



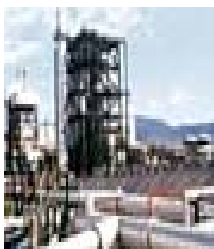
Third OPEC International Seminar

OPEC in a New Energy Era: Challenges and Opportunities

12-13 September 2006, Vienna, Austria



Oil Production Capacity Expansion



HE Dr Chakib KHELIL,

Minister of Energy and Mines, Algeria

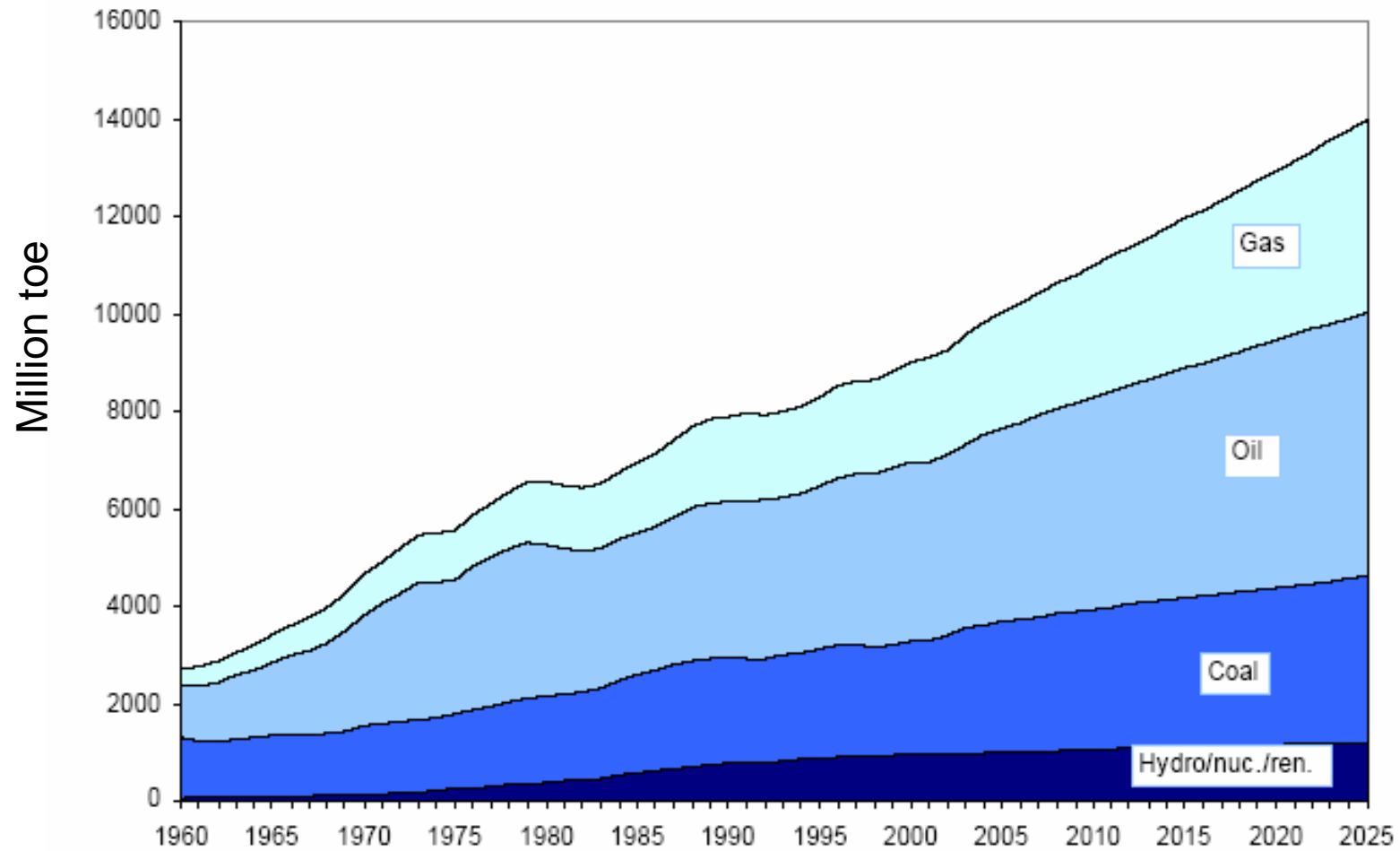


Outline

- I. Prospects for Oil Demand & Supply
- II. OPEC Upstream Capacity Expansion Plans
- III. NOC/IOC Co-operation
- IV. Concluding Remarks

