



# Oil and gas market and industry outlook

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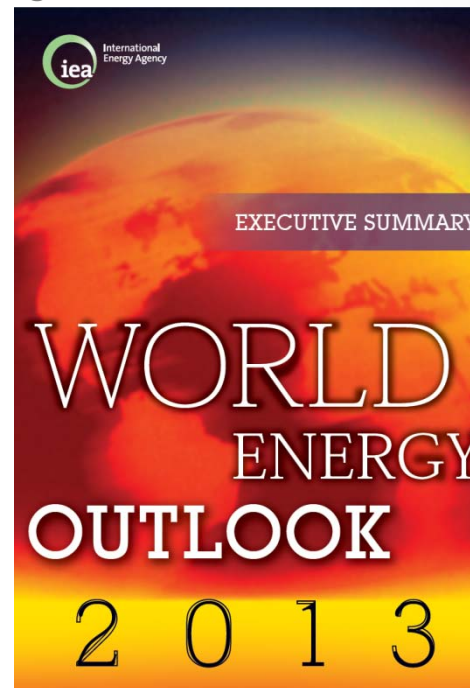


Mature fields: Business Opportunities and Challenges  
Sola, 1 April 2014

# Global energy outlook

Pressures are building, no resolution in sight

- Record-high oil price...
  - Dampened activity and demand
  - Higher investment and production
- ... cause market change...
  - Unconventional oil and gas
  - Setback for nuclear energy
  - Focus on energy efficiency
- ...and instability challenge
  - Fossil fuels are heavily subsidised
  - GHG emissions are yet to peak
  - 1.3 bn people still lack electricity
  - Water is increasingly scarce

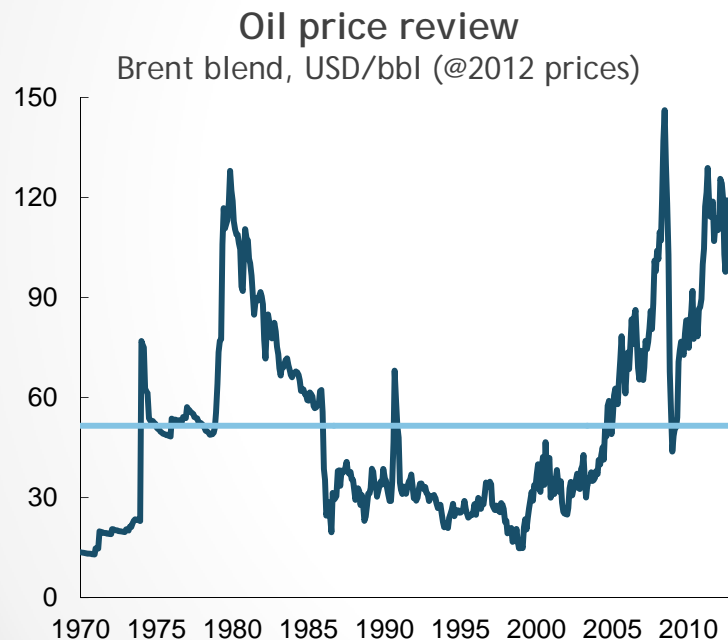


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Source: International Energy Agency.

