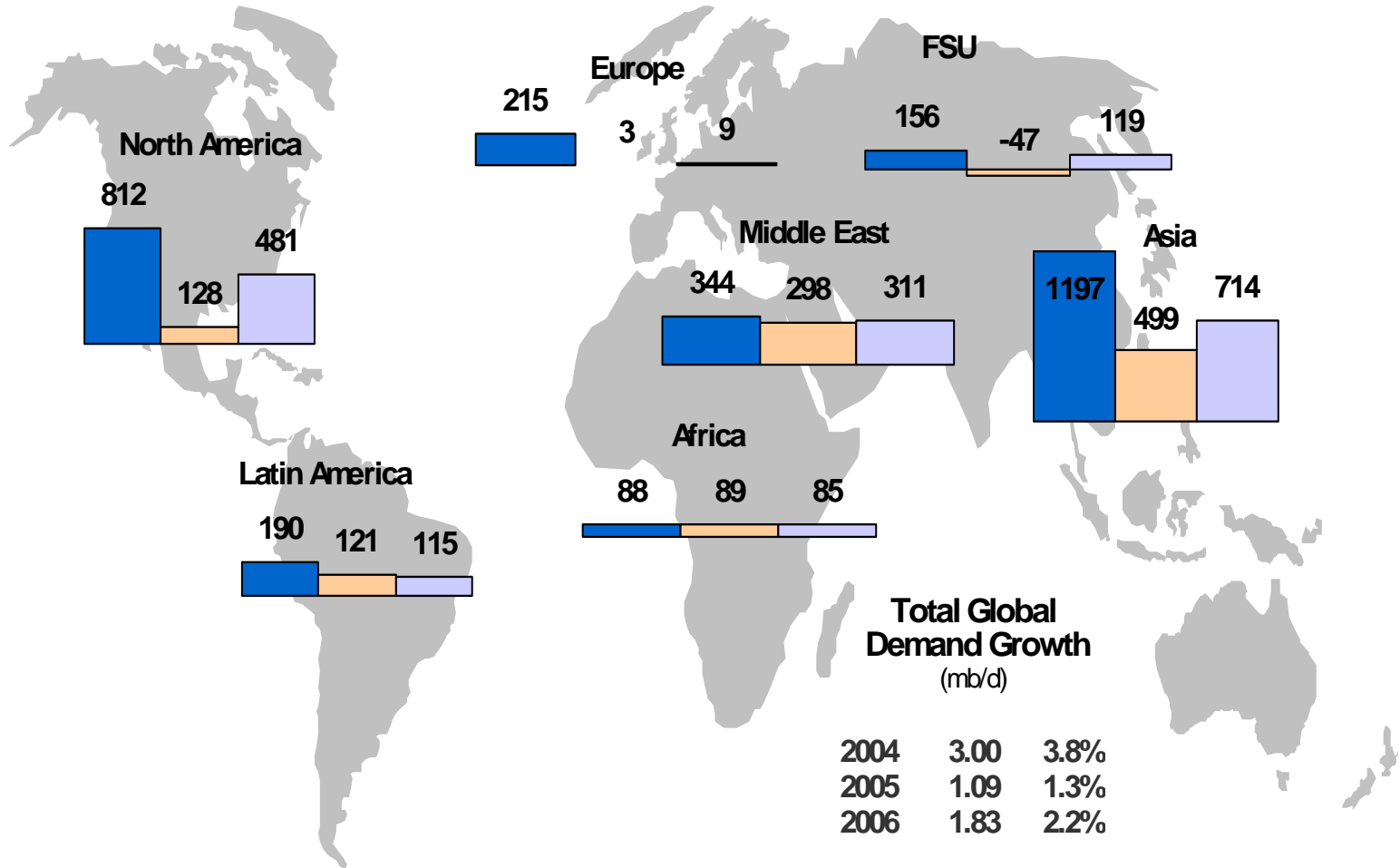
- Outages suffered by US, North Sea, Canada, India in 2005 shouldn't (all) be repeated
- Impressive list of new field & expansion projects (US GOM, Canada, Norway NGL, Brazil, Angola, Russia, Azerbaijan, Mauritania, Sudan);
- 2005 upstream spending is rising (13%-15% now vs. earlier 5%-7%);
- OPEC NGL & condensate continues to post robust growth