I. Oil Demand & Supply

World Primary Energy Demand



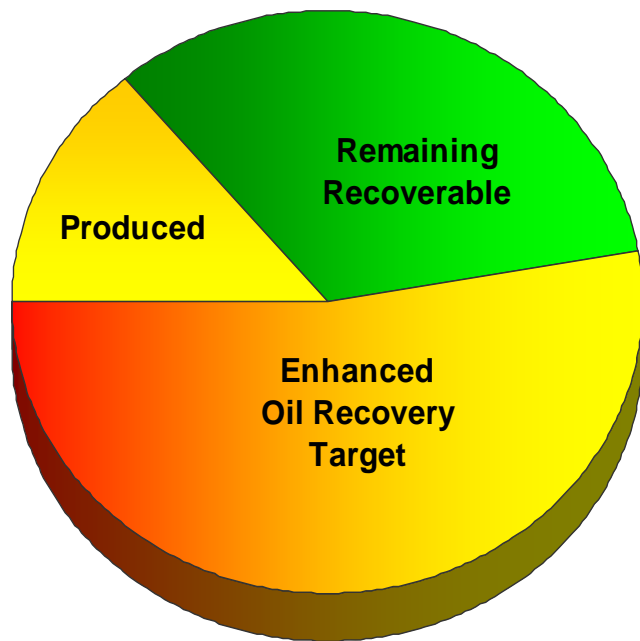
Source: OPEC

I. Oil Demand & Supply

Conventional & Non-Conventional Oil Resource

Conventional oil:

~6-8 Trillion barrels of oil in place

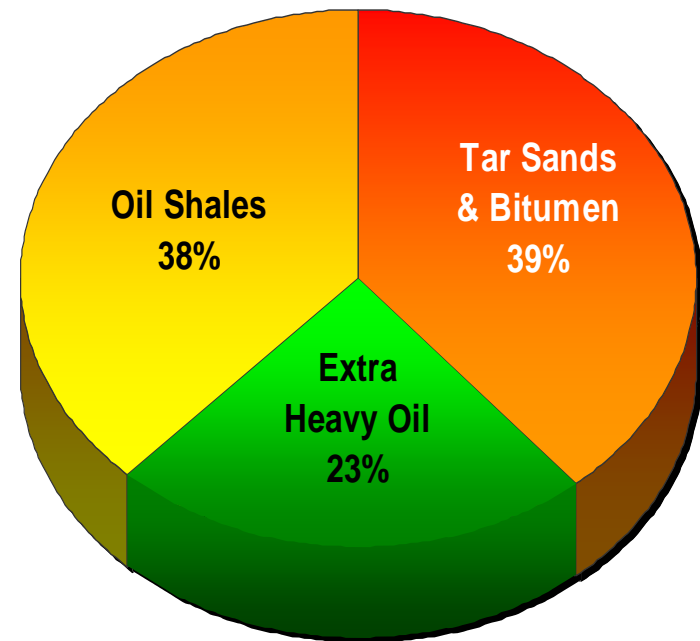


Challenge :

Improved recovery technologies needed

Non-Conventional Oil:

~7 Trillion barrels of oil in place



Challenge :

