Annual General Assembly of the International Chamber of Commerce - Austria

Global Oil Outlook up to 2025

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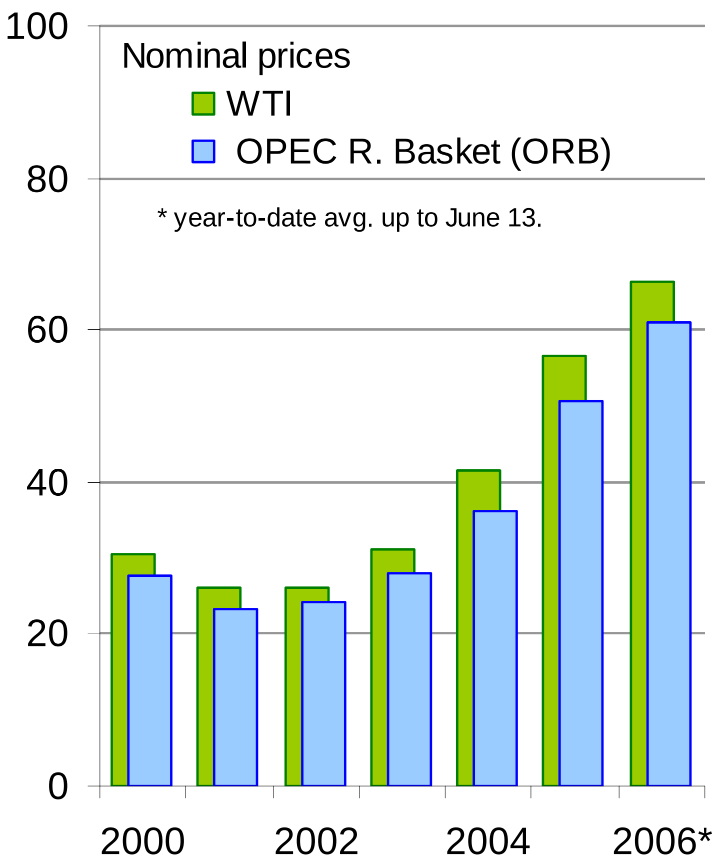
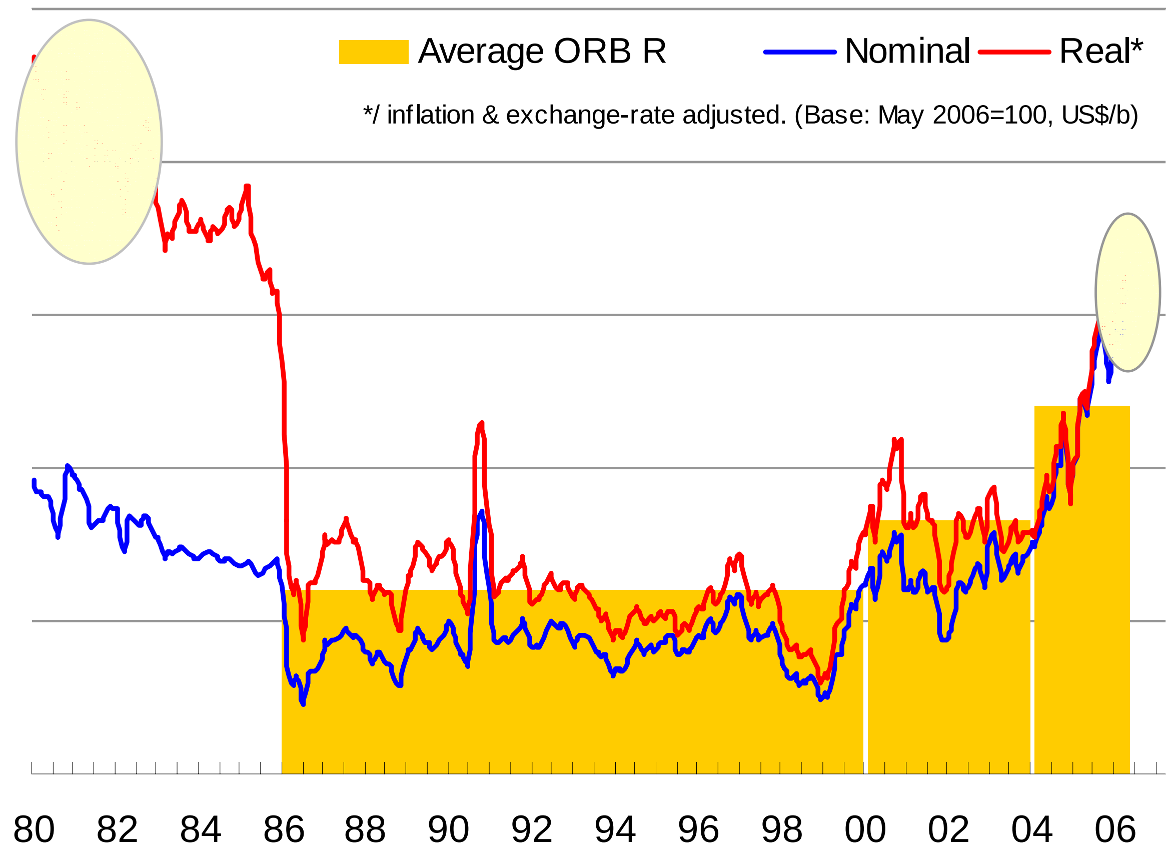
Rising oil prices to unexpectedly high levels
(OPEC reference basket & WTI in $/bbl)

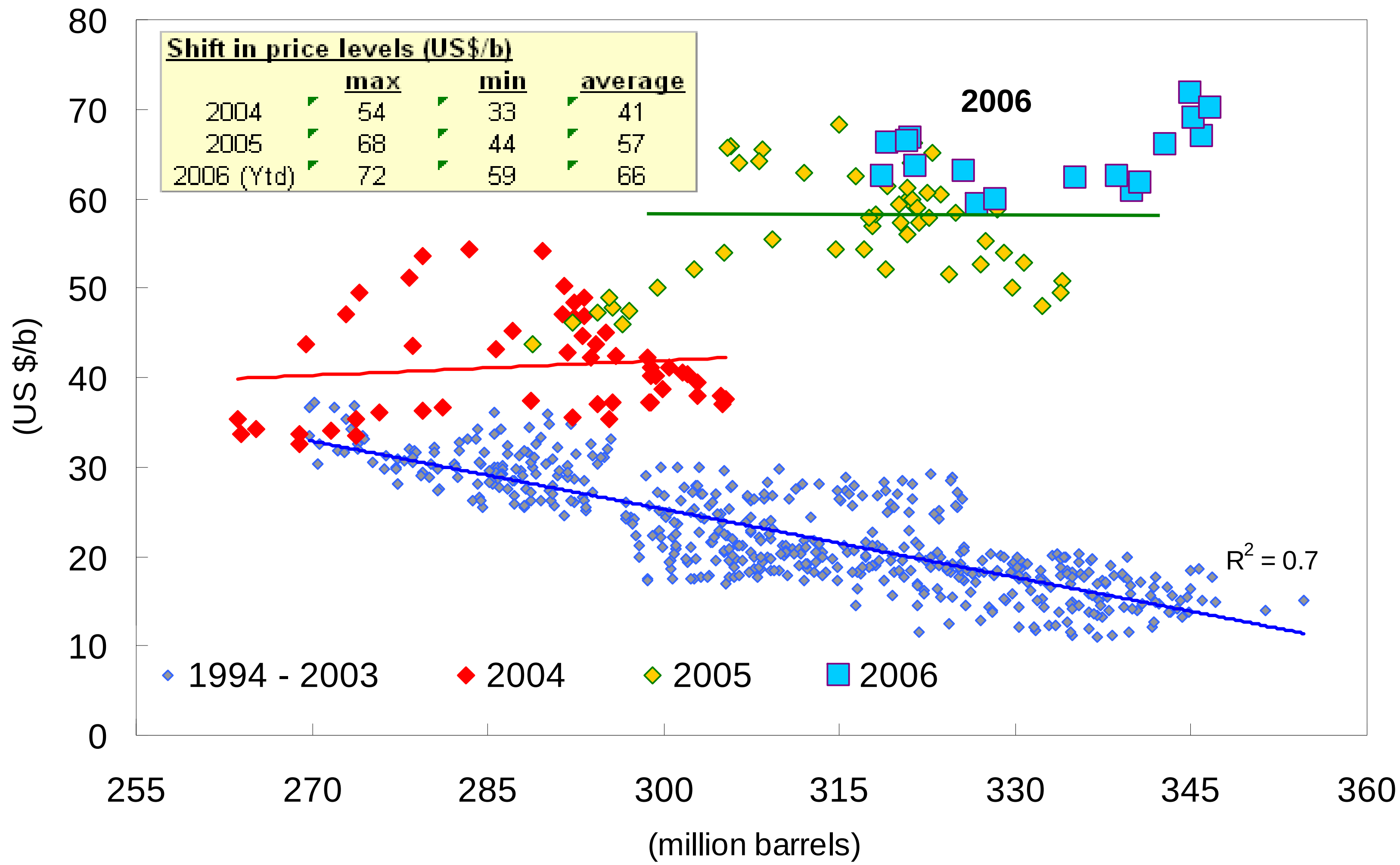
- **The real price is still well below historical highs**
- **Non-energy commodity prices have also risen**
- **Non-fundamentals are highly influential in shaping sentiments and play a role in prices.**