## **BUT**

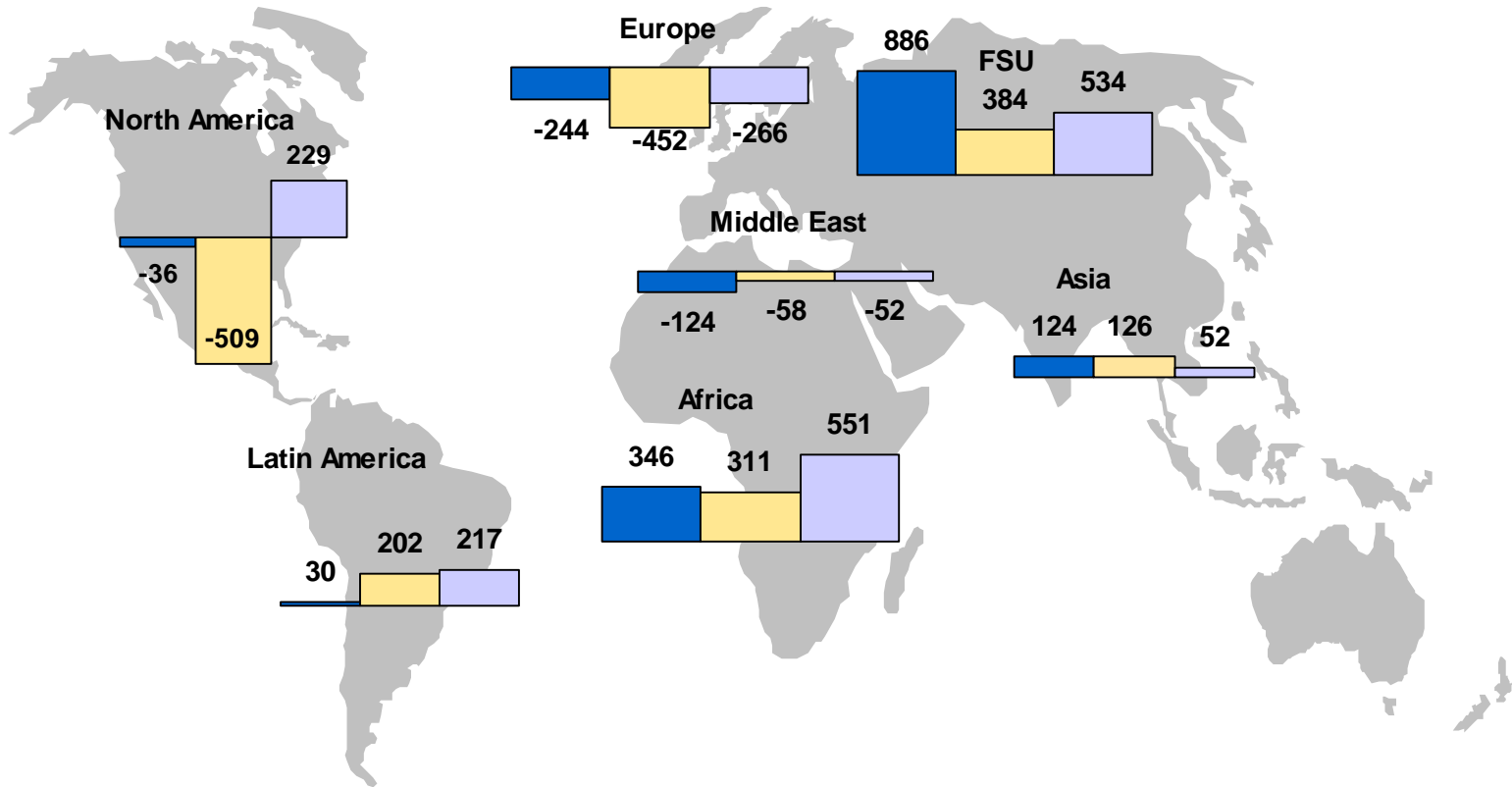
- Host governments continue to alter operating environment
- Political risks don't seem to be diminishing
- Costs are rising (insurance & tighter structural standards after Katrina/Rita)
- Potential shortages in drilling & upstream service capacity
- Perennial risk of project delays & unscheduled outages as operators run close to margin of capacity