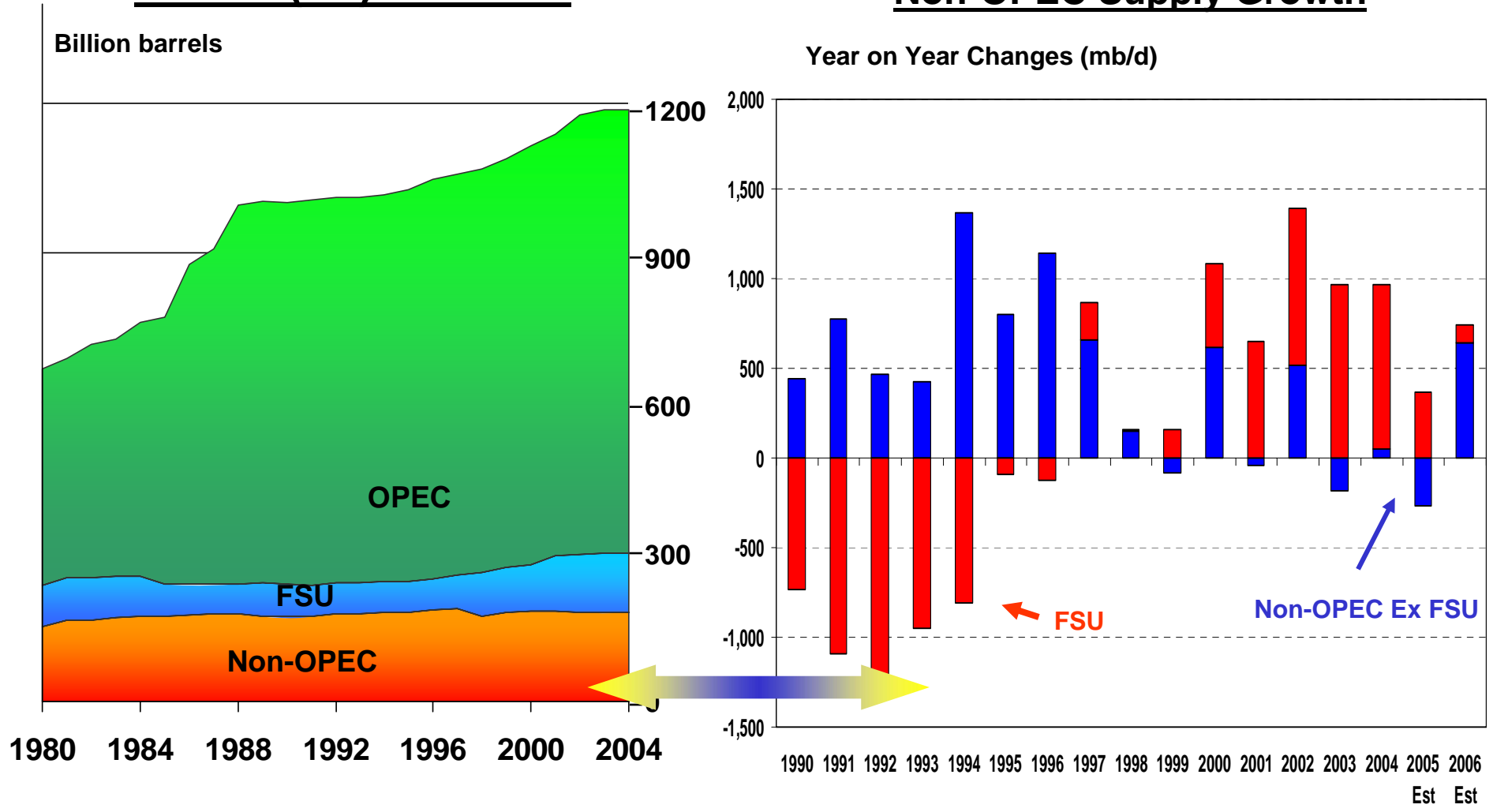
Cost-effective extraction technologies needed