Break in conventional stock/price relationship in crude
WTI vs US crude oil stocks

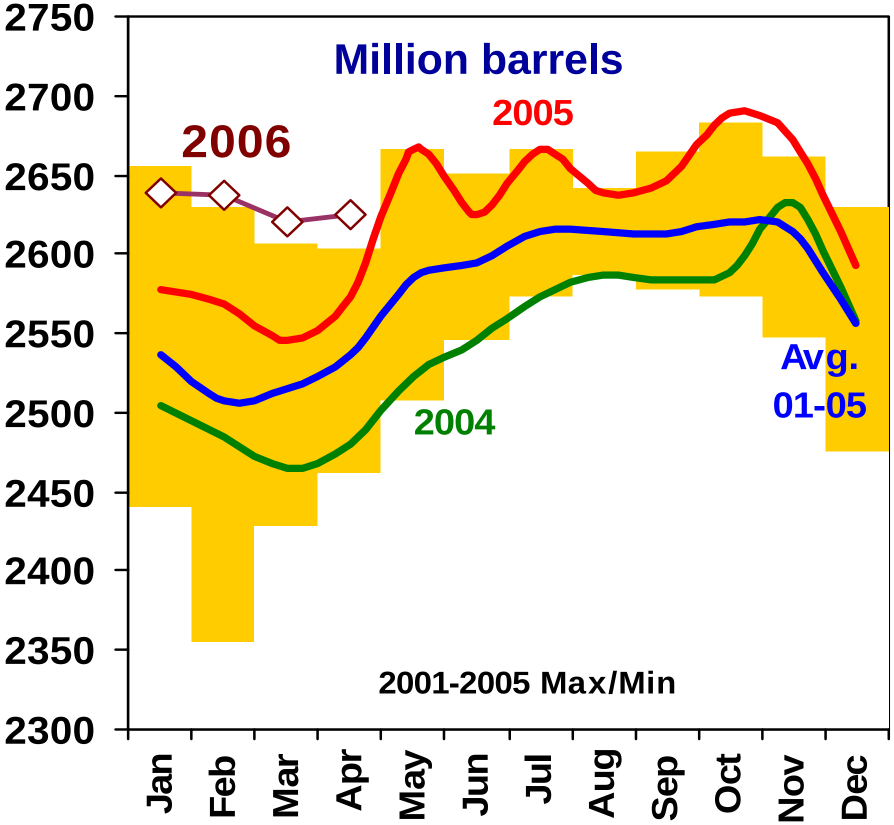
- **Oil prices more disconnected from stocks than before**
- **Since 2004, the flat move in stocks & prices has shifted to a higher level.**

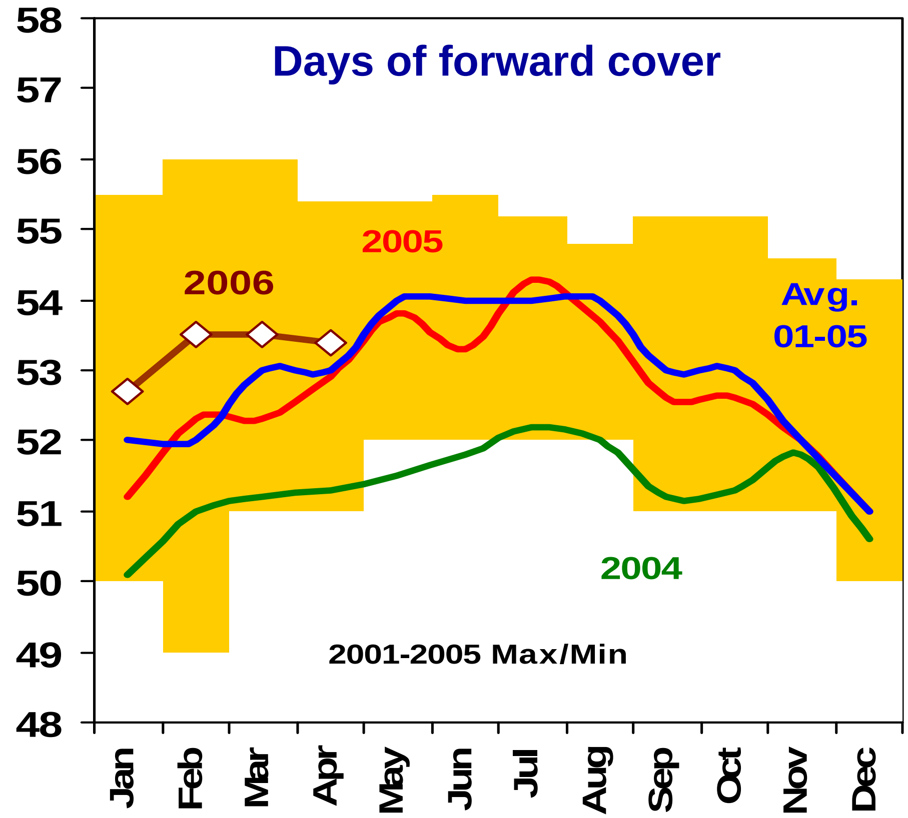


OECD commercial stocks are at comfortable levels, yet prices remain high!

Confluence of factors:

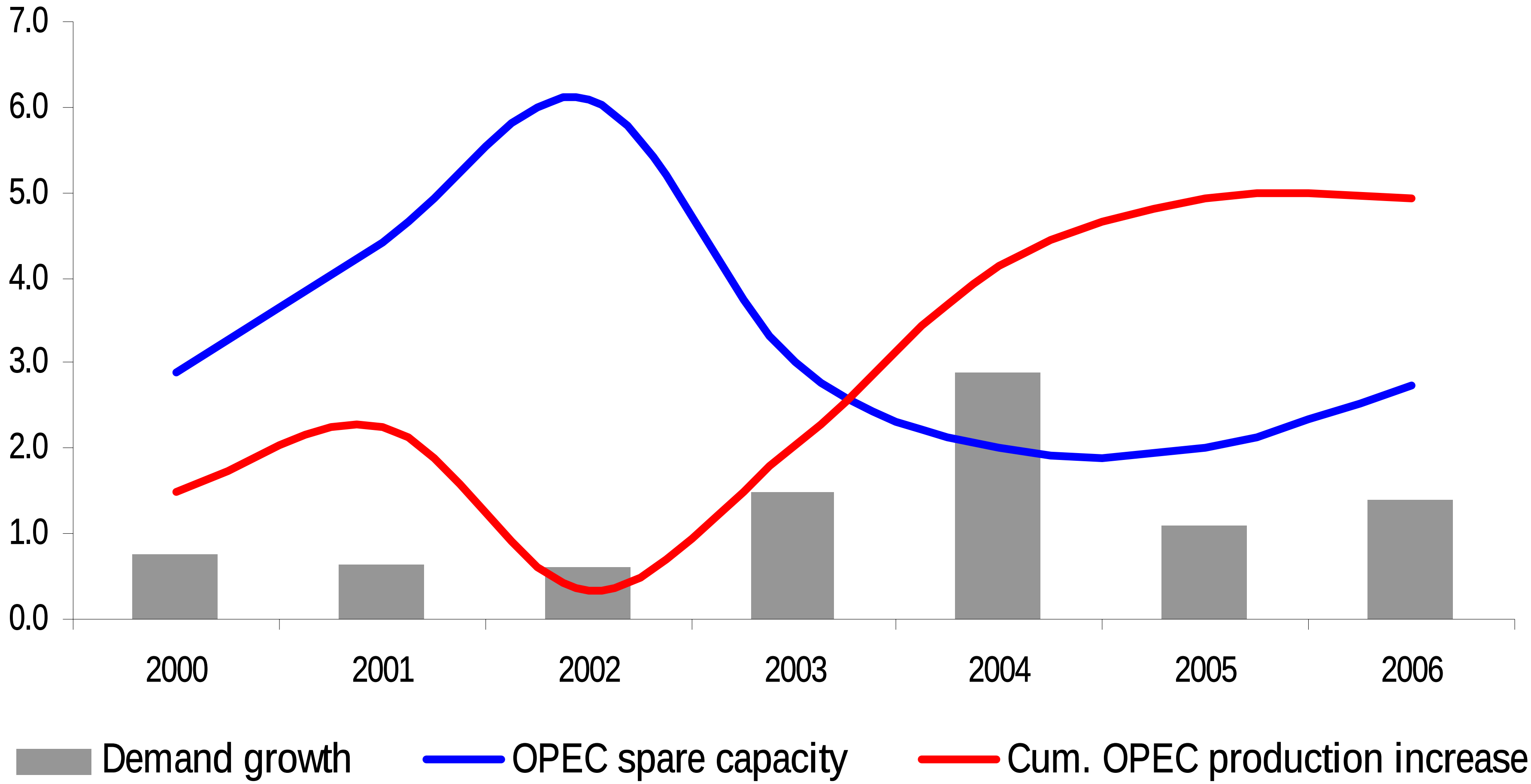
- **Strong global economic and, in turn, oil demand growth ('03-'05 increase: 5.4 mb/d)**
- **High capacity utilization in the supply chain, tightness in the downstream refining sector**
- **Heightened geopolitical concerns –fears of supply disruptions**
- **Increasing activity in futures market (new wave of capital movement by funds)**





