

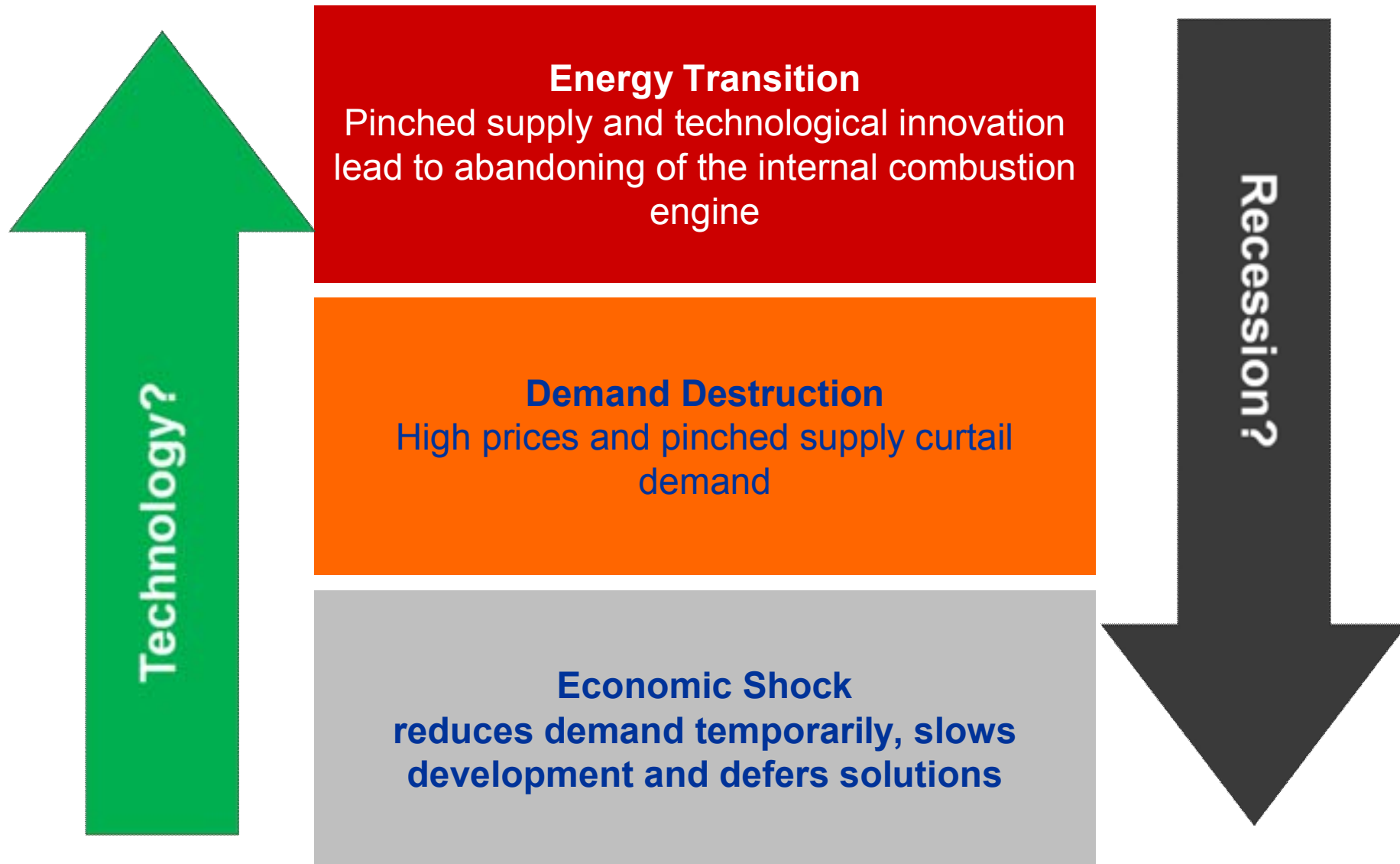
# The Financial Crisis and its Impact on the Oil & Gas Industry

Prepared for World Bank Energy Week  
by Lew Watts

March 2009



# The "Oil Century" may be ending



## But the Oil and Gas industry has been hit with a triple whammy ...

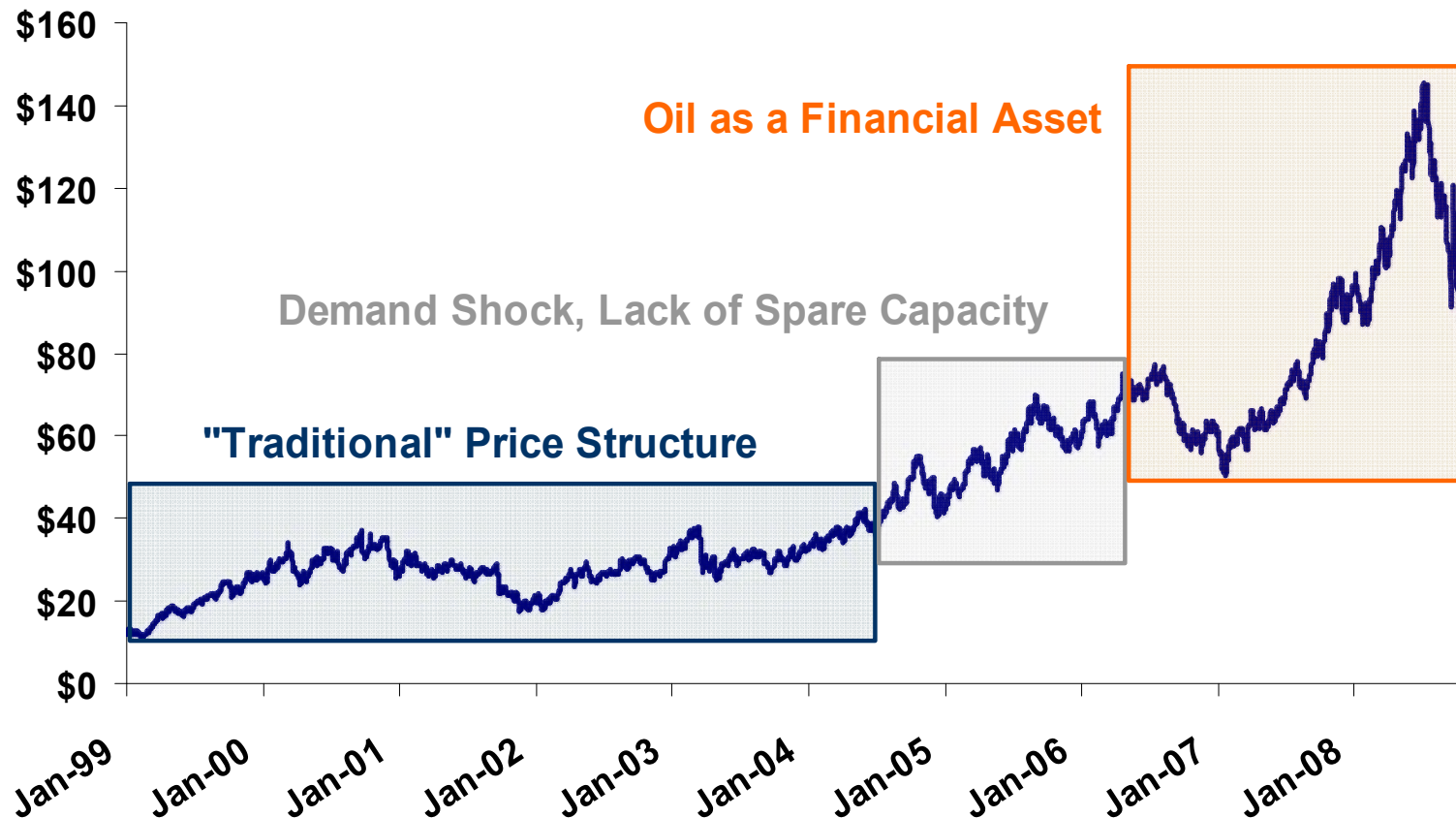


- A massive de-leveraging by financial institutions contributed to a collapse in the price of oil.
- A global economic slowdown is creating a real decline in the demand for oil which will persist for some years.
- The drying up of new credit availability and more restrictive terms will hamper the normal business financing of some players.

**... and perhaps a fourth whammy ...**

- Accelerating momentum towards carbon regulation.