I. Oil Demand & Supply

Proved Reserves vs. Non-OPEC Supply Growth

Proved (Oil) Reserves

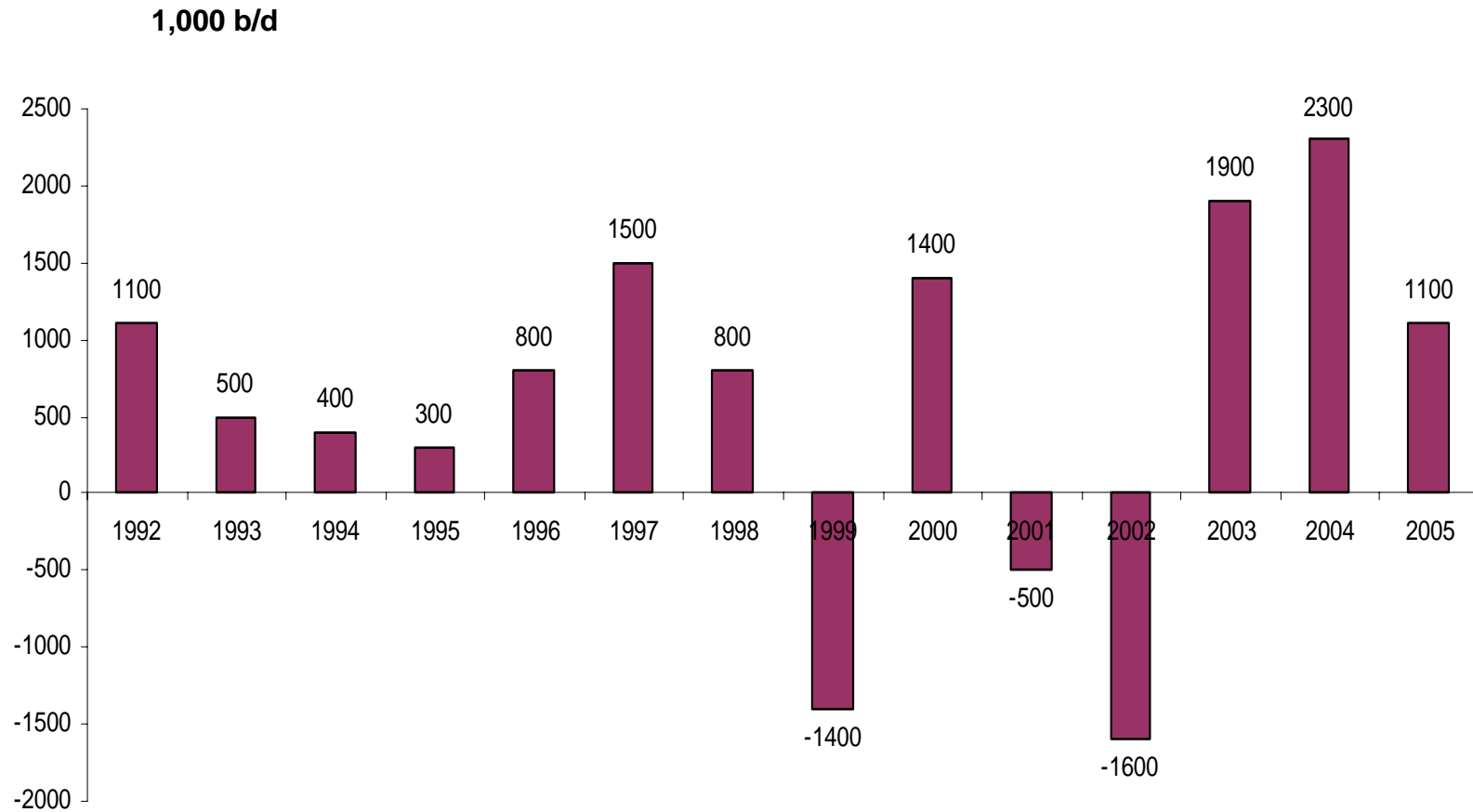
Non-OPEC Supply Growth