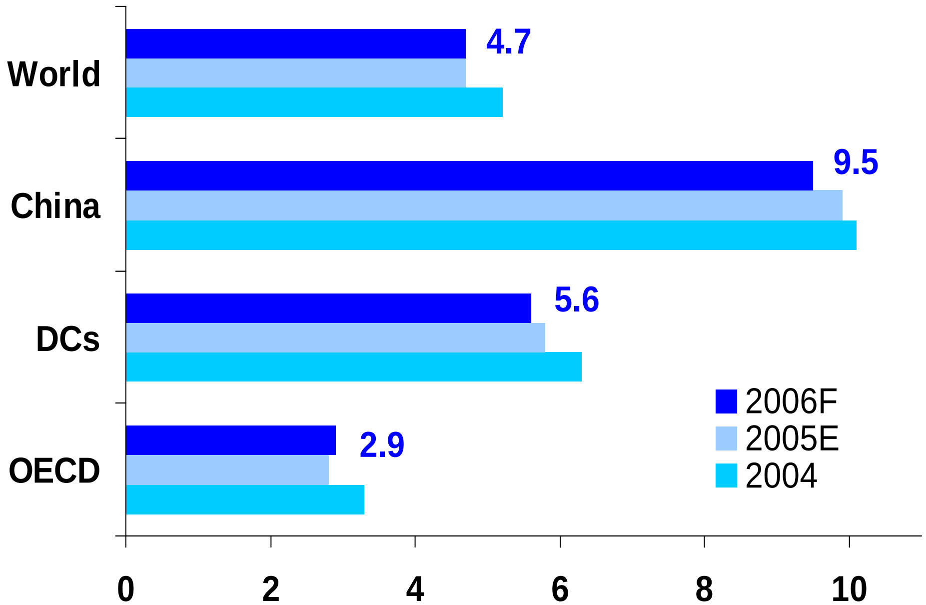
High OPEC production accommodates demand surge
Effective use of its spare capacity

- **OPEC have increased production by 4.5 mb/d since 2002**
- **Accelerating capacity expansion to maintain adequate spare capacity**

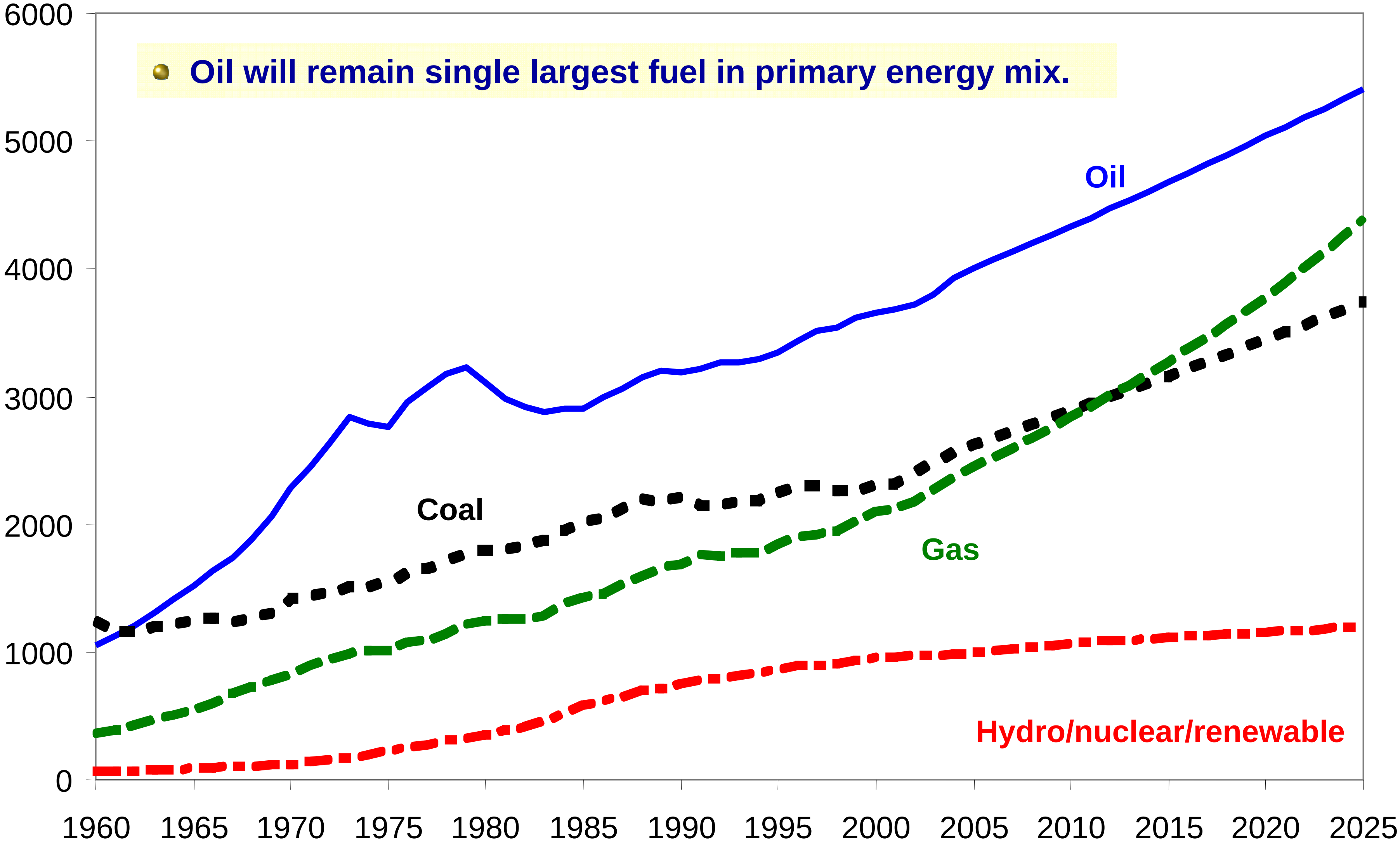


Continued steady growth in world economy
% growth in GDP

- **Recent revisions confirm resilient world economic growth with forward momentum**
- **Growth in 2006 is steadily broadening beyond North America & China**
- **Chinese economy remains robust: 1Q 06 growth at 10.2% above expectations**
- **DCs economy in ‘06 expected to consolidate similar to ’05**
- **Impact of higher oil prices on global GDP have been so far limited (< 1% since ’02)**
- **Delicate balance between interest rates & inflation: interest rates will now be the focus!**

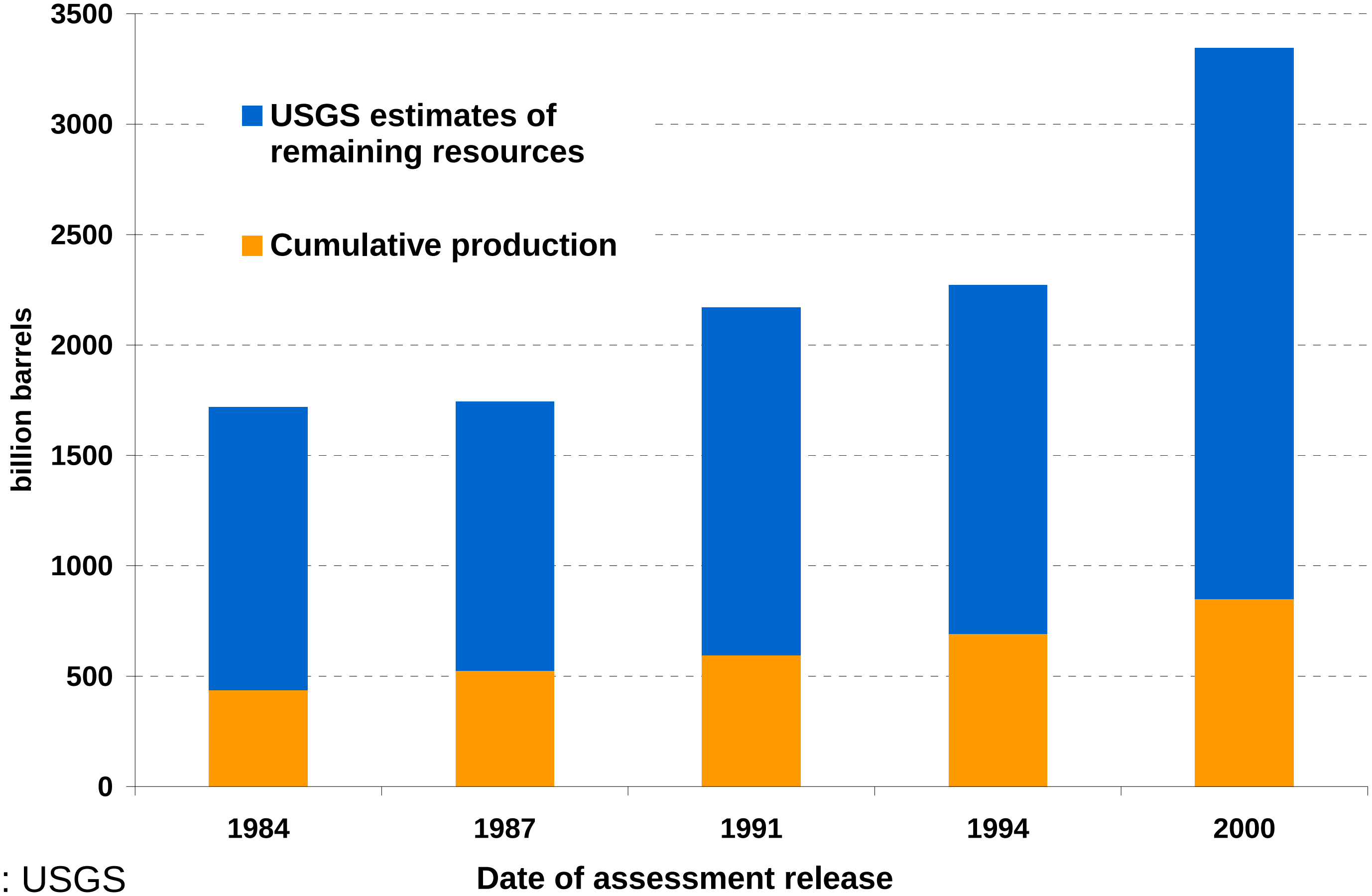


World energy demand by fuel type (mtoe)



Conventional liquids resource base is sufficient

- Resources are plentiful…but prices can affect estimates
- Technology blurs distinction between conventional and non-conventional oil
- Resource base likely to continue to grow …especially with non-conventional oil
- Broad agreement among international agencies on this idea



Source: USGS

OPEC's longstanding commitment to oil market stability

"…ensuring the stabilisation of prices in international oil markets, with a view to eliminating harmful and unnecessary fluctuations.

