Oil Production Capacity Expansion

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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

- Produced
- Remaining
- Recoverable
- Enhanced
- Oil Recovery
- Target

Challenge:
Improved recovery technologies needed

Non-Conventional Oil:
~7 Trillion barrels of oil in place

- Oil Shales
  38%
- Extra
  Heavy Oil
  23%
- Tar Sands
  & Bitumen
  39%

Challenge:
Cost-effective extraction technologies needed

Source: IEA World Energy Outlook 2004
I. Oil Demand & Supply
Proved Reserves vs. Non-OPEC Supply Growth

Proved (Oil) Reserves

Non-OPEC Supply Growth

Year on Year Changes (mb/d)

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

- **OPEC Crude Capacity**
- **Forcast**

Source: OPEC
II. OPEC Upstream Capacity Expansion Plans
Cumulative OPEC investment requirements vs. Demand estimations

$\begin{align*}
\text{Higher Growth} & : \\
\text{DAU} & : \\
\text{Lower Growth} & :
\end{align*}$

Call on OPEC Oil (*) :

\begin{tabular}{lccc}
& Lower Growth & DAU & Higher Growth \\
2004 & 34 & 35 & 36 \\
2010 & 37 & 40 & 42 \\
2015 & 41 & 46 & 49 \\
\end{tabular}

(*) 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.