# The oil price matters...

... for demand, supply, and future price dynamics



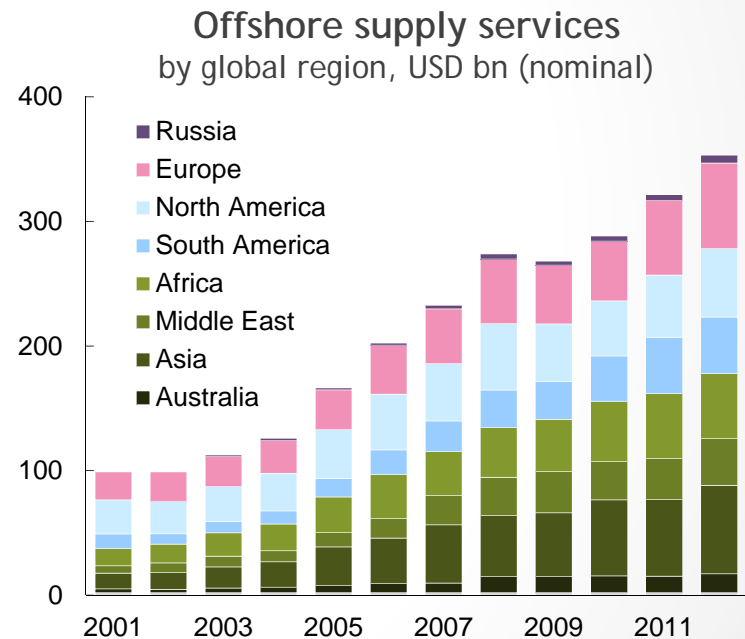
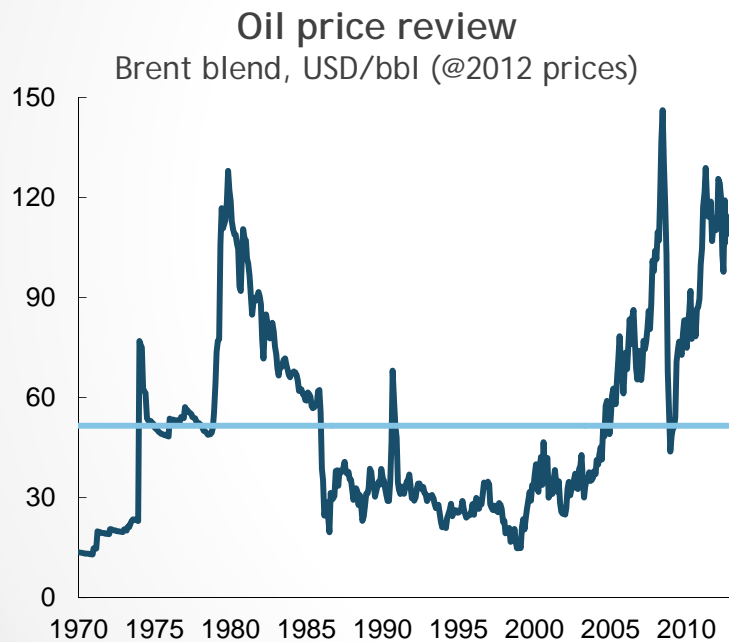
- 4-fold increase since 2000
- Impact on demand
  - Income effect
  - Substitution effect
  - Policy response
- Impact on supply
  - Conventionals
  - Unconventionals
- New technologies



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# The oil price matters...

... for demand, supply, and future price dynamics



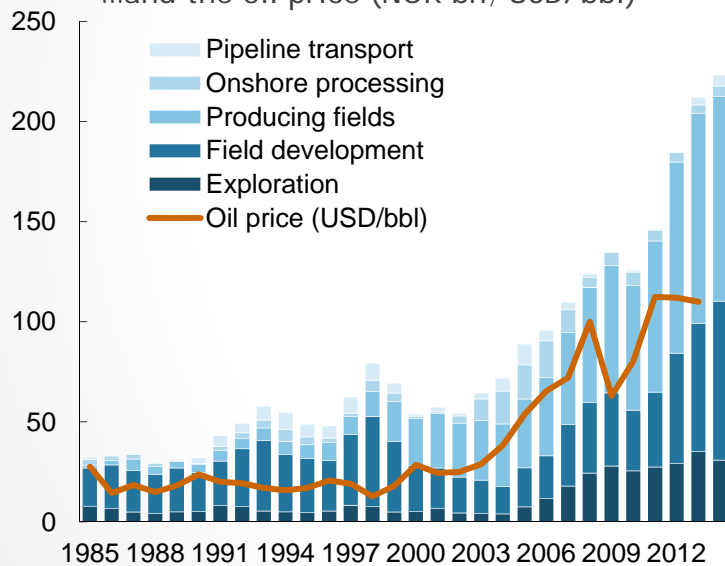
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Source: Norwegian Petroleum Directorate, Norges Bank Investment Management, author's calculations (GPF projections).