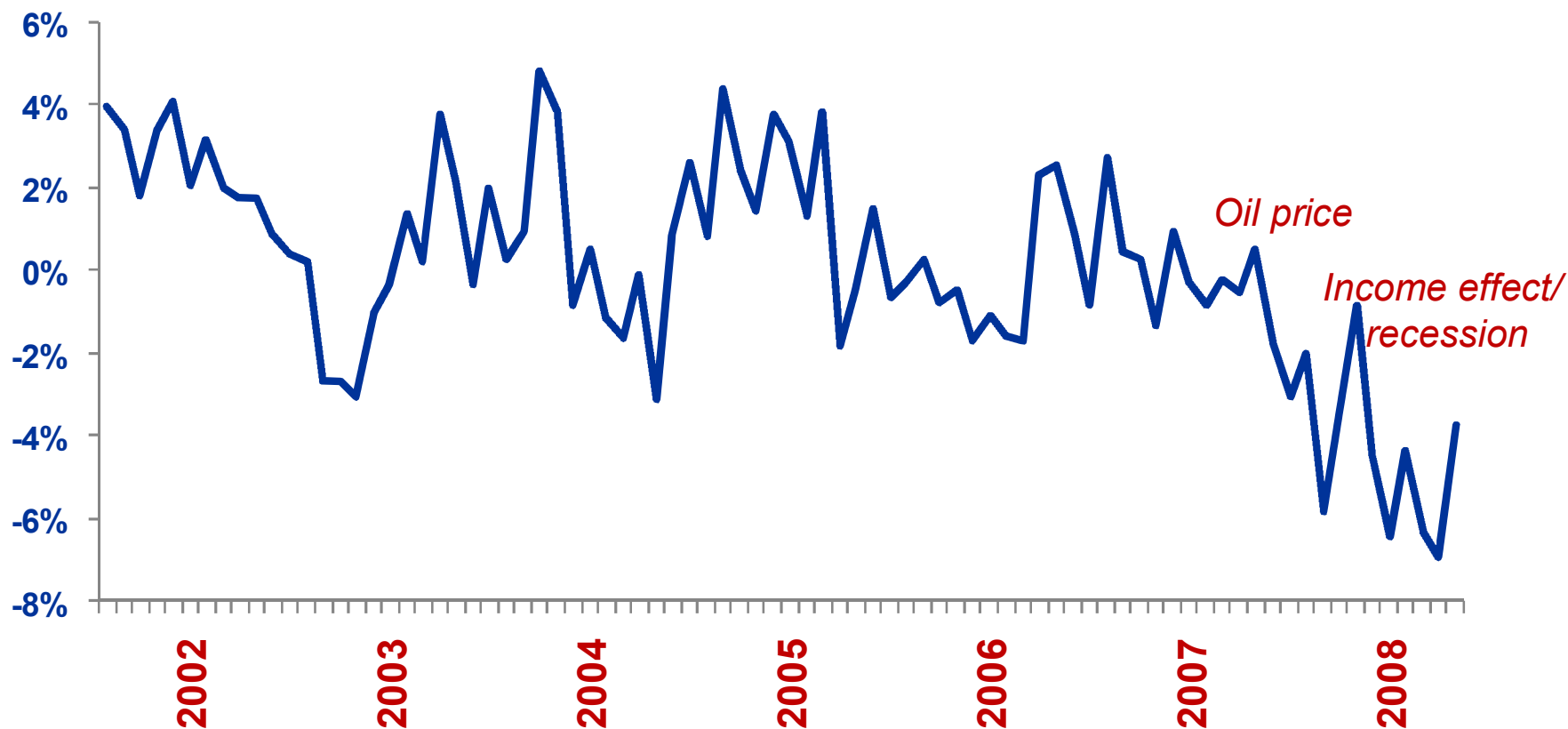
## WTI Prompt Month Price



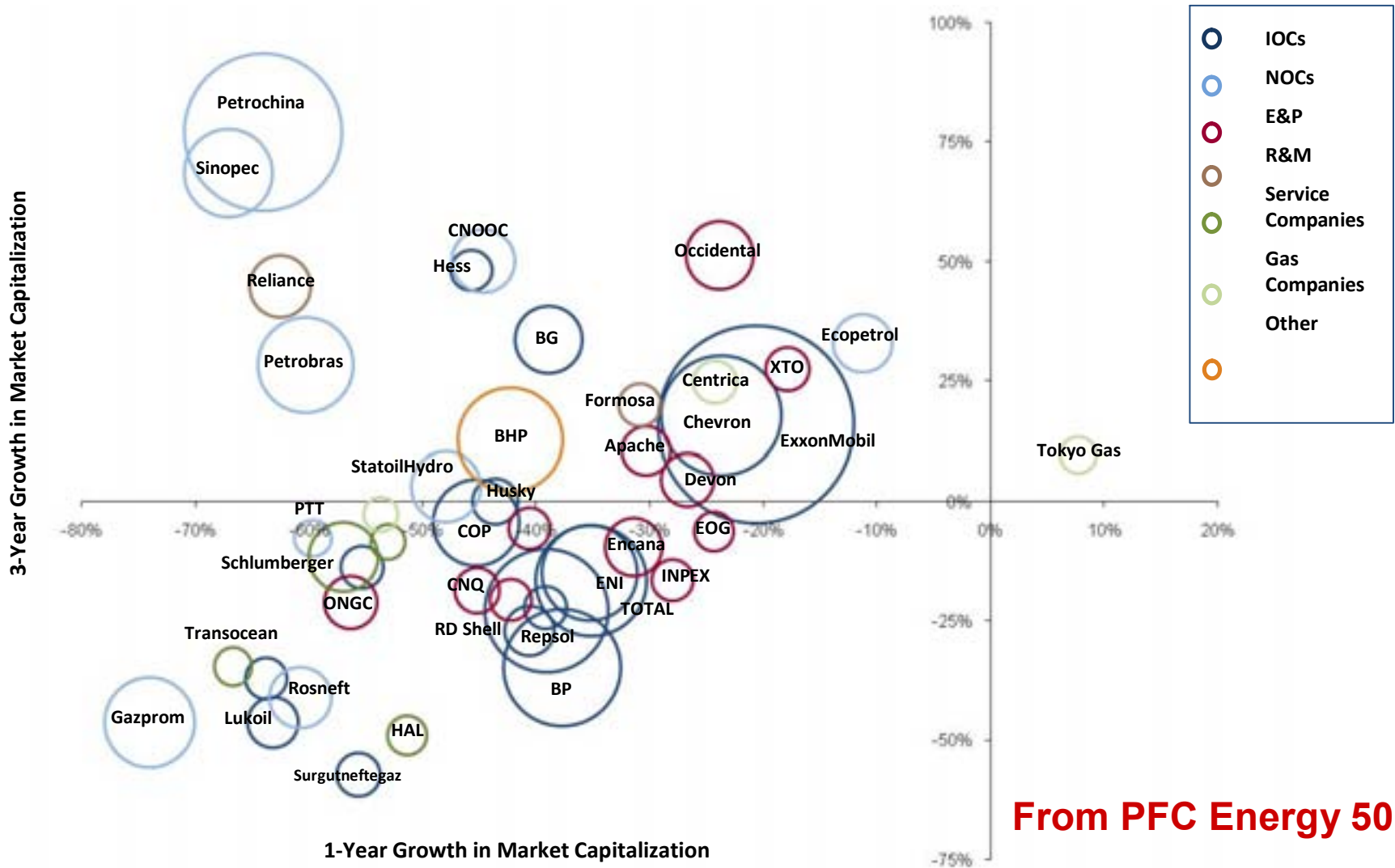
Oil became a financial / investment vehicle  
as well as a physical commodity

# Signs of significant demand destruction

## YOY change in US monthly gasoline demand



# Massive value destruction in value



**From PFC Energy 50**

# Implications to Oil & Gas Companies

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- 1. Some exploration programs and development projects will not be economic at the lower prices and will be deferred or cancelled.**
- 2. Some companies – IOCs, NOCs, Independents and Service Companies – will not be able to find funding, resulting in delays, defaults and consolidation. Cash is King—but so is Paper...**
- 3. Irrespective of demand destruction, a supply crunch still looms in the next decade.**
- 4. Huge uncertainty on potential carbon legislative frameworks, timing and exposure.**