"…securing a steady income to the producing countries, an efficient, economic and regular supply of petroleum to consuming nations; and a fair return on their capital to those investing in the petroleum industry."

OPEC Statute, 1961

"…there is a need to support fair and stable prices, sustainability of supply, and security of demand."

The OPEC Long-Term Strategy, 2005

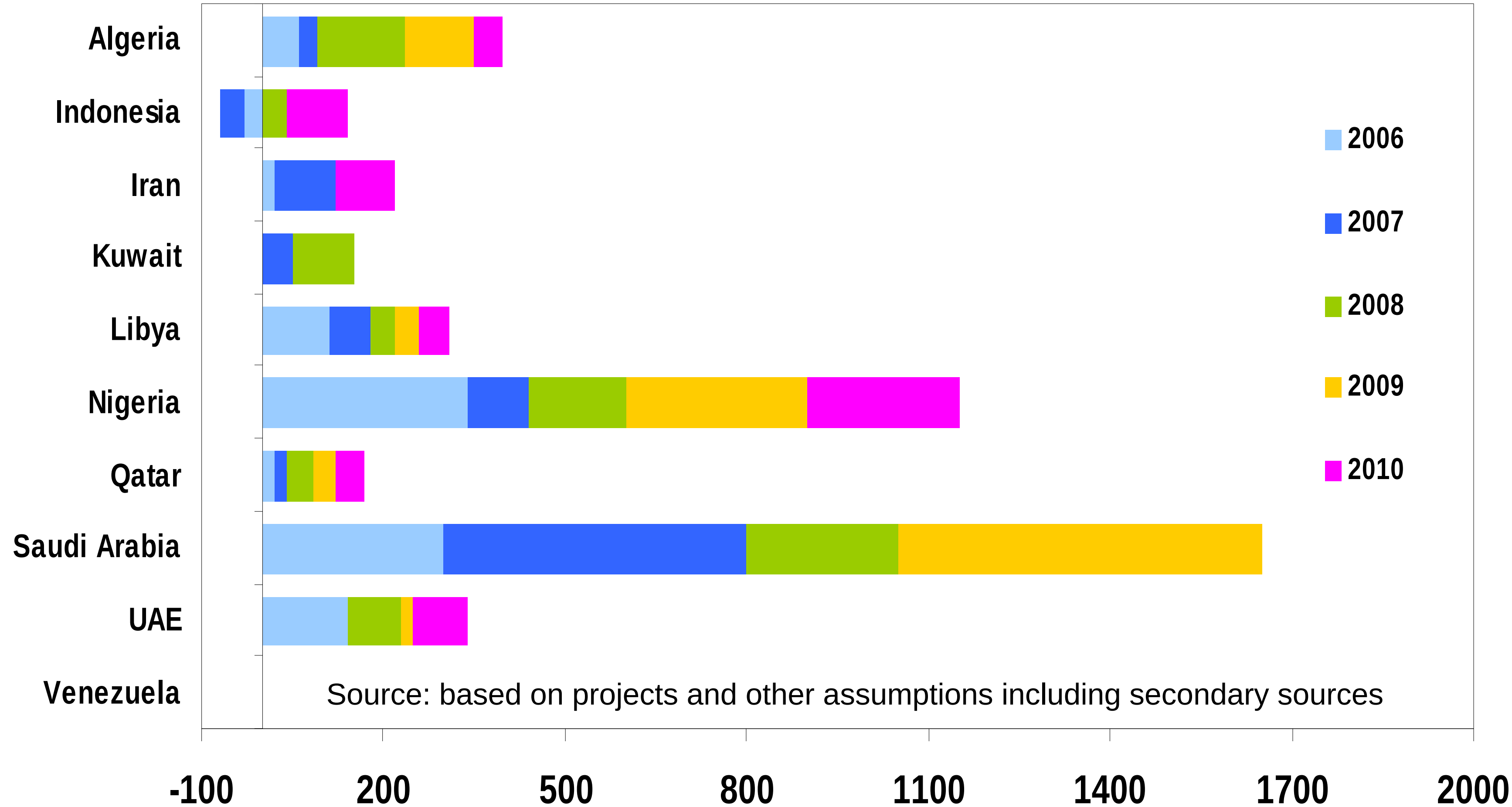
Global energy security: shared responsibility

- **Global energy security is fundamental to life in 21st Century**

- **The basis for global energy security is a balanced and mutually supportive supply and demand network at reasonable price levels to both consumers and producers**

OPEC 10 capacity expansion plans, (tb/d)

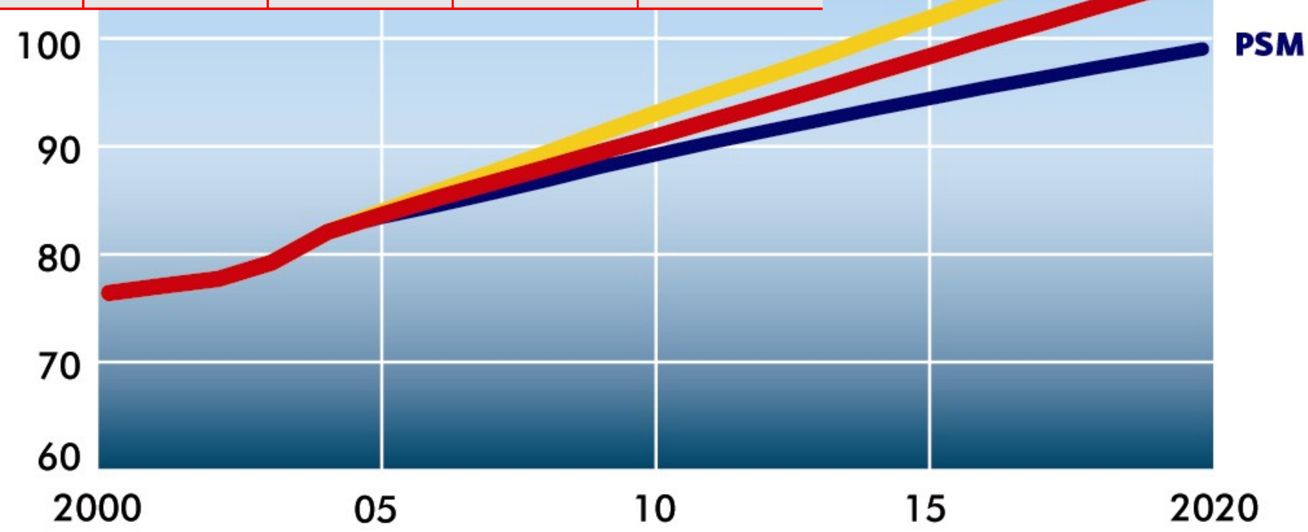
- **Over 100 projects with cumulative investments of more than $100 billion!**
- **50% of these projects are in partnership with IOC's**
- **OPEC-10 cumulative capacity increase > 4 mb/d by 2010, with Iraq: 5-6 mb/d**
- **Production of other liquids + NGL is also expected to increase by 2 mb/d**



Oil demand outlook, mb/d

- **Oil demand increases by 30 mb/d by 2025, or 1.5 mb/d annually**
- **Four-fifths of the increase in demand comes from developing countries**
- **Transportation continues to be the dominant source of growth (~60 %)**
- **Many uncertainties: GDP, technology, policy.**

Reference	2005	2010	2015	2020	2025
OECD	49.8	51.4	52.7	53.8	54.7
DCs	29.0	34.4	40.3	46.4	52.8
Transition economies	4.8	5.1	5.4	5.7	5.9
Total World	83.6	90.9	98.4	105.9	113.4