Source: BP

I. Oil Demand & Supply

Increase in Demand Met by OPEC

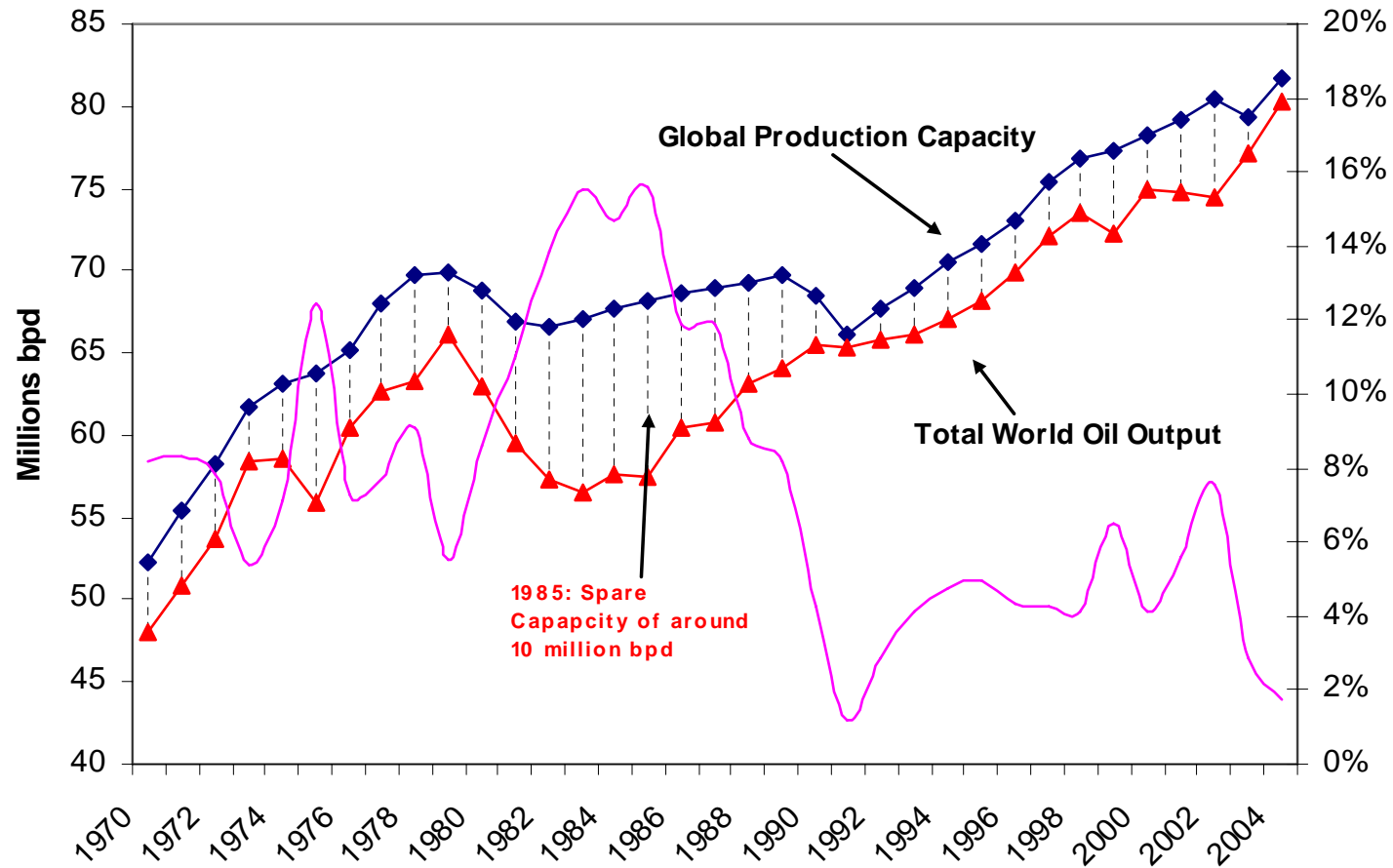


NB: Figures include crude oil, condensates and NGL's