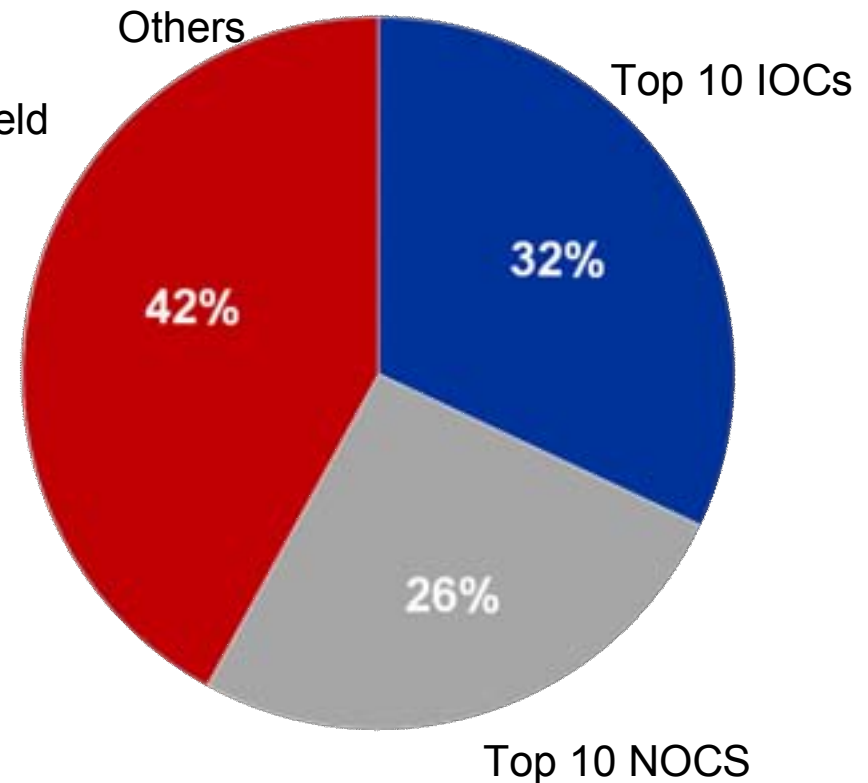
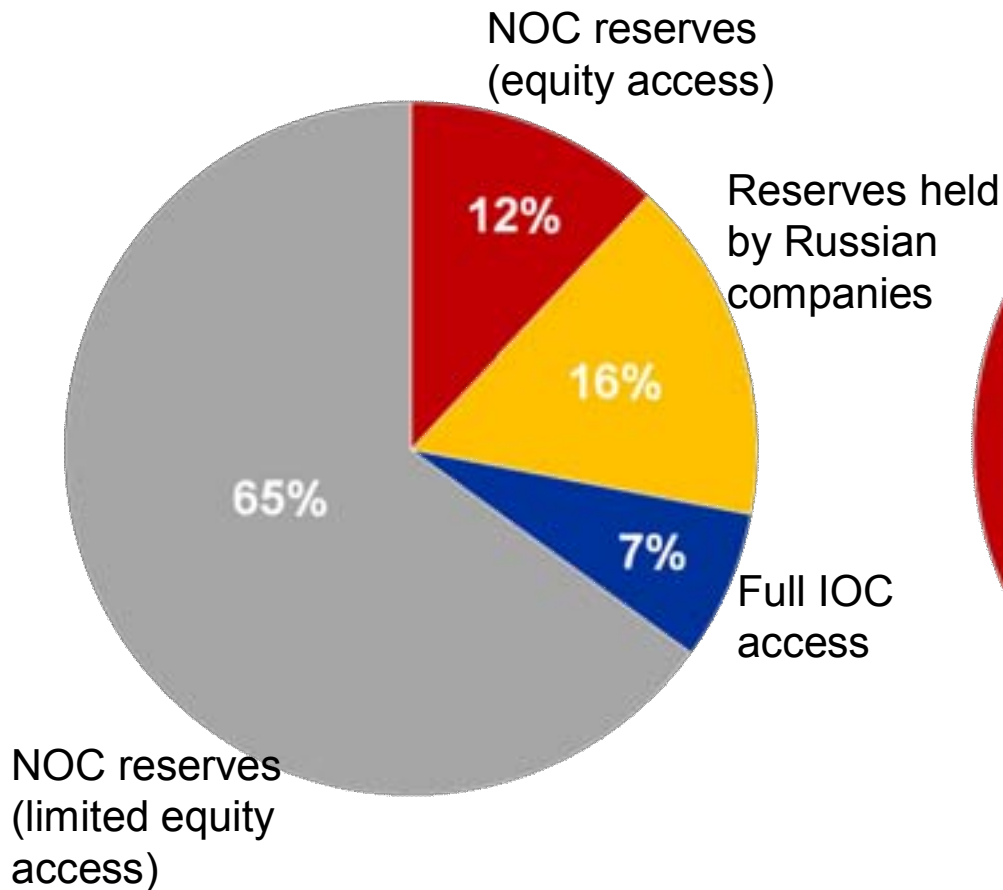
# Cuts, Delays, Consolidation ... and Opportunities

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# IOCs may have limited access—but control bulk of investment

## Access to Reserves

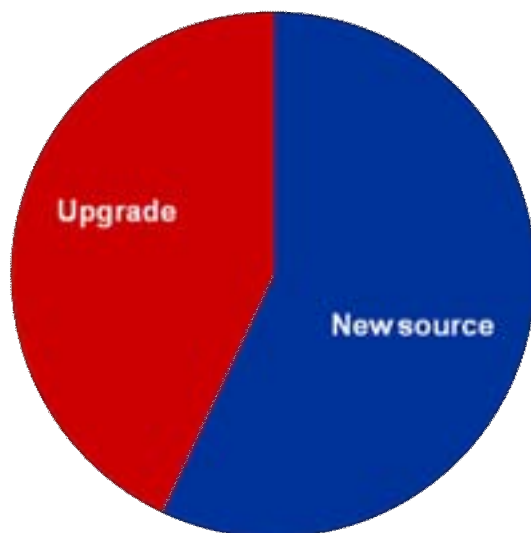
## Total E&P Capex in 2007



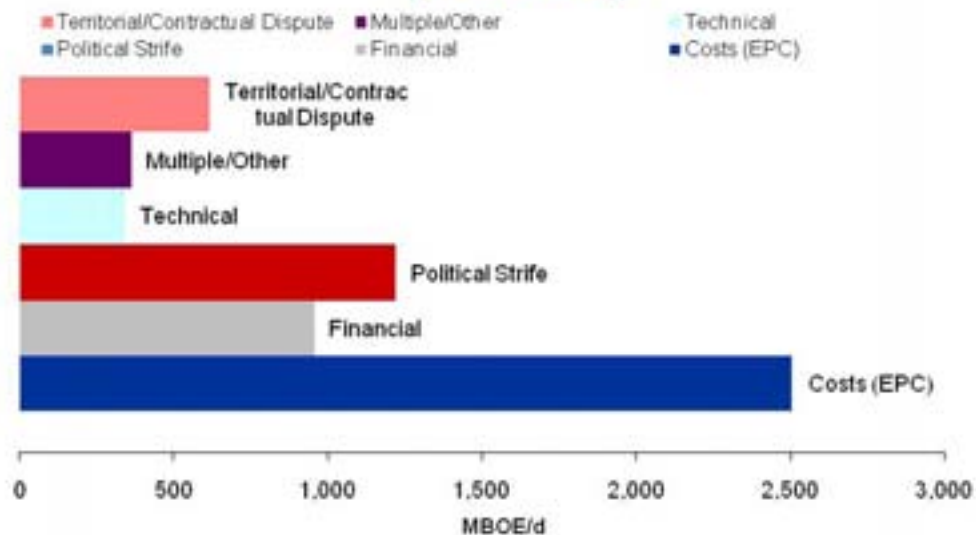
# Oil & Gas sector investment cuts accelerating

- The credit crisis caught independents off guard and the oil price fall weakened all players' finances
- Upstream cuts: Independents, and some IOCs (and NOCs)
  - Some IOCs postponing projects to negotiate lower EPC costs
  - Many other players unable to find financing
- Most affected: new source developments in OECD

Delay/Cancelation (2009-2014)



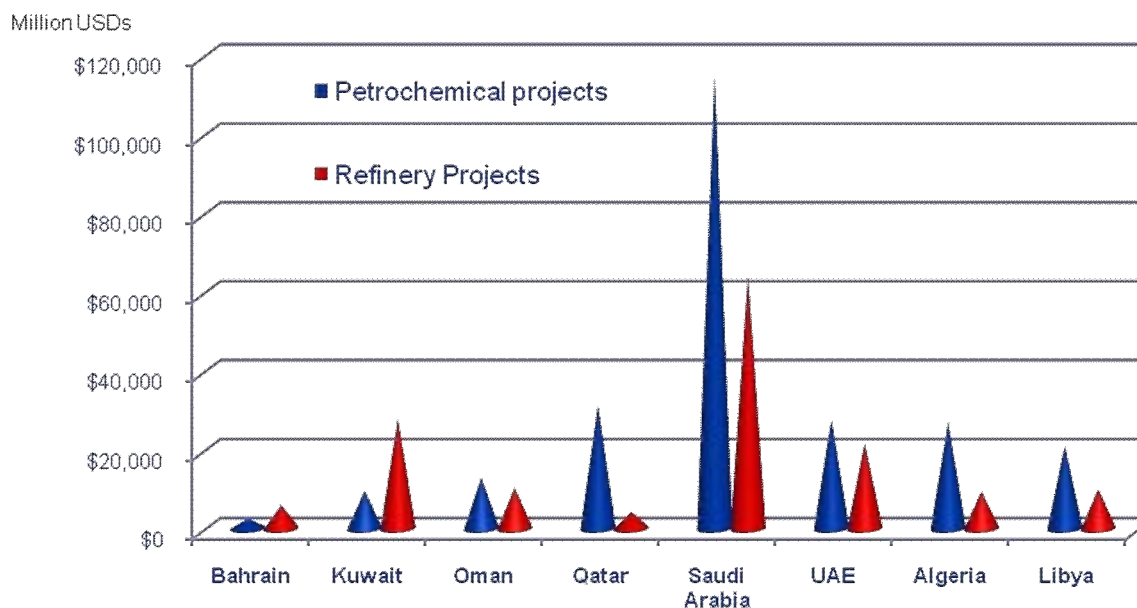
Delay/Cancelation by Reason (MBOE/d)