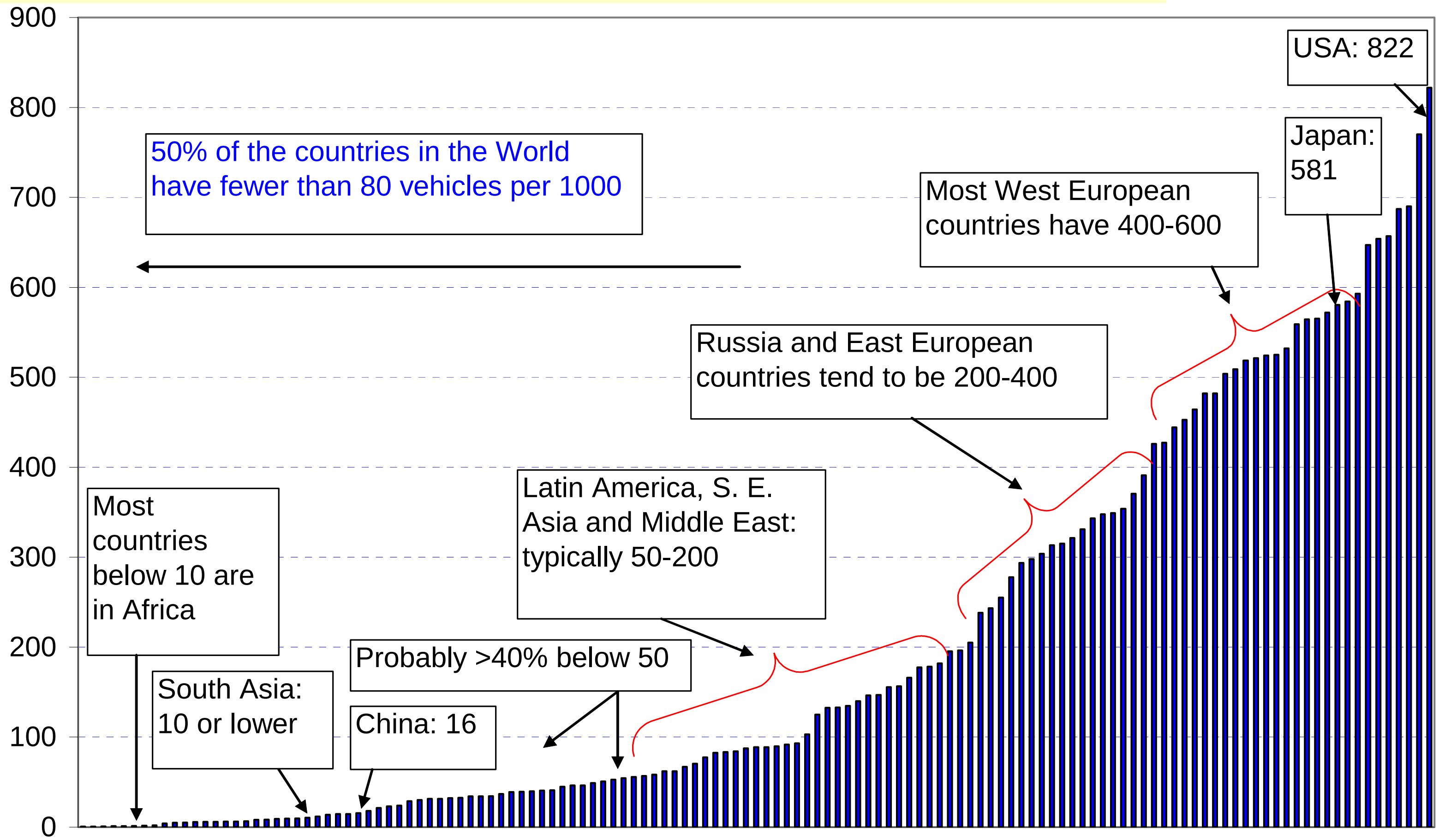


Vehicle ownership per 1000 inhabitants in 2003

- **In DCs: structural change in the economy - growing faster than the rest of the world, fueled by strong growth in oil**
- **Long-way to go: in line with rising per capita income levels, low per capita oil demand is yet to approach levels of other countries!**