Source: IEA

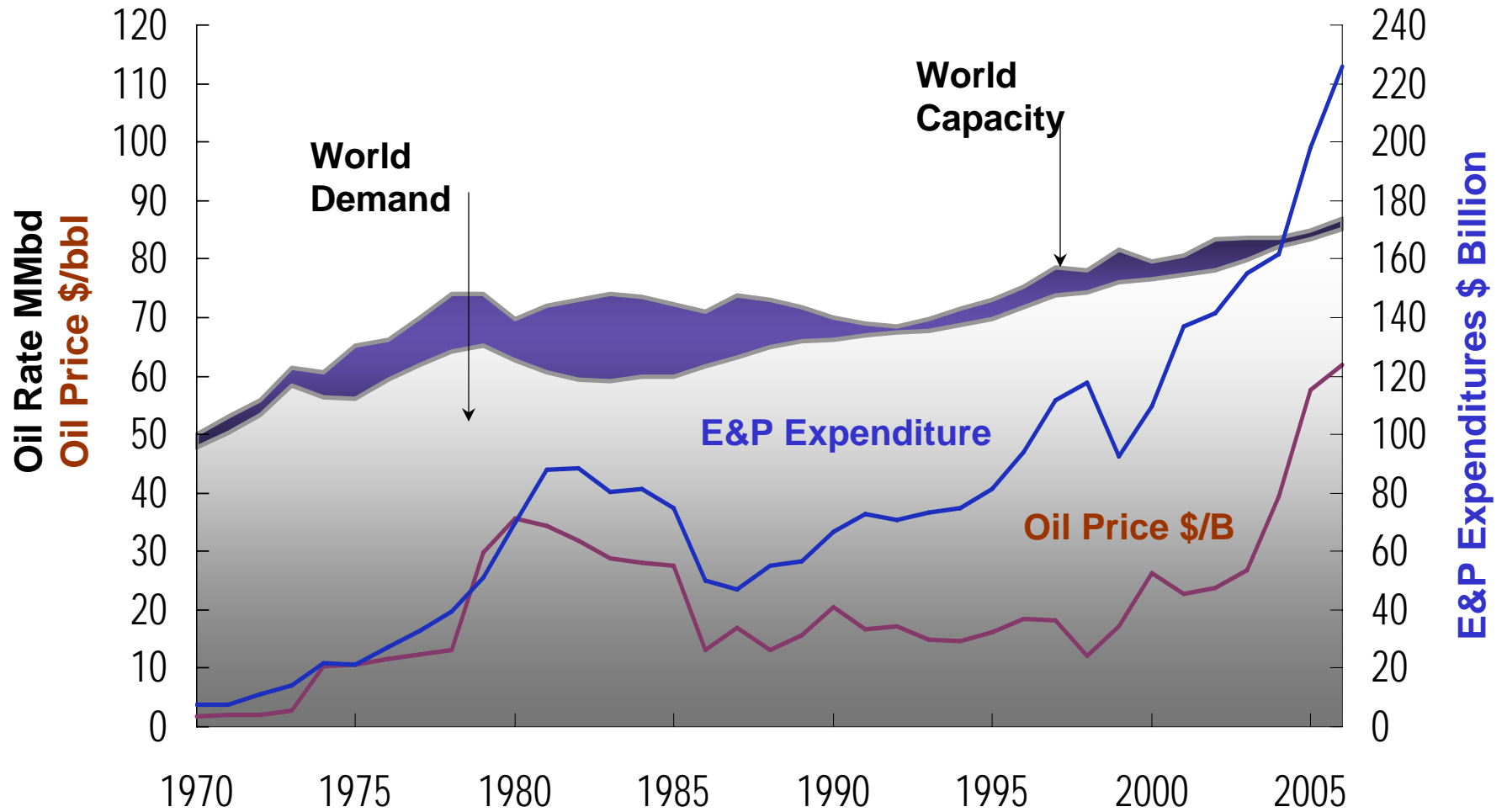
II. OPEC Upstream Capacity Expansion Plans

Erosion in OPEC Spare Capacity : How long ?