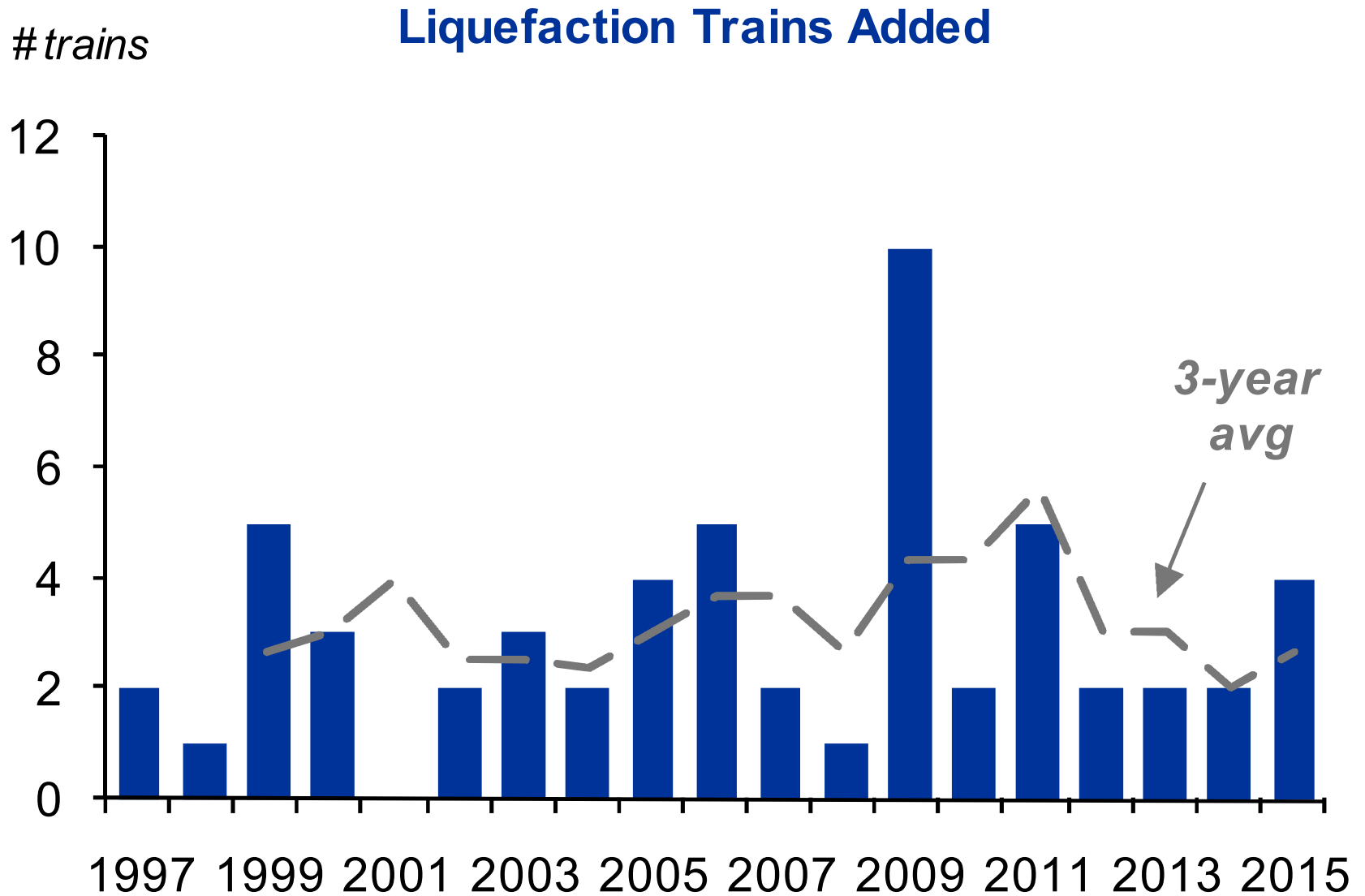
## Downstream project delays in Middle East (by end 2008)

- Middle East had enormous plans for petrochemical and other downstream projects by 2015
- These plans increasingly in doubt as project sponsors retrench from significant investment activity during a period of uncertainty
- Most Downstream projects in pipeline threatened with cancelation or delay

Planned Downstream Projects in the Middle East - Under Threat



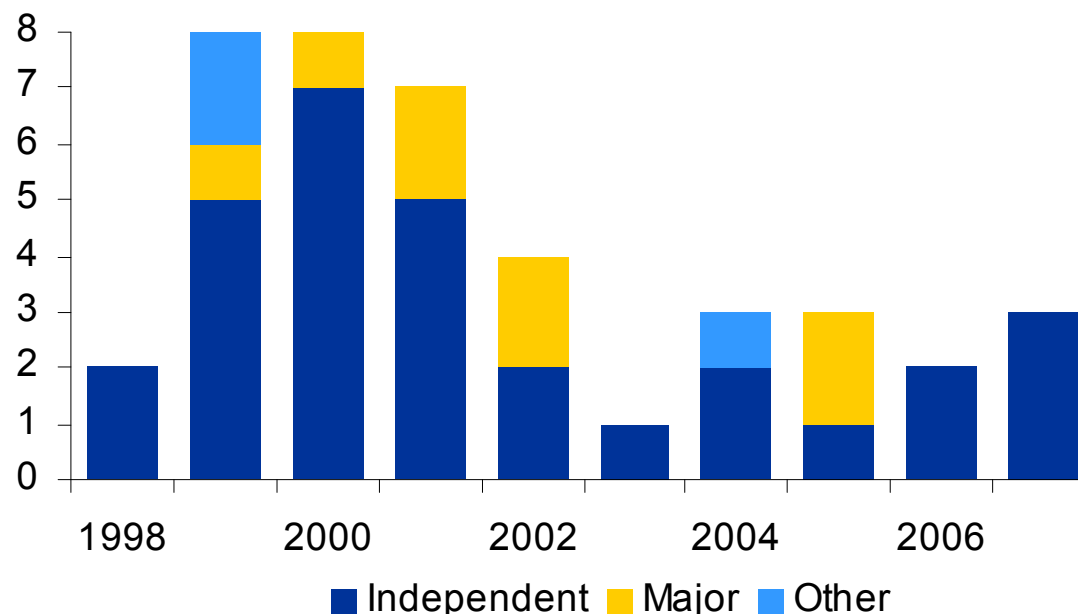
# Fewer LNG trains will be added in the future...



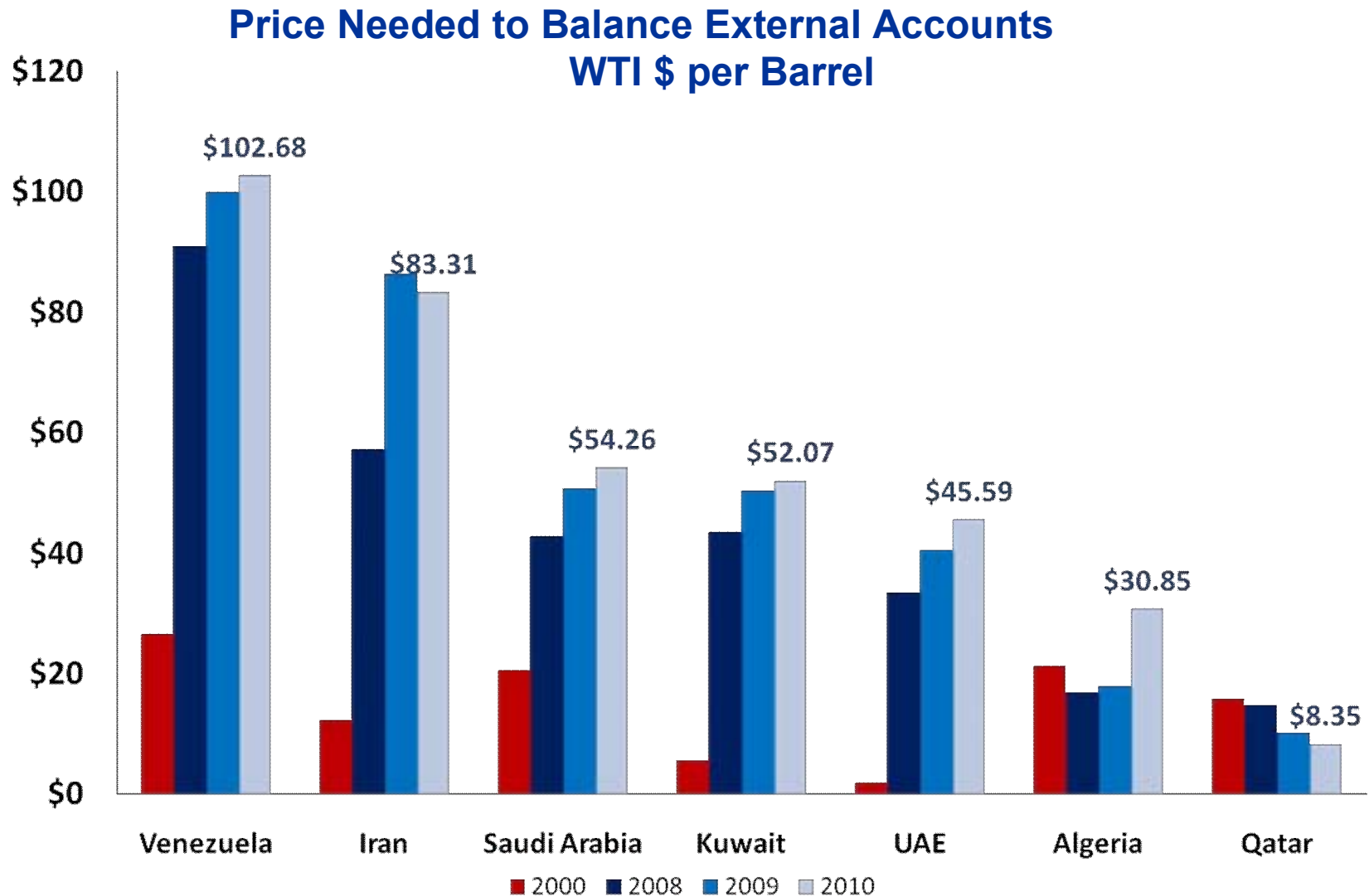
# Lessons from 1998 – more consolidation?