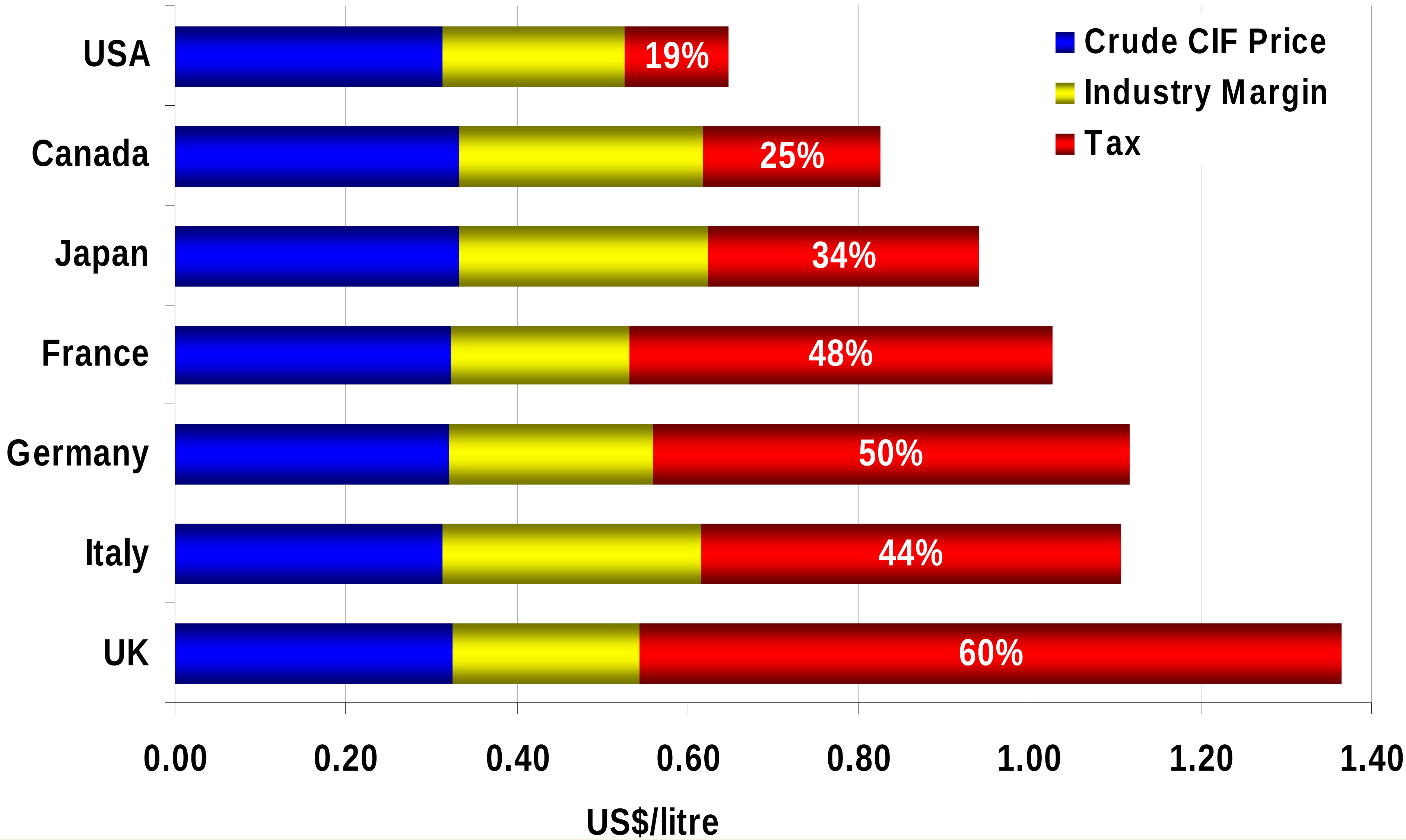
Per capita oil demand ratios

	India	China
Brazil	6	3
UK	14	7
USA	34	16



Taxation of oil products

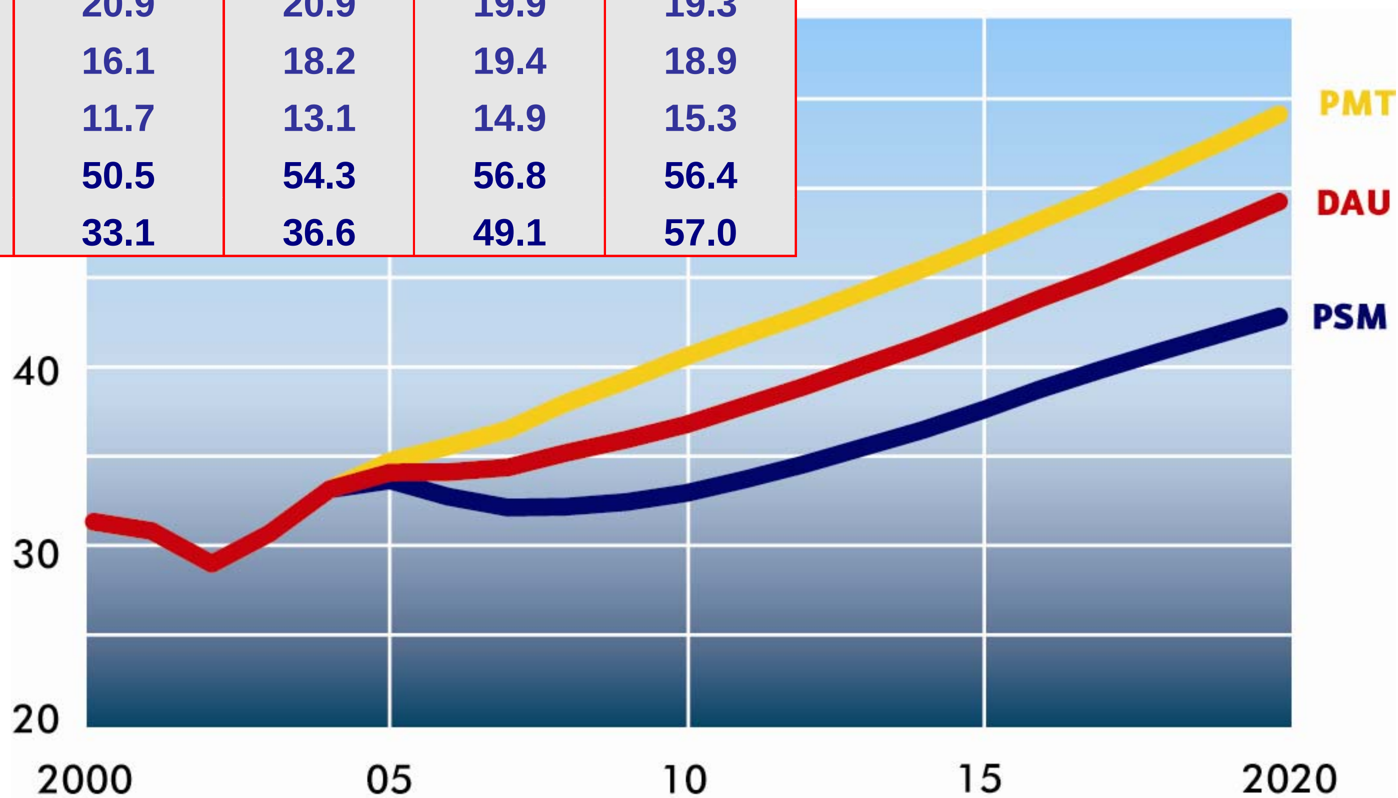
Diesel prices & taxes, December 2005



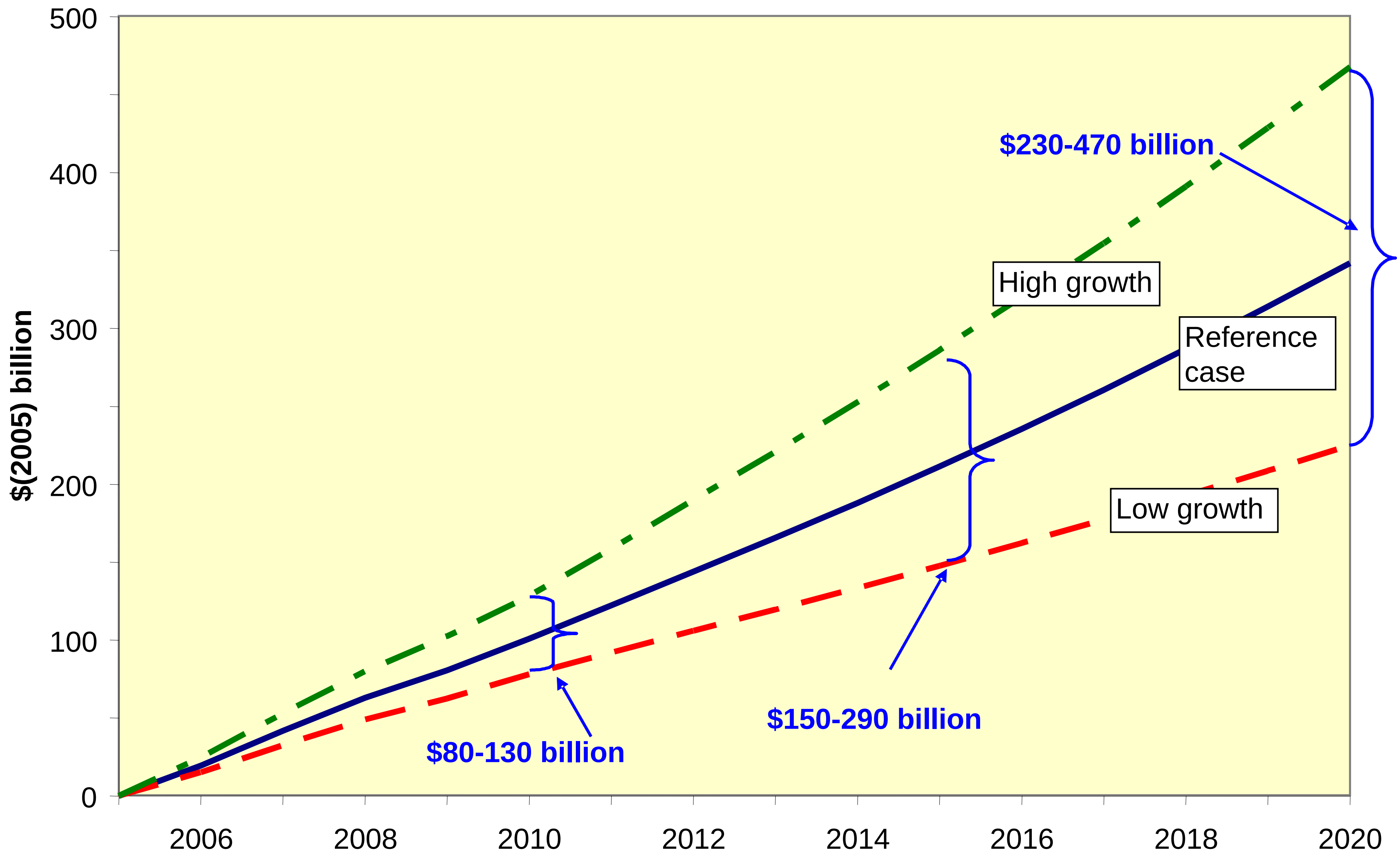
There is considerable uncertainty over how much oil OPEC will need to produce, (mb/d)

- **Significant uncertainties with substantial downside risks.**
- **Considerable implications on the scale & timing of investments!**
- **“Road-map” for oil demand is called for!**

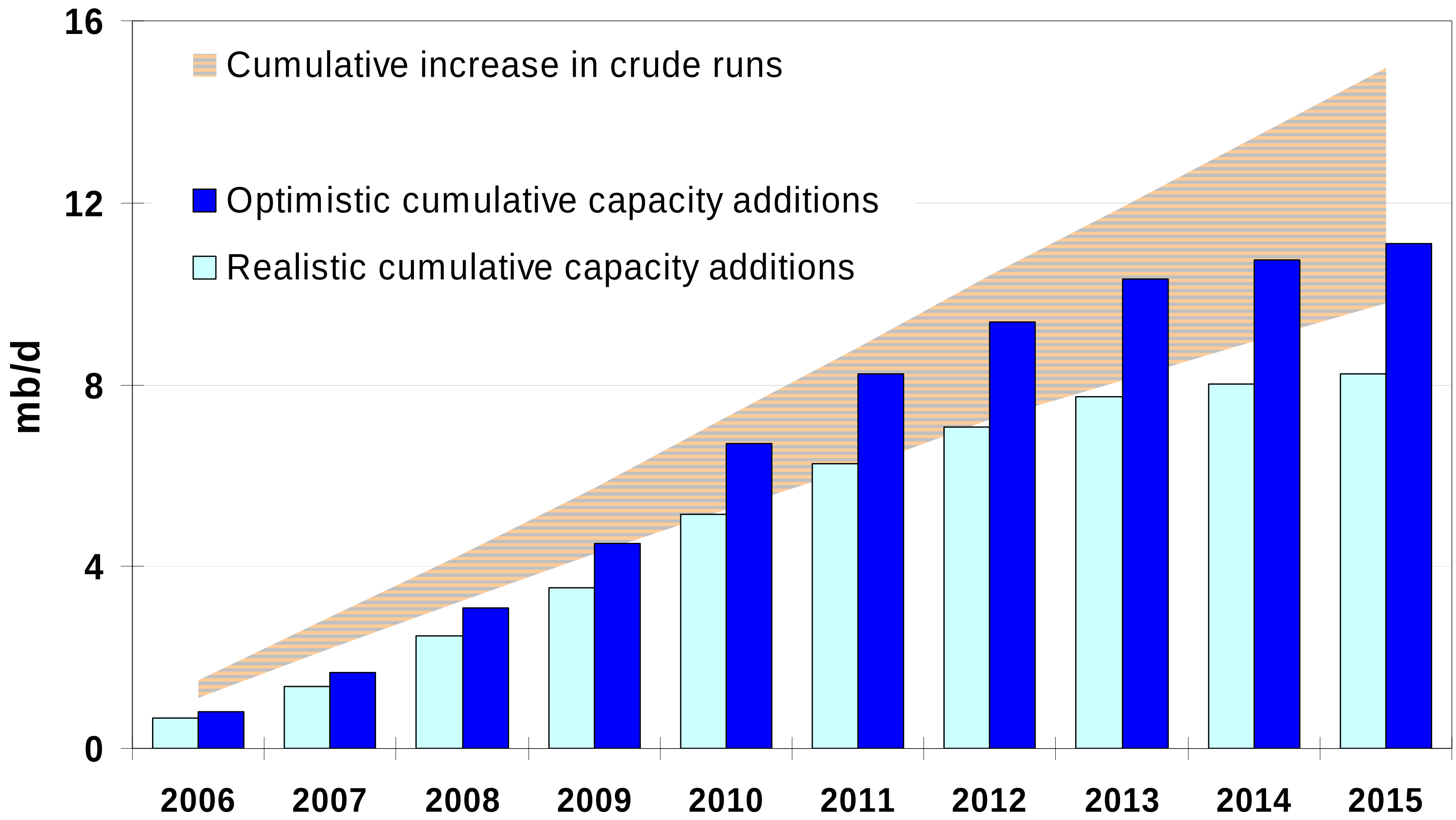
Reference	2005	2010	2020	2025
OECD	20.9	20.9	19.9	19.3
DCs (exc. OPEC)	16.1	18.2	19.4	18.9
Russia & Caspian	11.7	13.1	14.9	15.3
Non-OPEC	50.5	54.3	56.8	56.4
OPEC (inc. NGLs)	33.1	36.6	49.1	57.0