Source: IMF & BP

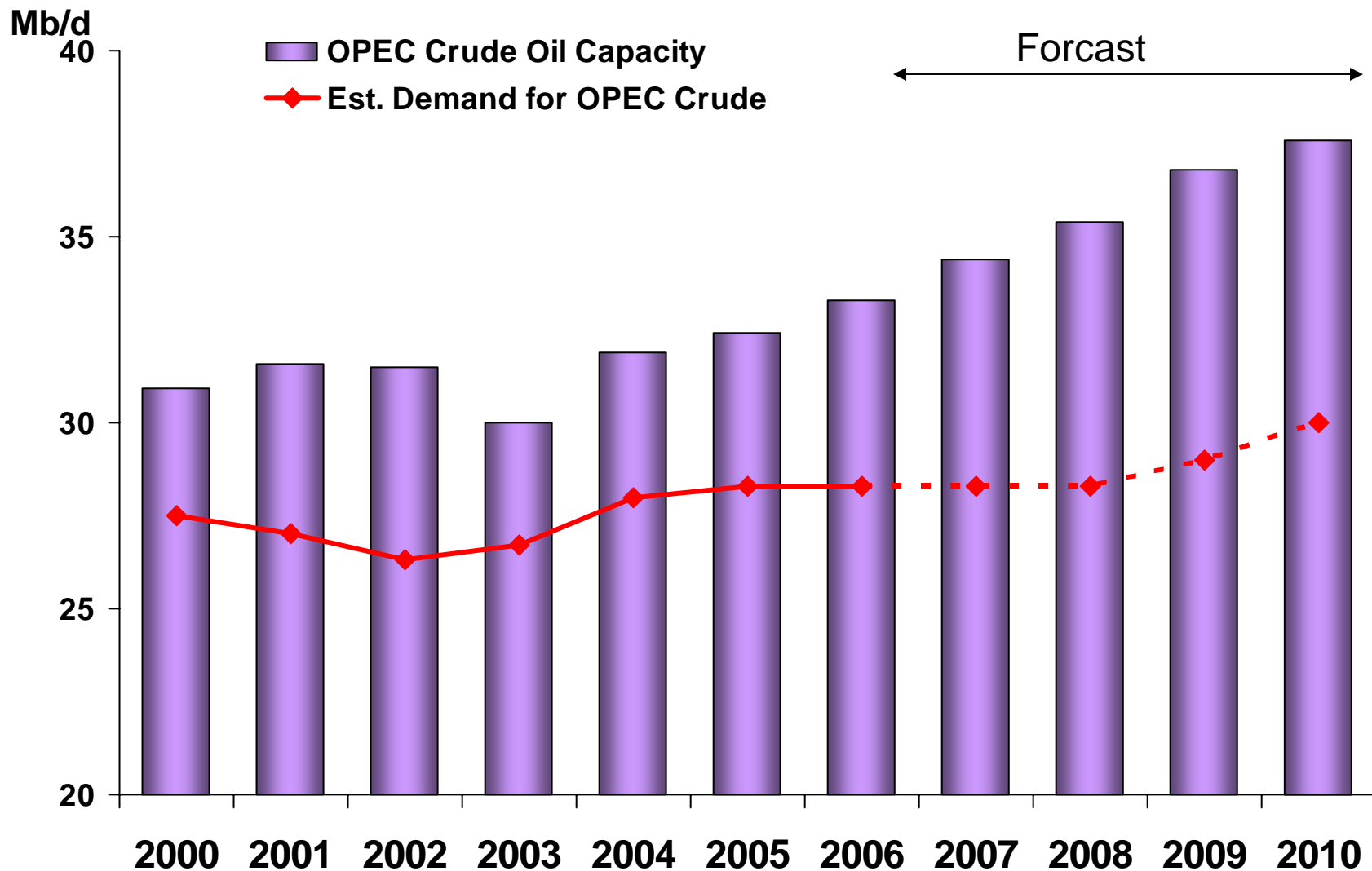
II. OPEC Upstream Capacity Expansion Plans E & P Expenditure



Source: IHS, BP, IEA, OPEC & Salomon Smith Barney.