# Global Demand Growth 2004 / 2005 / 2006 (kbpd)



# Non-OPEC Supply Growth 2004 / 2005 / 2006 (kbpd)



**Total Non-OPEC Supply Growth (kb/d)**

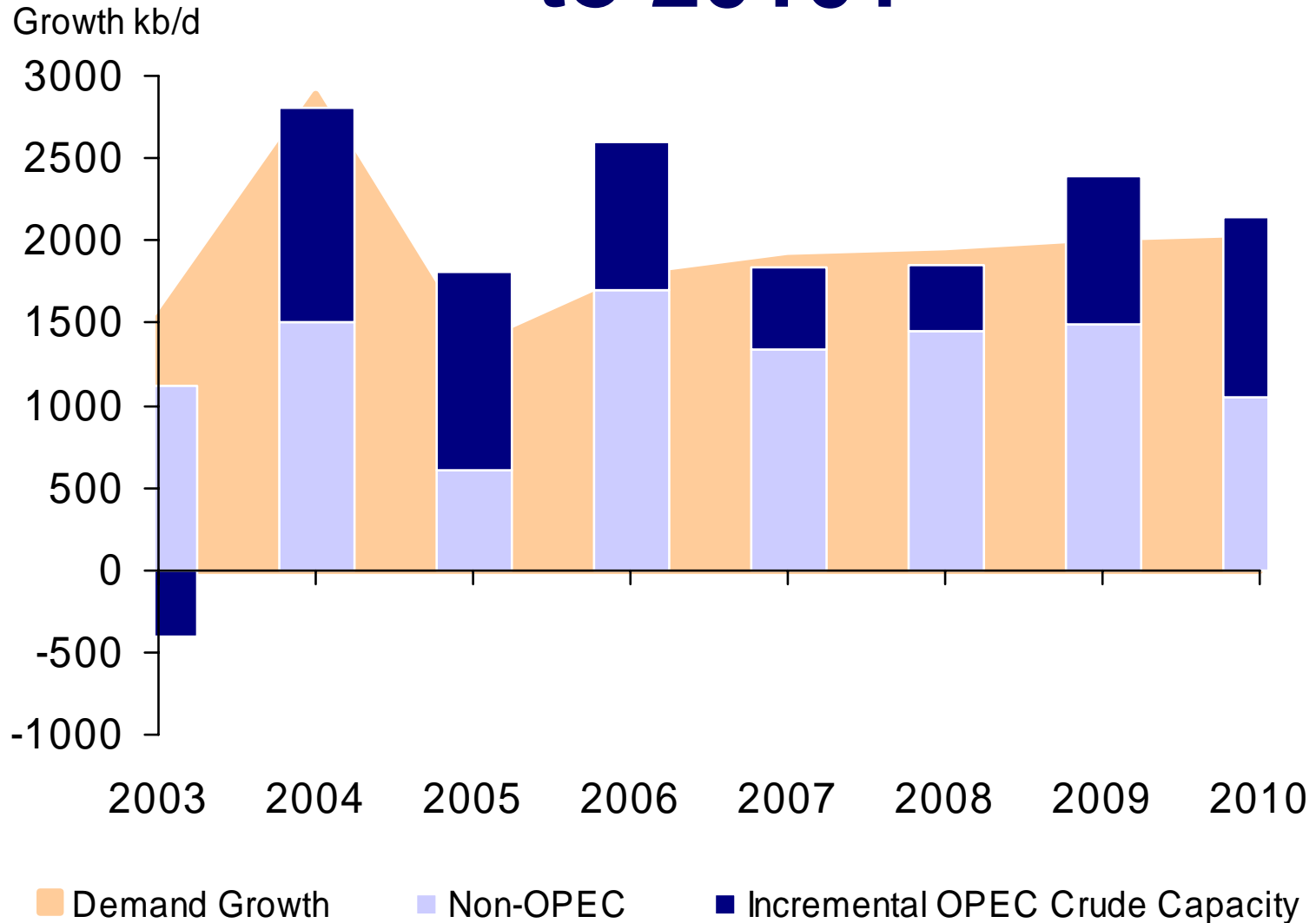
2004	1012
2005	34
2006	1302

**OPEC NGLs (kb/d)**

2004	425
2005	422
2006	351



# Can OPEC Fill the “Supply Gap” to 2010?







# Long-term Outlook

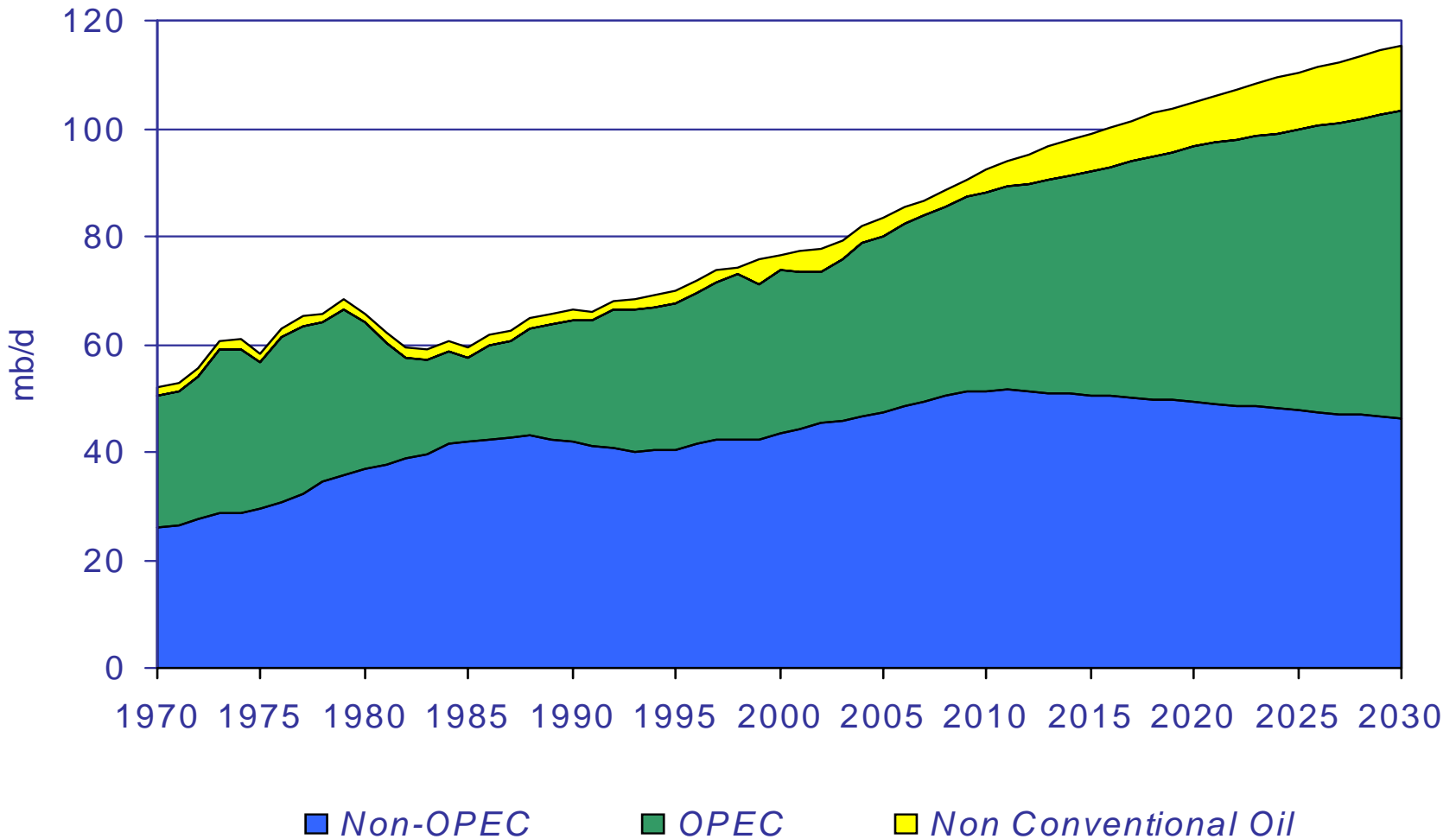


# World Energy Outlook 2005

- **Answers the question: how much oil and gas will the Middle East and North Africa export through to 2030 ?**
- **Analyses three distinct scenarios: Reference Deferred Investment and Alternative Policy**
- **Draws implications for global energy markets, international oil and gas prices and energy security**