Uncertain future demand translates into a broad range of possible OPEC investment needs

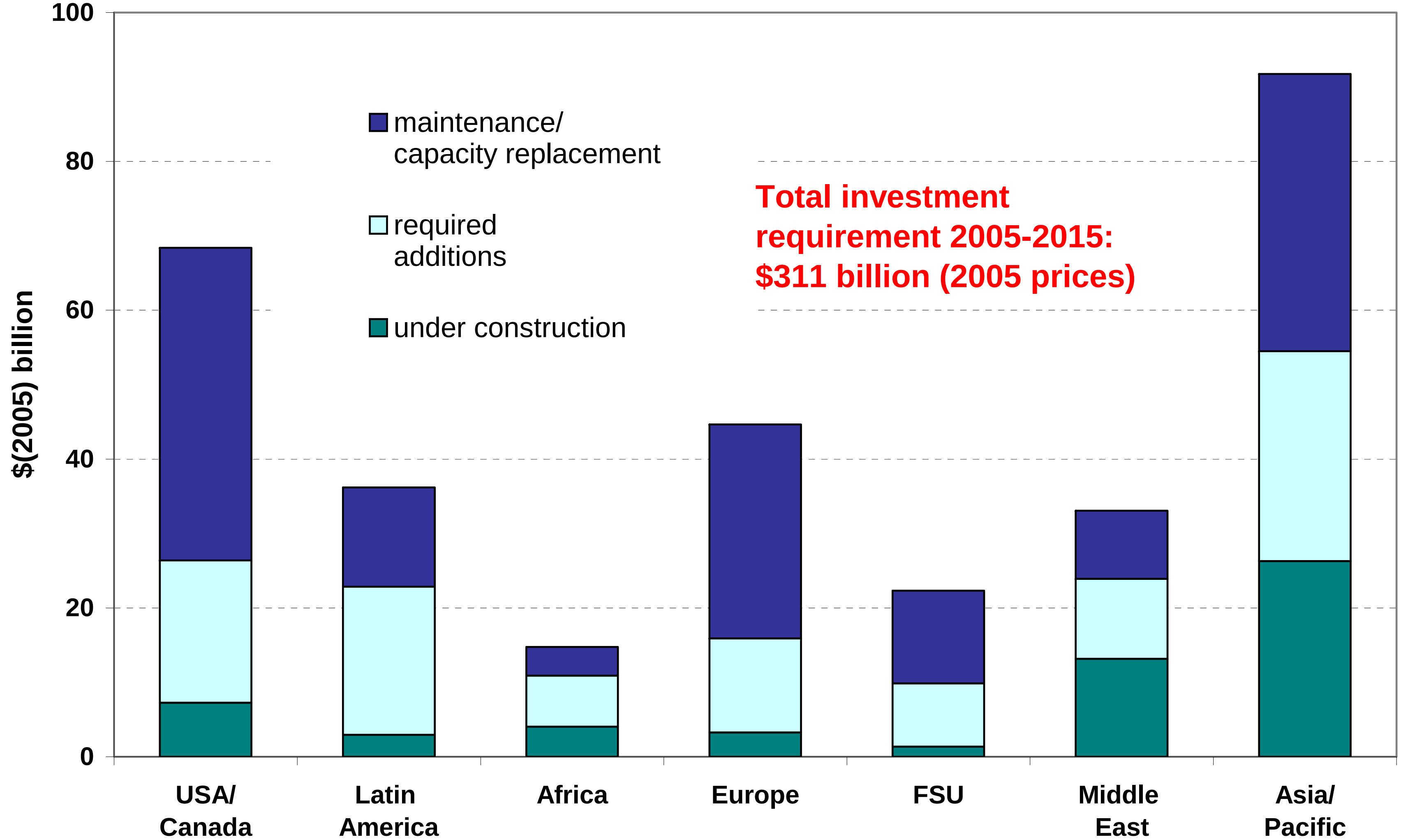


Distillation capacity additions vs. incremental crude runs

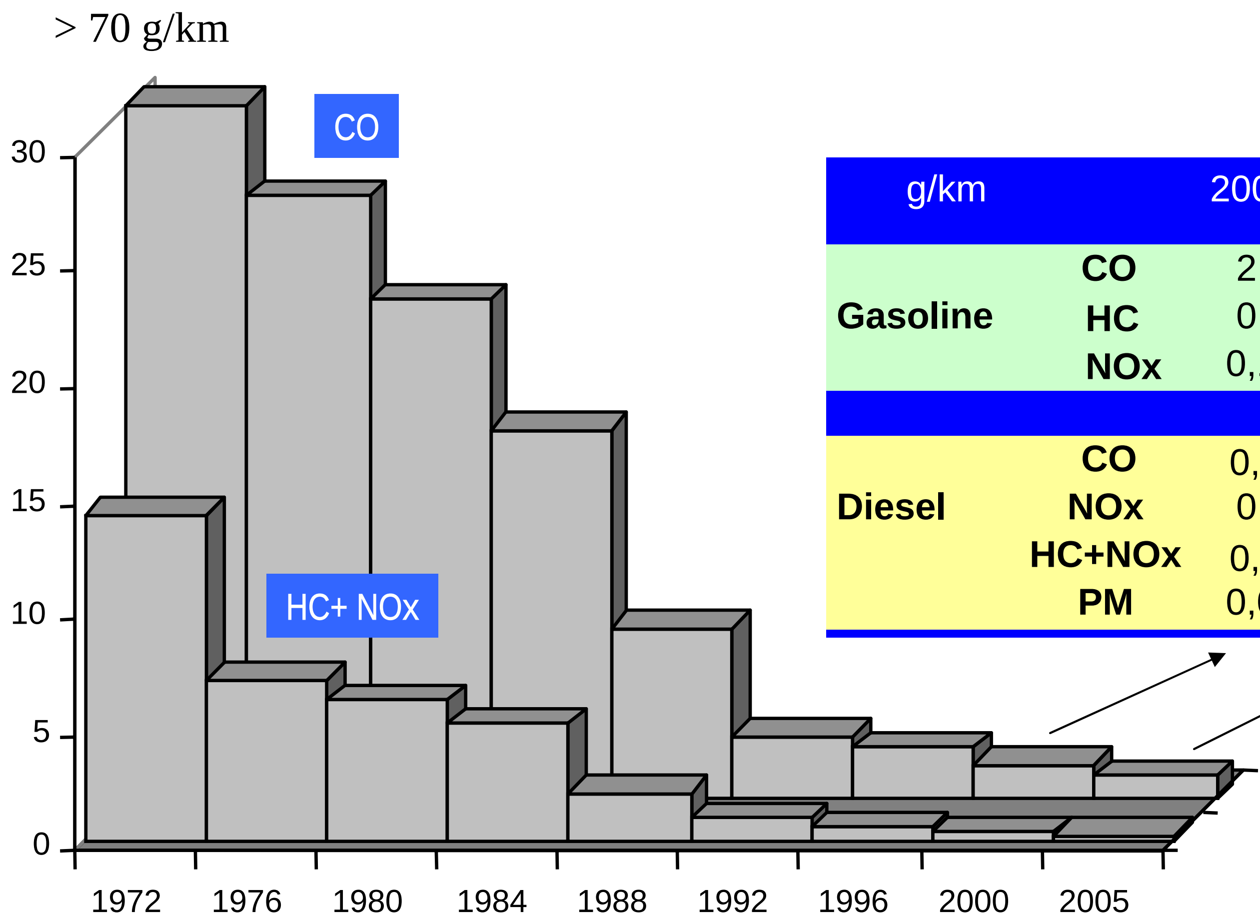


Cumulative increases from 2005

Refining investments in the reference case 2005-2015,



Huge progress has been made in addressing local pollution concerns: evolution of pollutant emissions (individual cars)