- Of 74 larger E&P Independents that produced a combined 6.5 mmboe/d in 1995, only 32 still existed in 2007
- Most mergers were between independents and occurred in 1999 to 2002, when oil price was ~\$11-25

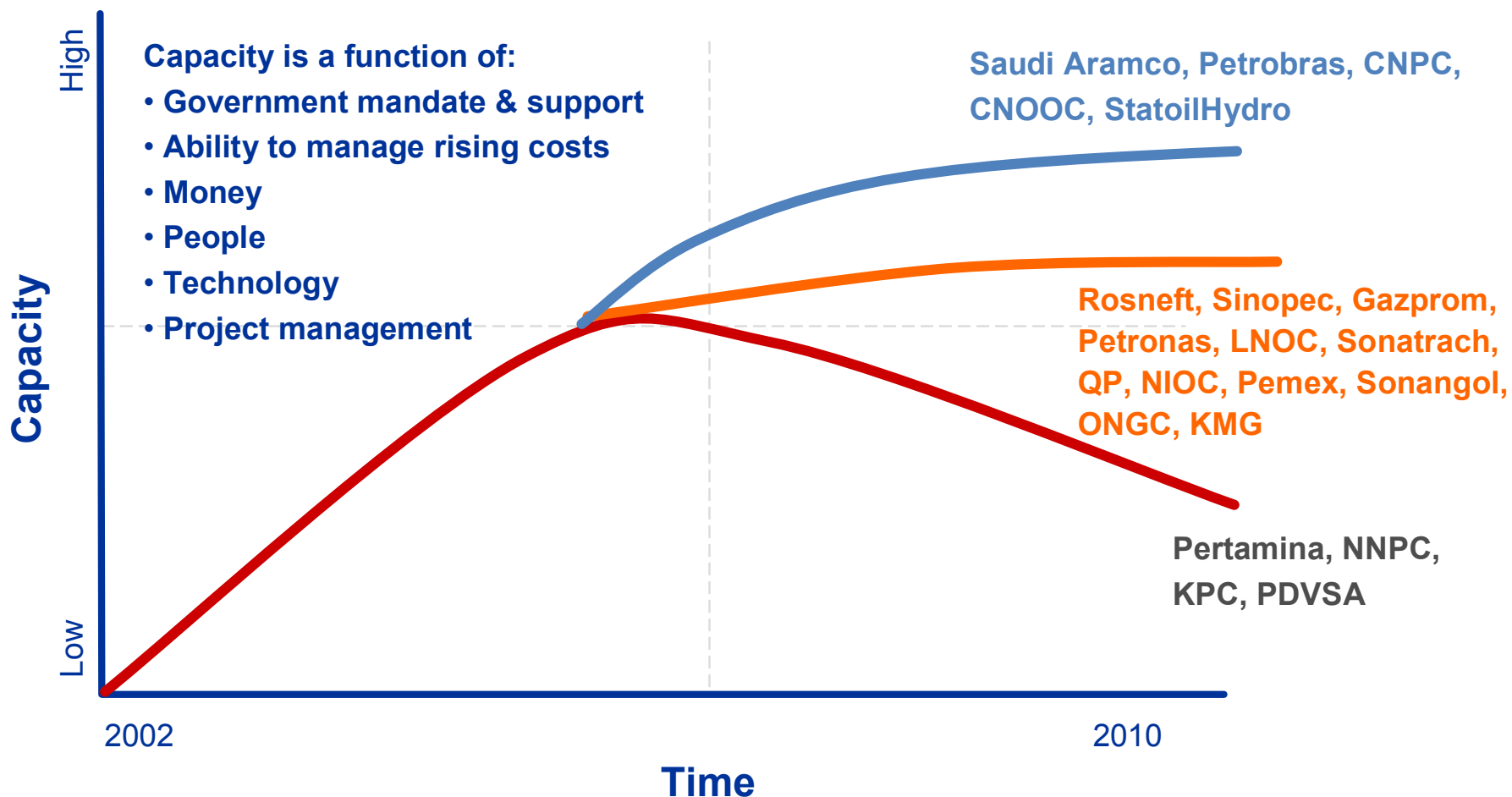
41 Independents Acquired,  
by Type of Acquirer



# But Producing Countries also exposed ...



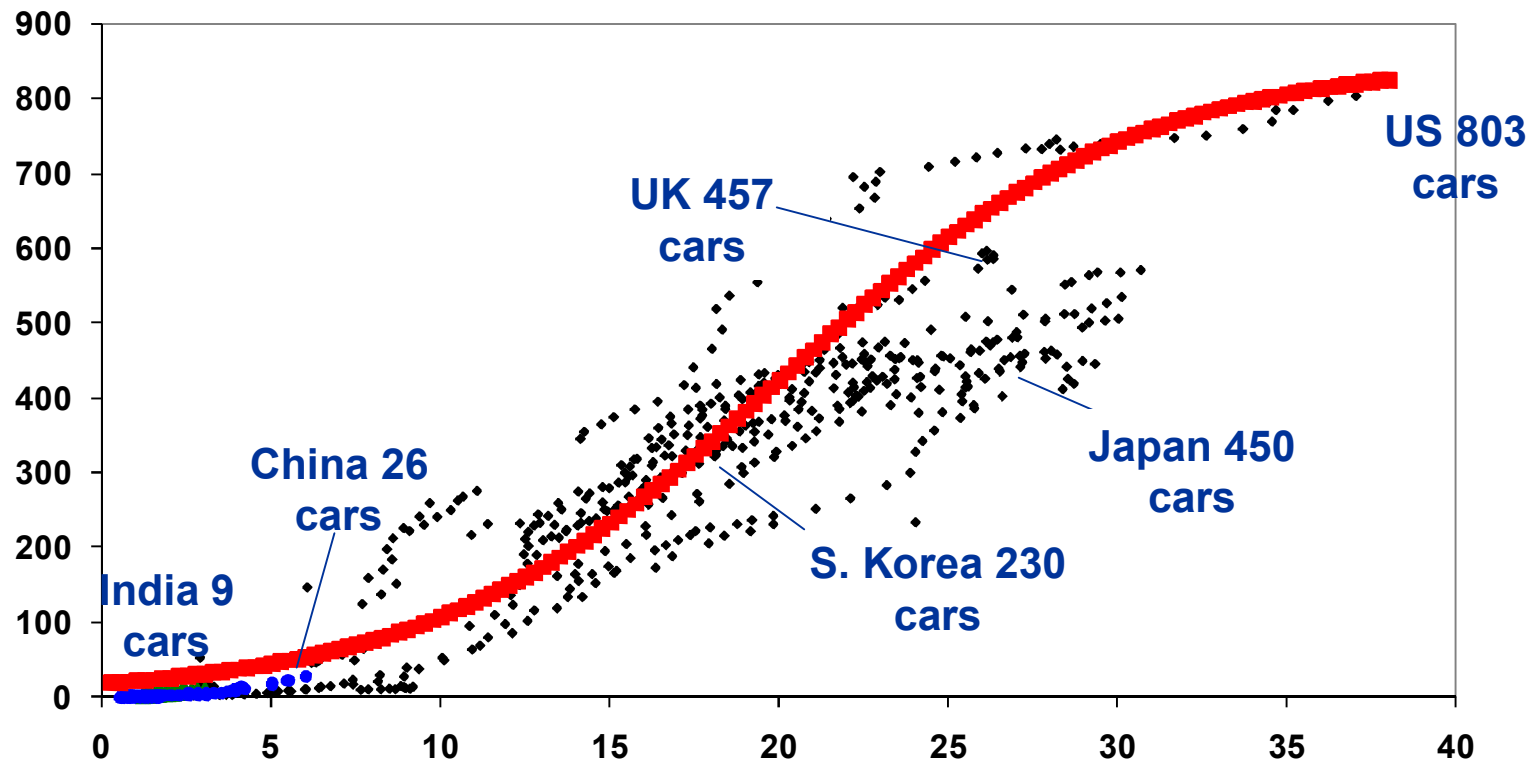
# Cracks in NOC landscape combined with financial stress also create opportunities