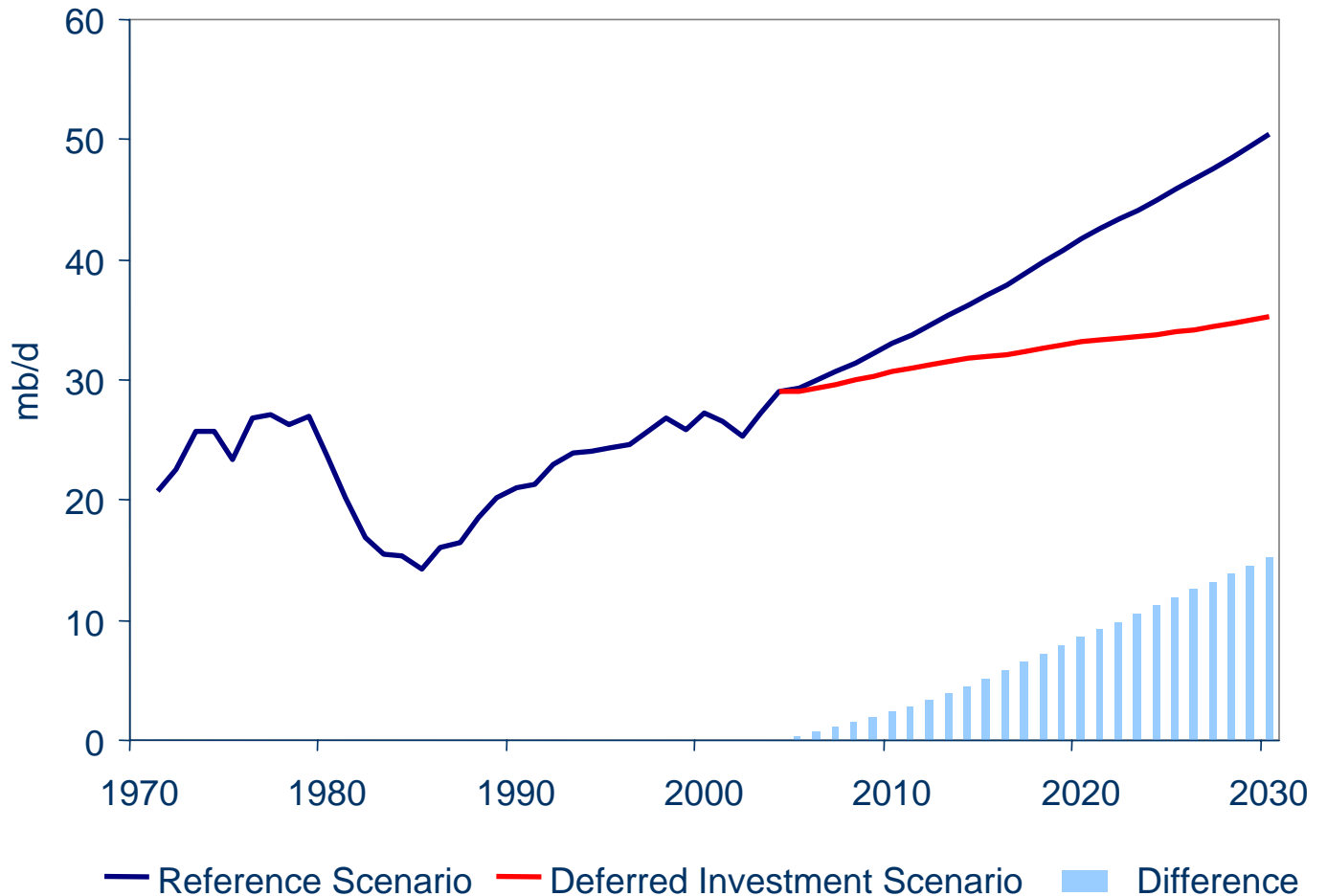
# Global Oil Demand



**Oil demand could reach 115 mb/d by 2030, and OPEC's Share of Supply could rise to 50%**



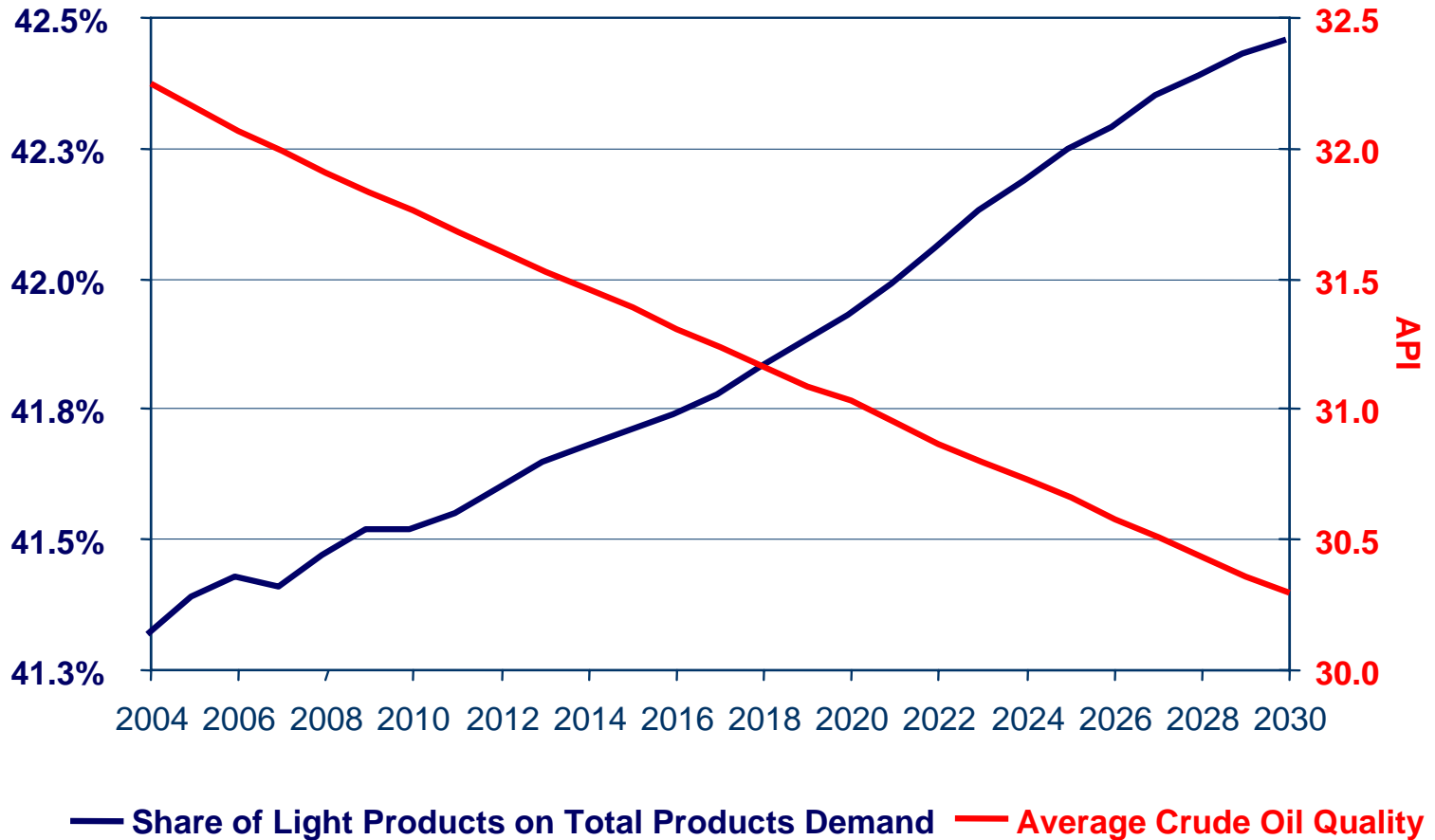
# MENA Crude Oil Production



***In the RS, MENA production rises from 29 mbd in 2004 to 51 mbd in 2030 at a cost of \$484 Billion. In the DIS, production in 2030 reaches only 35 mbd***