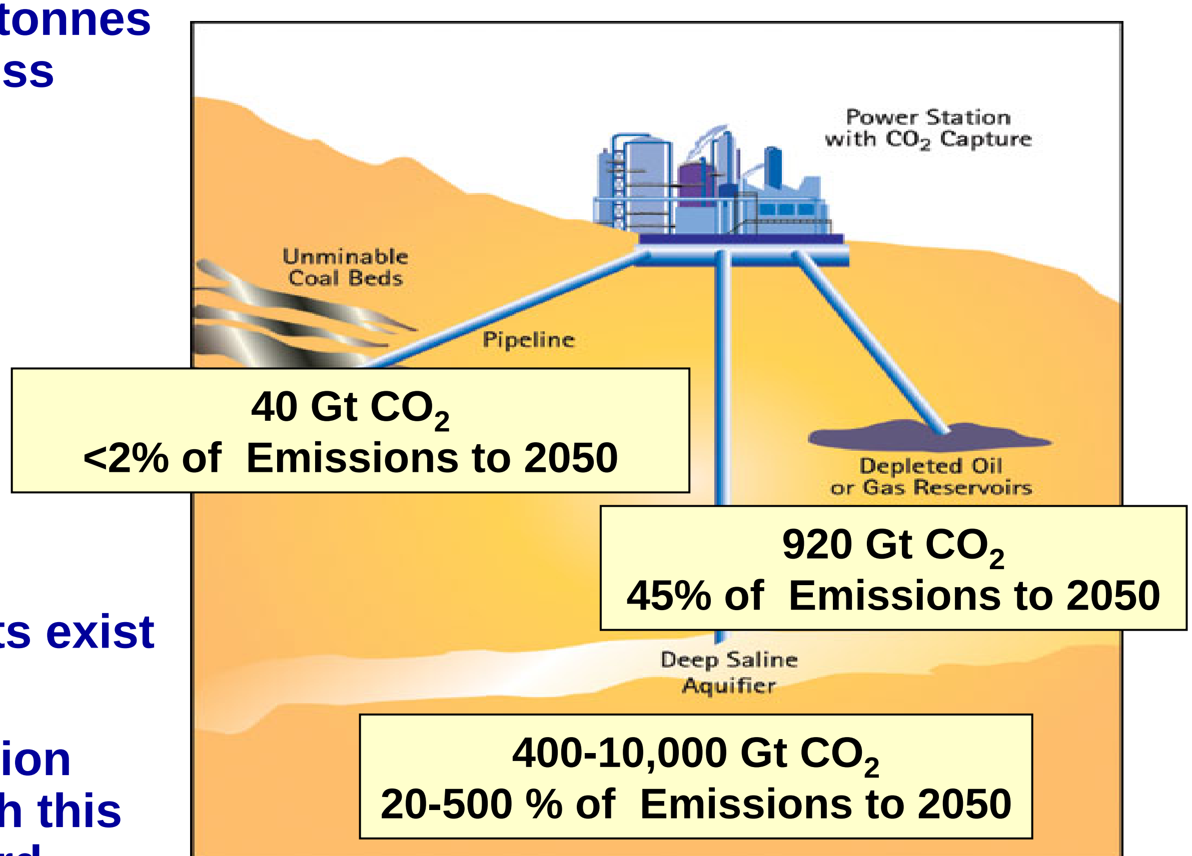
g/km		2000	2005
Gasoline	**CO**	2,3	1
	HC	0,2	0,1
	NOx	0,15	0,08
Diesel	**CO**	0,64	0,5
	NOx	0,5	0,25
	HC+NOx	0,56	0,3
	PM	0,05	0,025

Source: IFP

Carbon capture and storage

- **Cost to sequester 750 gigatonnes CO_2 is small relative to Gross World Product**
- **CO_2 Capture issues**
- **CO_2 Transport & storage**
- **CO_2 EOR**
- **CCS demonstration projects exist**
- **But large scale demonstration projects are needed to push this technological option forward**

CO_2 Storage



Source: IEA

Enhanced & more in-depth Dialogue

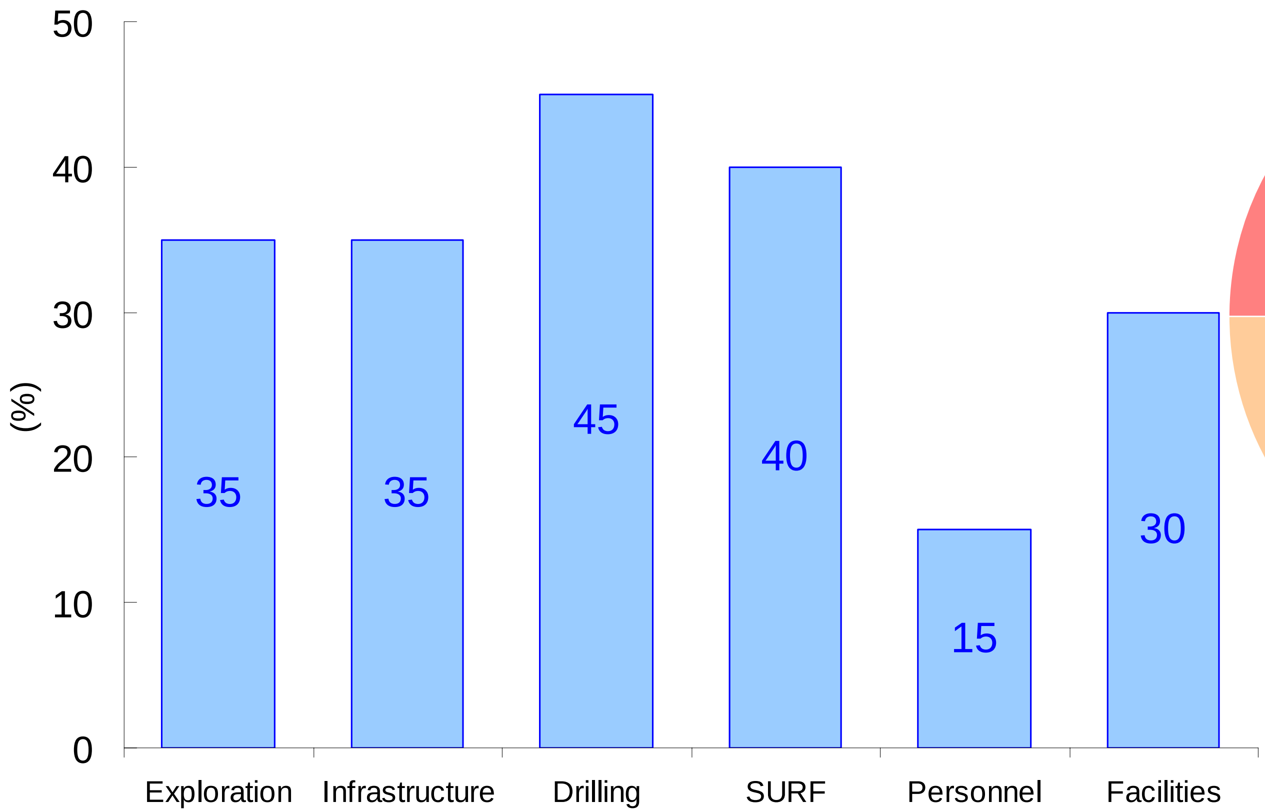
"Dialogue… should be widened and deepened to cover more issues of mutual concern…"

The OPEC Long-Term Strategy

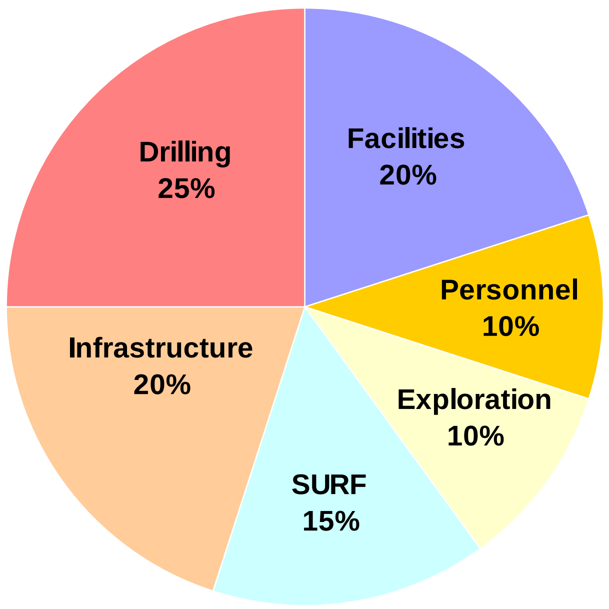
- **2005 — launch of formal Energy Dialogues between OPEC and: EU, China, Russia**
    - **3rd EU-OPEC Energy Dialogue (June 7, 2006)**
- **10th International Energy Forum (IEF), Doha**

Rising project costs: indicative cost rises

- 3D seismic costs have doubled in the last 24 months
- Deepwater drilling day rigs up at least 50% in 12 months. Contracts at $500k/d for 2008.
- Wage pressure is escalating with growing shortage of skilled labor (~15% rise in 2005)
- Steel is a major component of infrastructure & facilities, with prices up 40% since 2004.



Cost split for a typical deepwater development



Source: Goldman Sachs, OPEC Secretariat

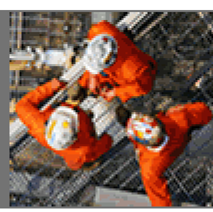
Concluding remarks

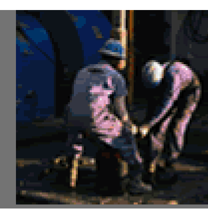
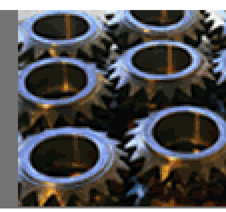
- Recent market conditions influenced by a convergence of factors
- Tightness in downstream sector as a potential source of instability
- Security of demand and security of supply are mutually supportive
- Uncertain scale of investment required in OPEC
- Investment requirements are large, subject to long lead-times and pay-back periods
- Key role of energy in supporting the three pillars of sustainable development (social and economic development and the protection of the environment)
- Recognise the role of technology in addressing climate change: carbon capture and storage
- The pressing need to eradicate human poverty: an overriding priority

OPEC

Thank you

www.opec.org



Stability in the oil market