II. OPEC Upstream Capacity Expansion Plans

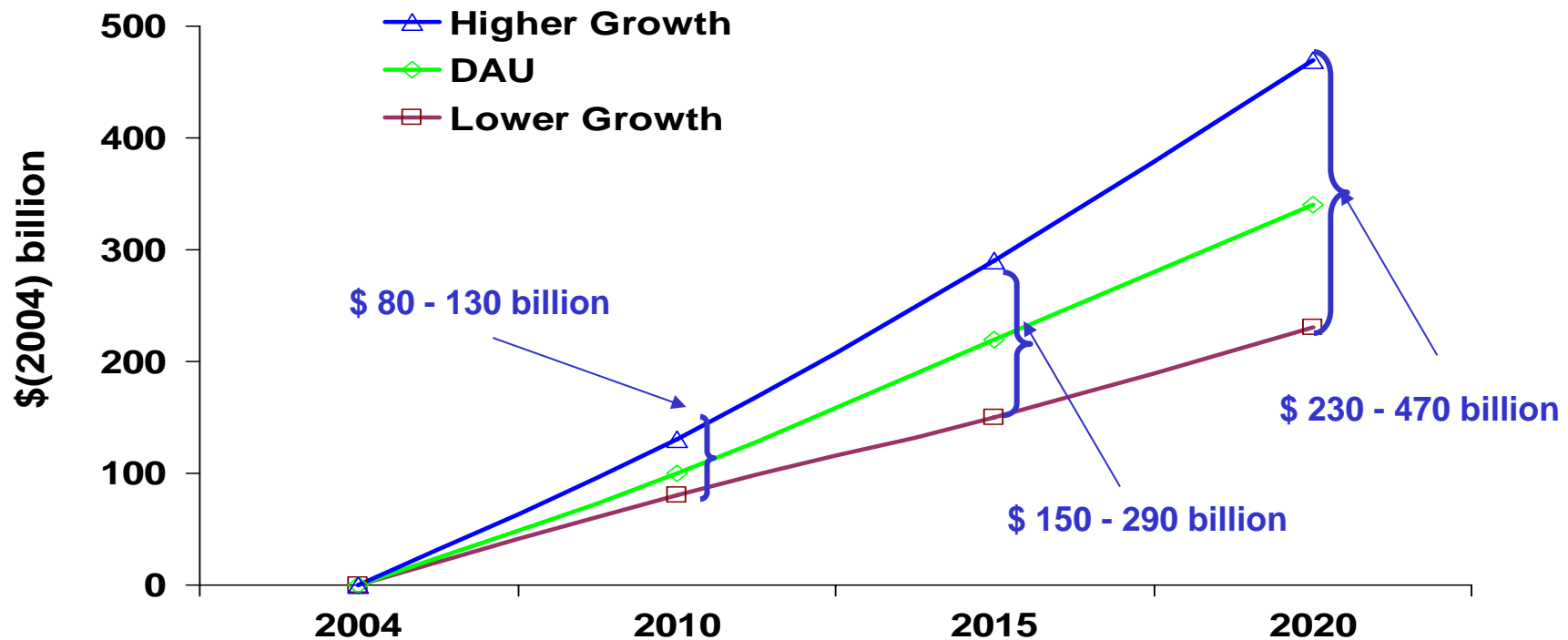
OPEC Crude Capacity Expansion Plans



Source : OPEC

II. OPEC Upstream Capacity Expansion Plans

Cumulative OPEC investment requirements vs. Demand estimations



Call on OPEC Oil (*):

Lower Growth	34	37	41
DAU	35	40	46
Higher Growth	36	42	49

(*) Including NGL's

Source : OPEC

III. Producers - Consumers Dialogue : The Challenges

- High prices contribute to record cash flows for E&P companies but intensify competition for opportunities;
- High service costs and declining size of discoveries are increasing risk capital exposure and putting pressure on returns;
- New efforts are required to overcome the challenges in today environment :
They may force energy companies (IOCs, NOCs and Independents) to Join efforts to capitalize on competitive advantages (expertise, operating experience and technology).

III. Producers - Consumers Dialogue : OPEC efforts

- 1 – International Energy Forum (IEF) with Secretariat in Riyadh;
- 2 - Joint Oil Data Initiative (JODI);
- 3 – OPEC Bilateral dialogues (IEA; EU; China; India; *Russia...*);
- 4 - OPEC Seminar.

IV. Concluding remarks:

- The resource base is sufficient to meet expected world oil demand growth,

However,

- Medium-term supply outlook presents real energy policy challenges,

Hence,

- Without reserve additions, Non-OPEC countries will face increasing challenges to expand conventional oil production,
- OPEC will face the challenge of timely expanding its production capacity in order to both meet demand growth and to contribute to oil market stability.