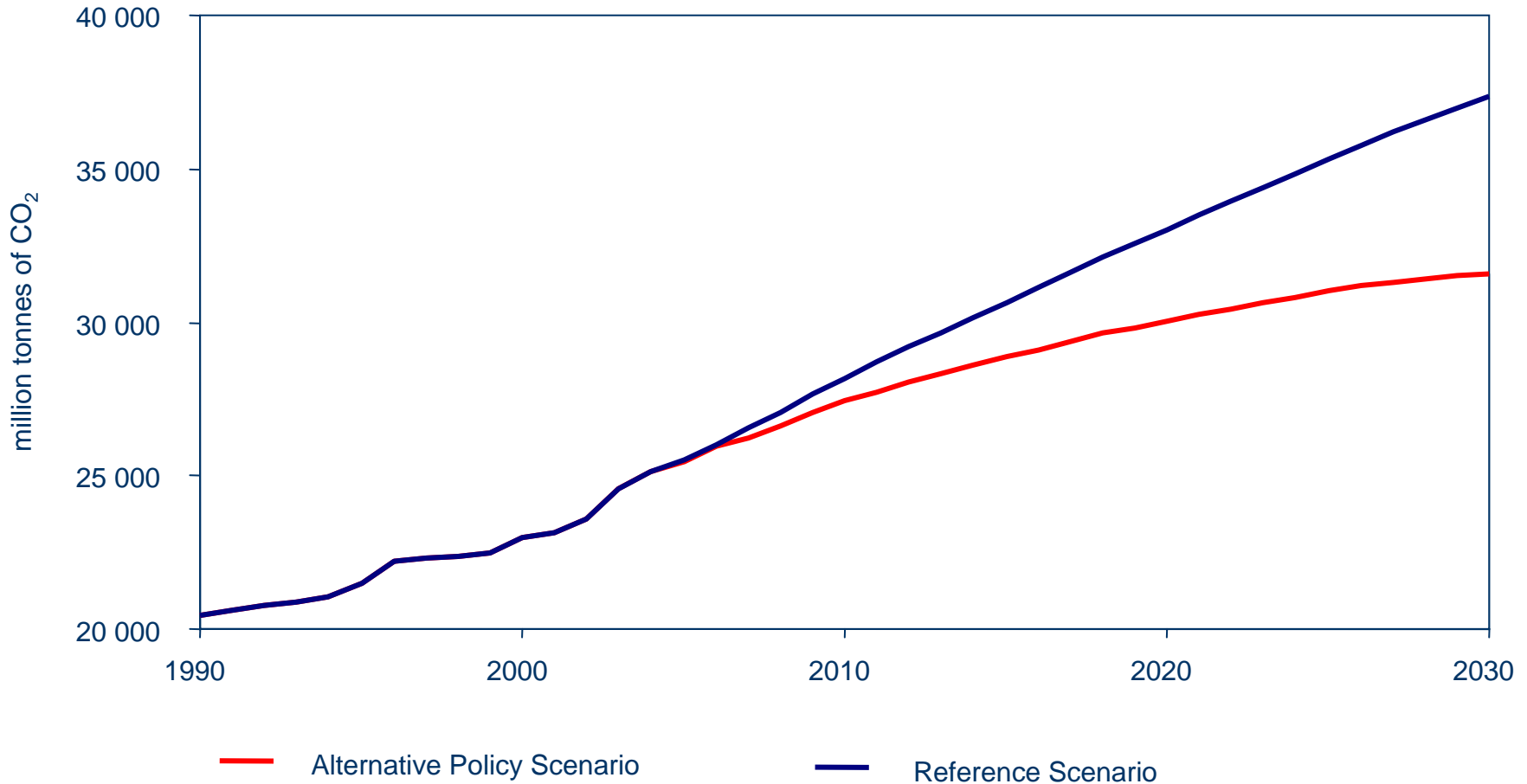
# Evolution of Crude Quality and Refinery Product Slate



*Oil quality will fall while light product demand will rise -  
a key challenge for the refining industry*



# CO<sub>2</sub> Emissions in the Reference and Alternative Policy Scenarios



***In 2030, CO<sub>2</sub> emissions are 16% lower but still more than 50% higher than 1990***



## G8 GLENEAGLES 2005



**“Strong global growth has boosted energy demand and, together with capacity constraints and supply uncertainties, has led to high and volatile oil prices... Significant investments will be needed, in the short-, medium-, and long-terms, in exploration, production, and energy infrastructure to meet the needs of a growing global economy.”**

**-- from “Global Economy and Oil”  
document, G8 Summit**

# Conclusions

- **Capacity constraints can be surmounted by:**
  - ◆ **Adequate investment**
  - ◆ **Better access for E&P**
  - ◆ **Consistent fuel standards**
  - ◆ **Improved data transparency**
  - ◆ **Greater public awareness of need for energy infrastructure**
  - ◆ **Continued dialogue between producers and consumers**
  
- **But demand-side measures are also necessary:**
  - ◆ **Continue to curb oil intensity**
  - ◆ **Increase energy efficiency**
  - ◆ **Identify measures to reduce demand from transport sector**
  - ◆ **Promote development and deployment of technology**
  
- **Major importing countries are already considering more vigorous policies to curb demand growth & reduce reliance on oil**