# Meanwhile, oil demand will continue to increase ...

## Cars per 1000 People vs. GDP/capita Historical Data 1970 - 2007

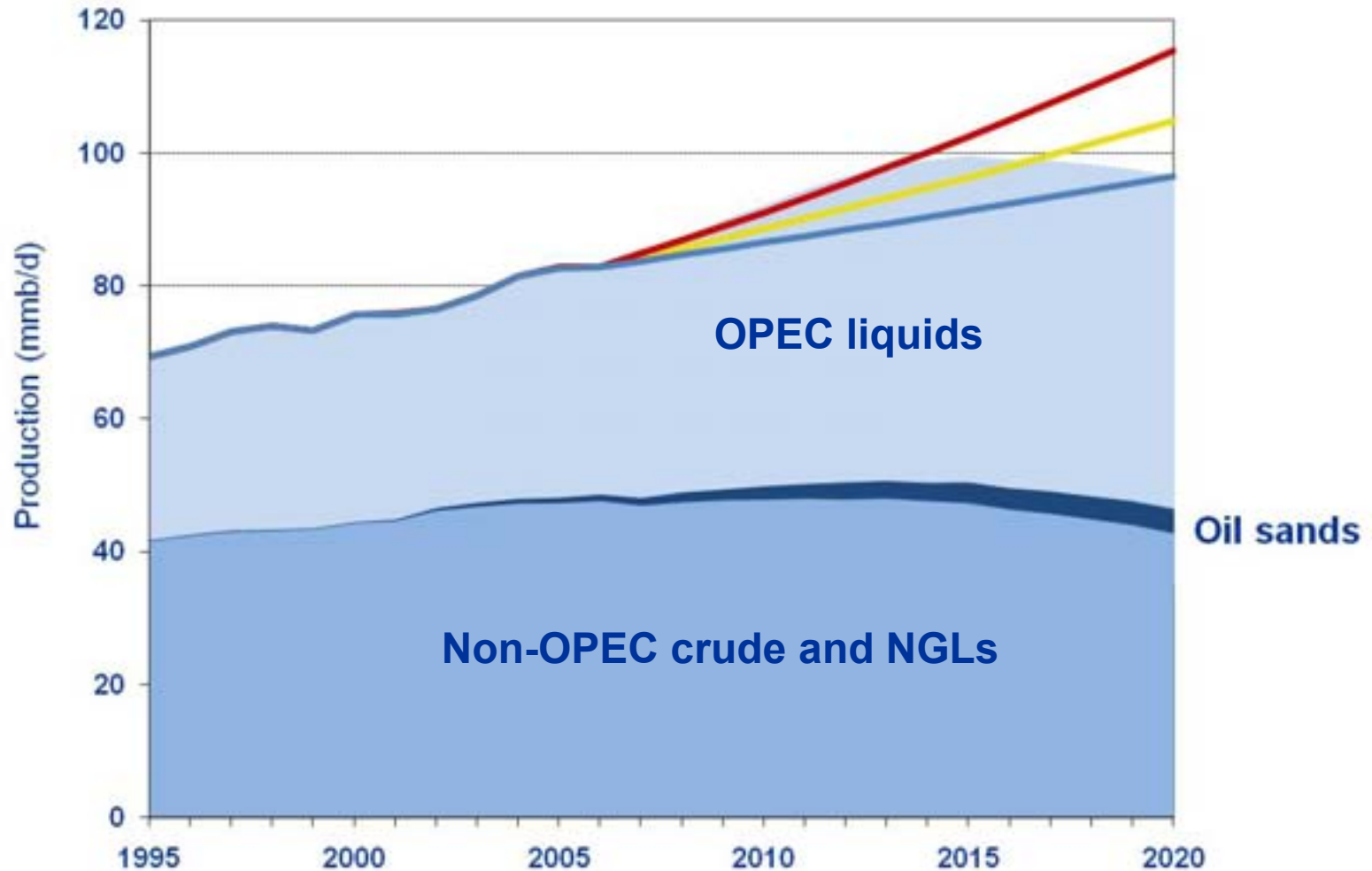
Cars/Capita (000)



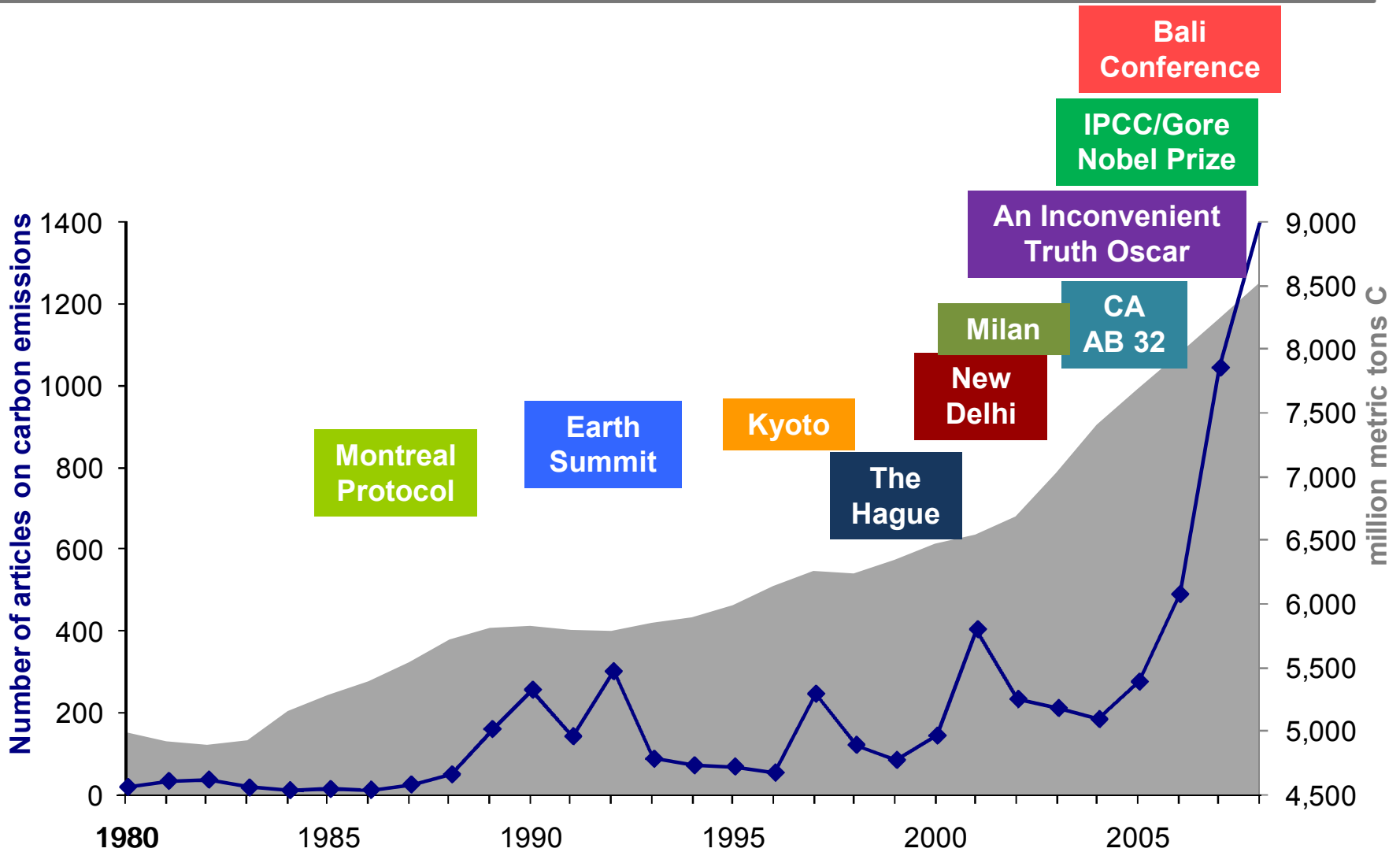
**Without major technological change—Pickens' gasification and/or electrification of fleet—transportation drives oil demand growth**

# Production crunch delayed, but still in our future

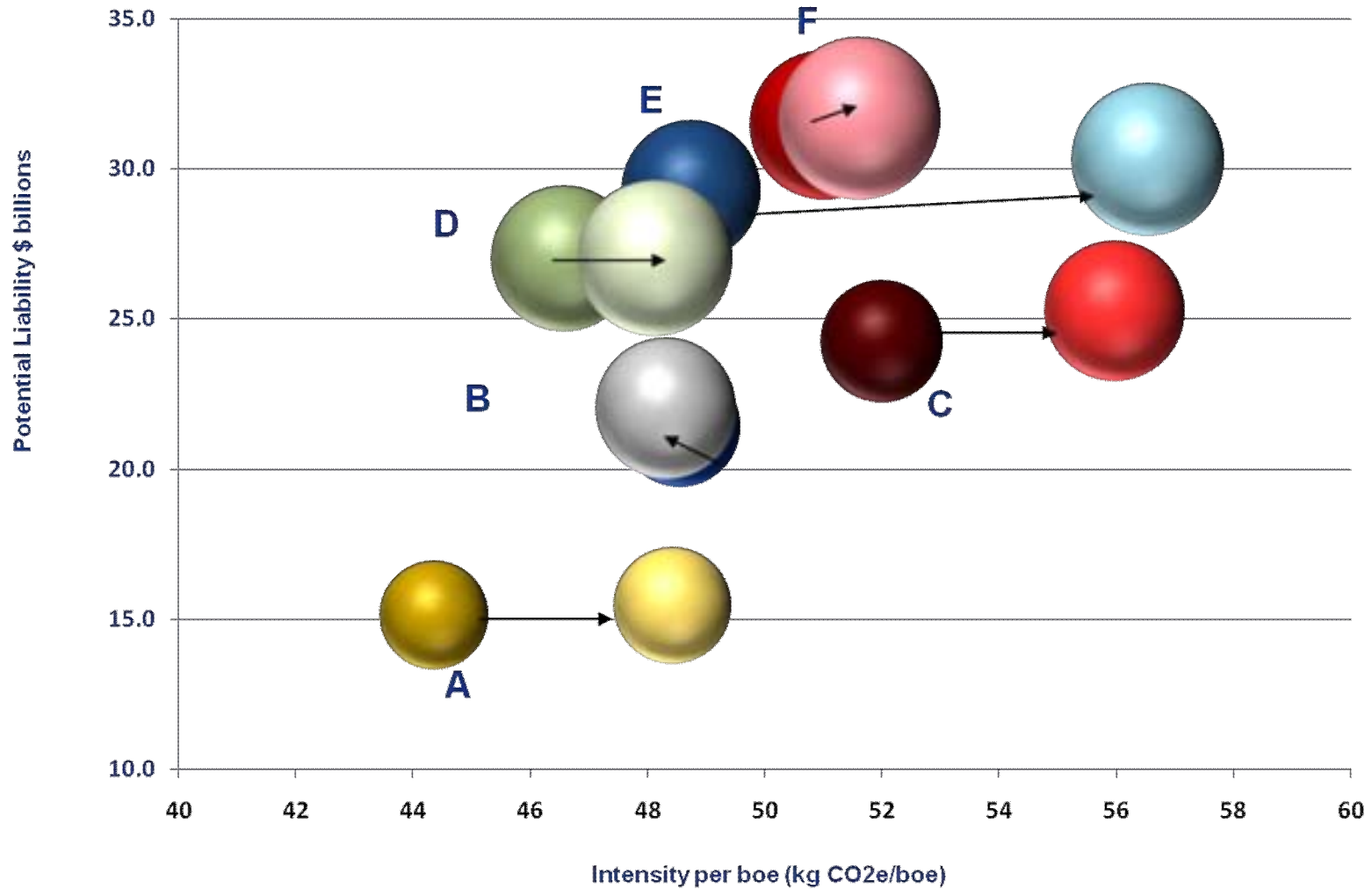
2020 call on OPEC ~50–70 mmb/d, given 1.1% - 2.4% growth



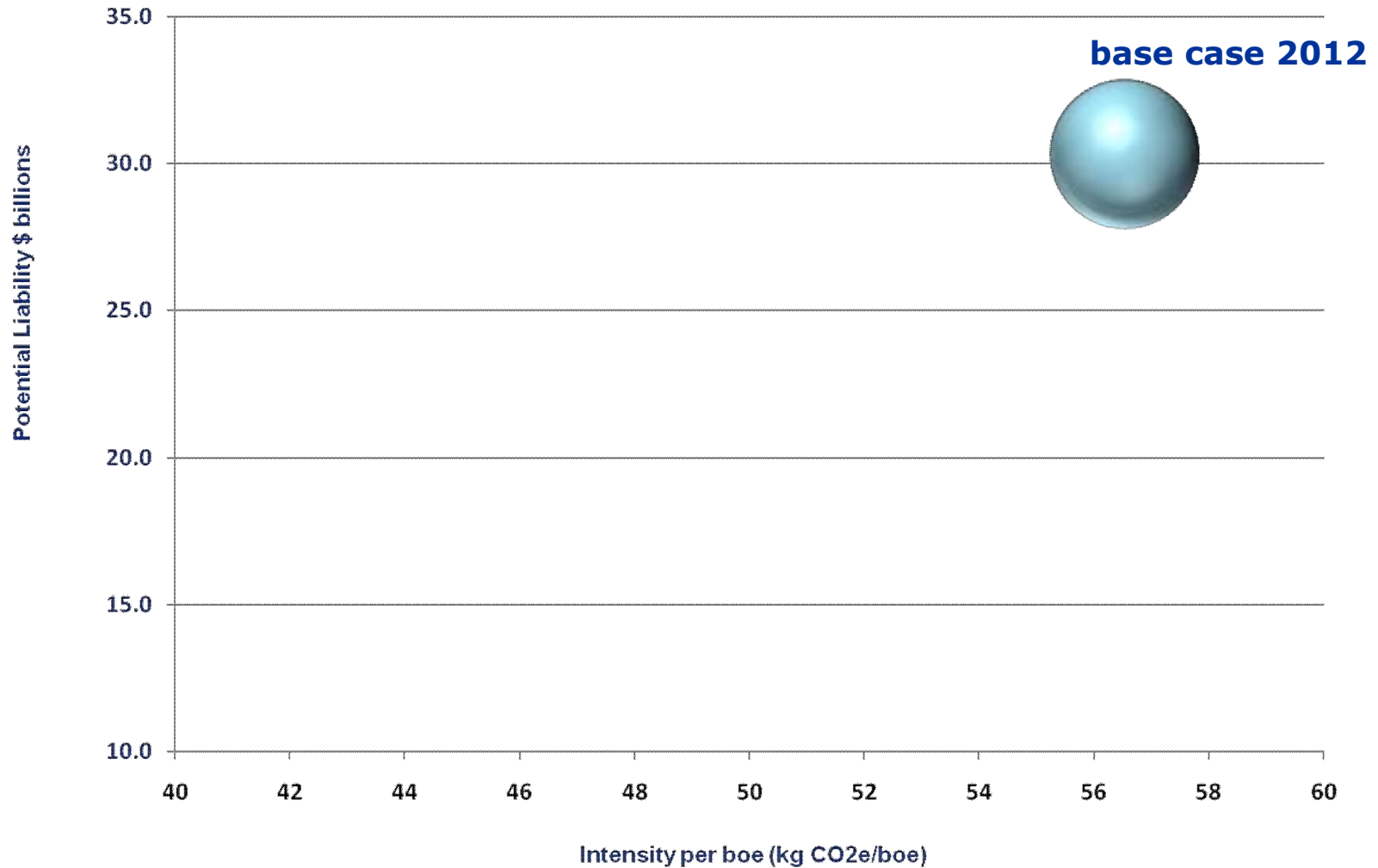
# And then there is climate change ...



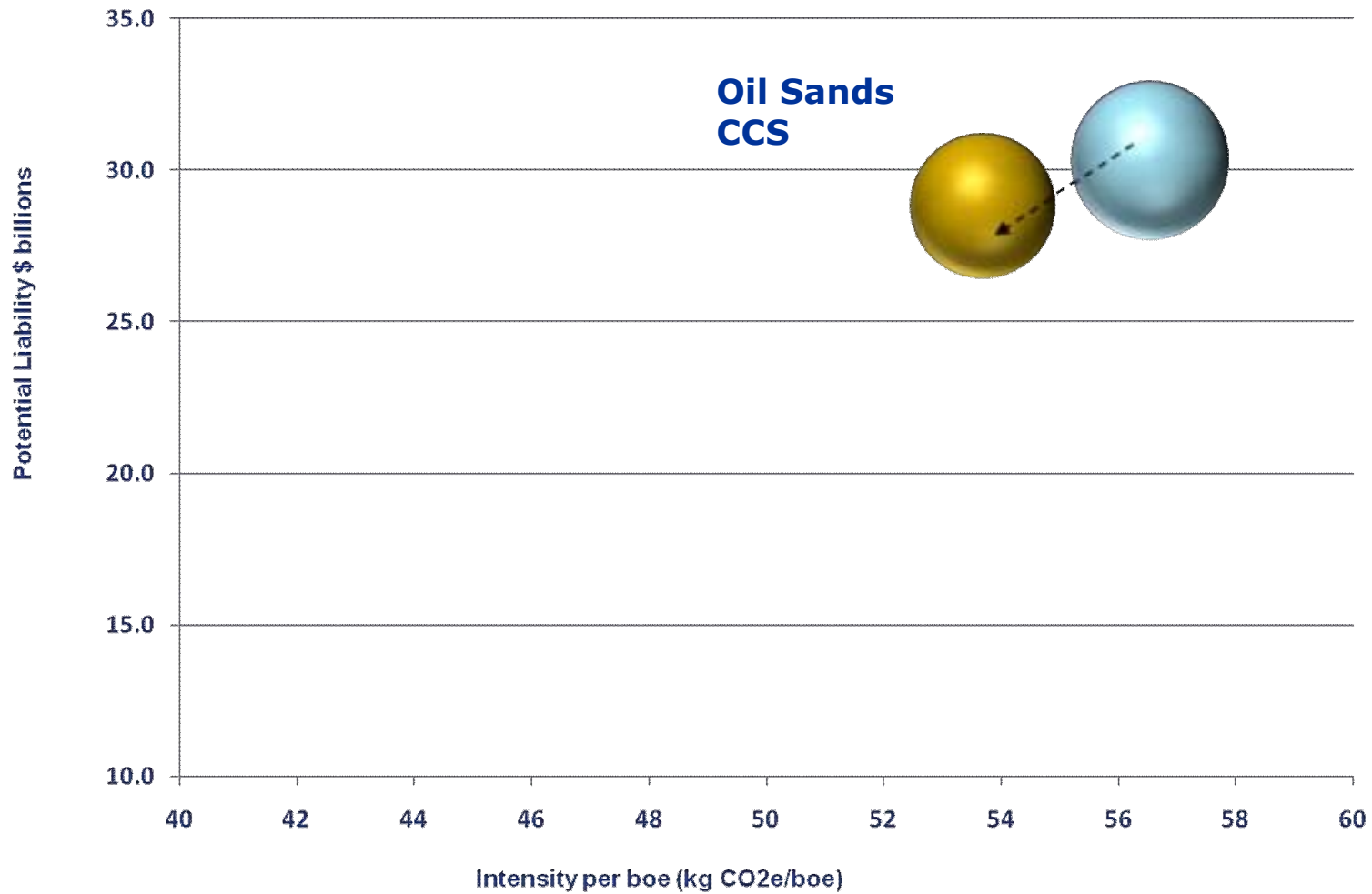
# Value of emissions: 2007 - 2012



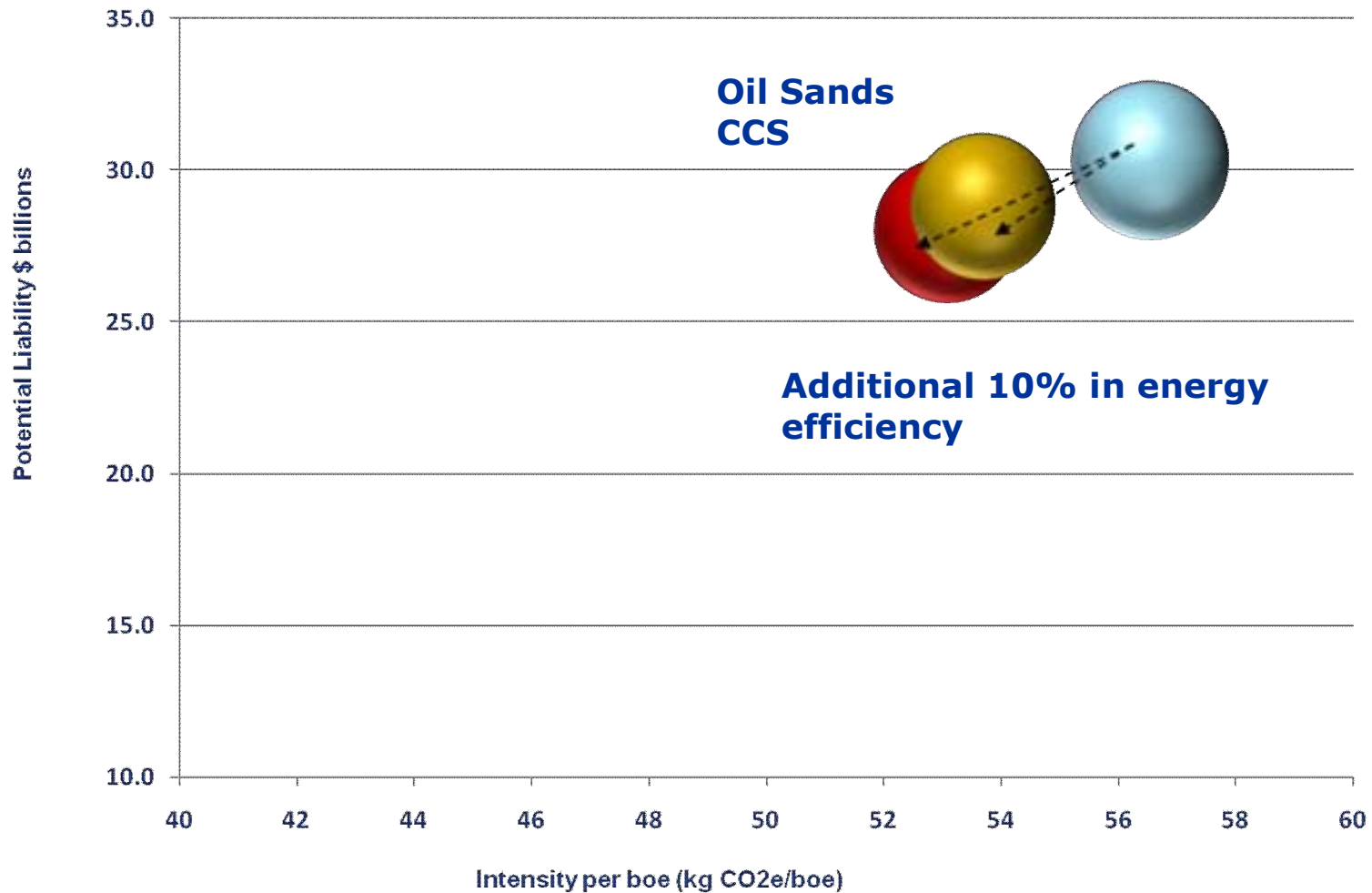
# The cost of Carbon – threat or opportunity?



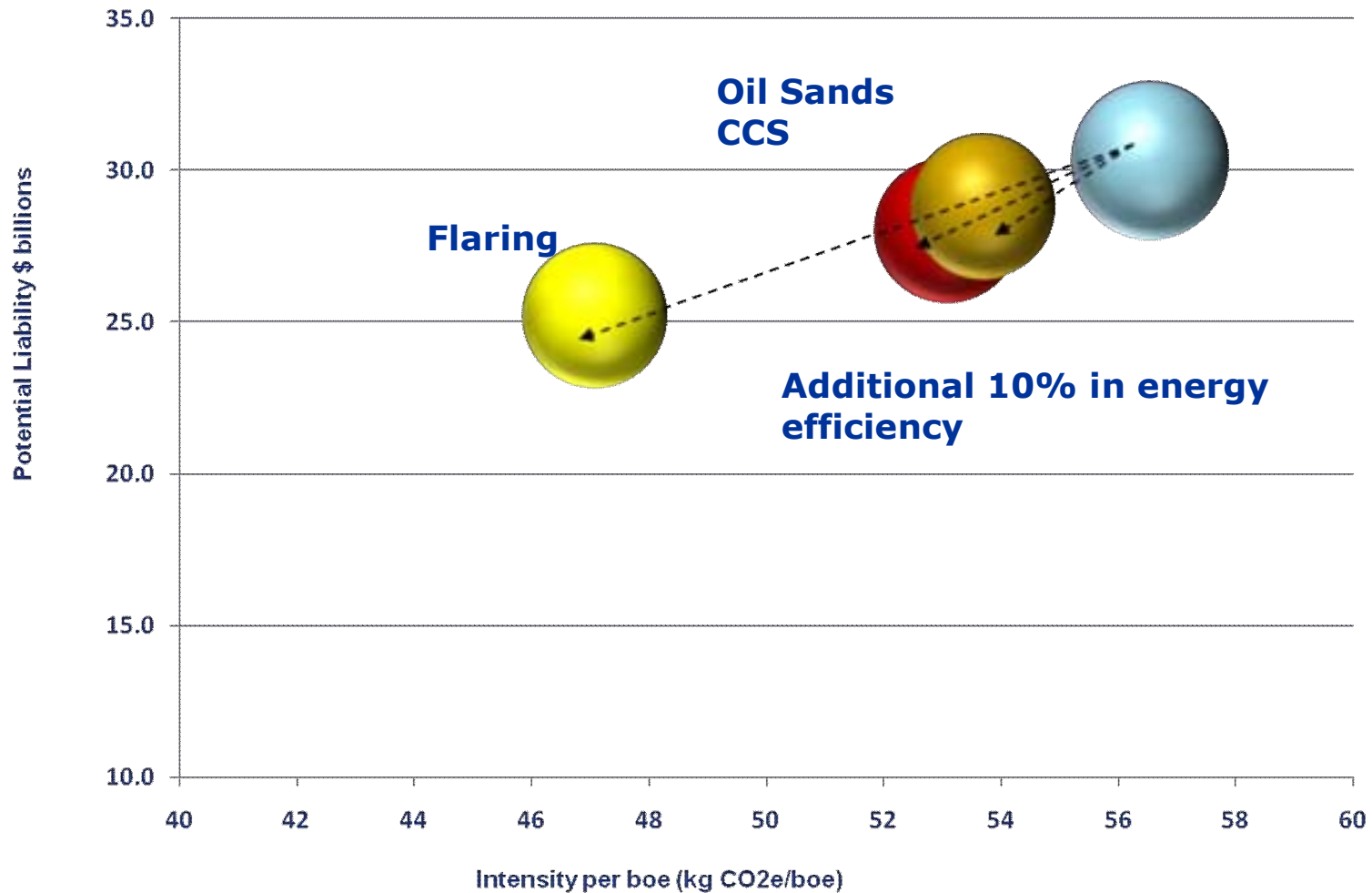
# The cost of Carbon – threat or opportunity?



# The Cost of Carbon – threat or opportunity?



# The cost of Carbon – threat or opportunity?



## In conclusion

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- **At least 3 major issues threaten the oil and gas industry**
- **Except for a few IOCs, major cuts and project deferrals**
- **But short term, three sets of opportunities:**
  - Potential increased access to NOC reserves
  - Reduced contractor prices
  - Acquisitions by stronger players among Independents and ServCos
- **Carbon regulation will force action**
- **Longer term, a major oil supply crunch looms**

***Thank You***



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