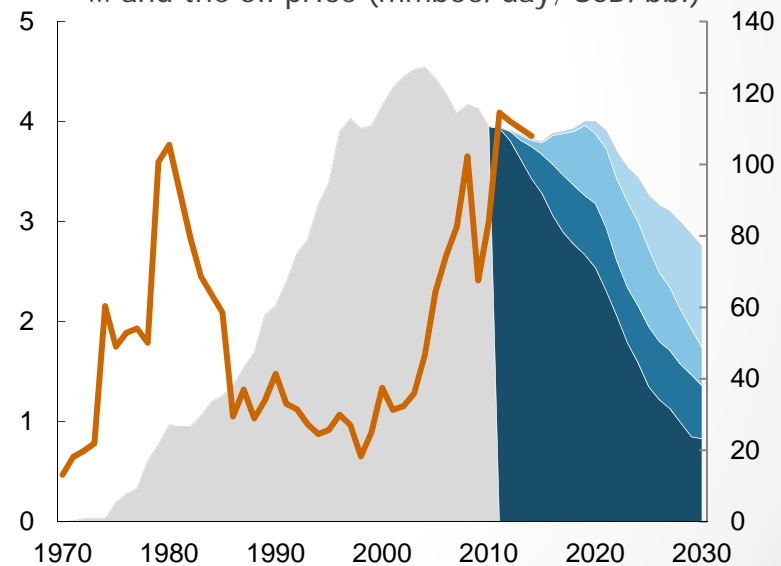
# The oil price matters...

... for NCS activity, production, revenues - and costs

NCS oil and gas investments...  
...and the oil price (NOK bn; USD/bbl)



NCS oil and gas production...  
... and the oil price (mmboe/day; USD/bbl)



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Source: Statistics Norway, Norwegian Petroleum Directorate, Reuters EcoWin.

# IOC returns fall short of expectations

Unimpressive share price developments

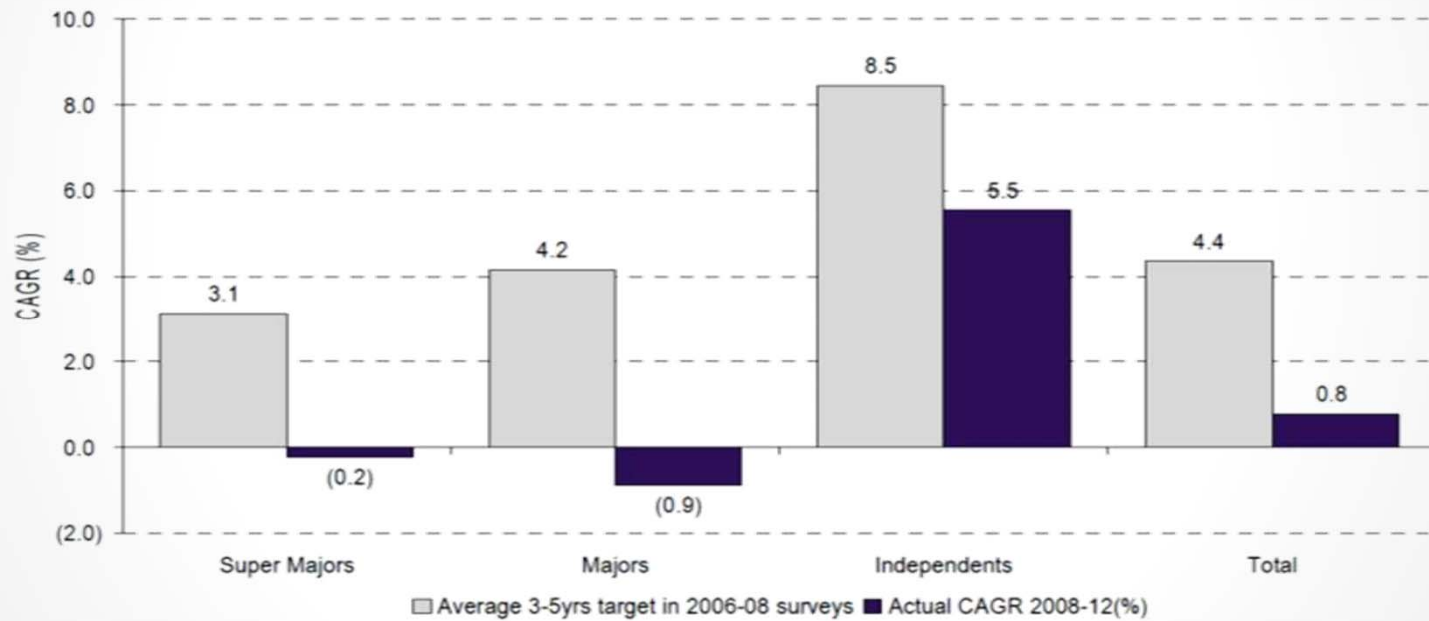


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Source: <http://www.statoil.com/IR>.

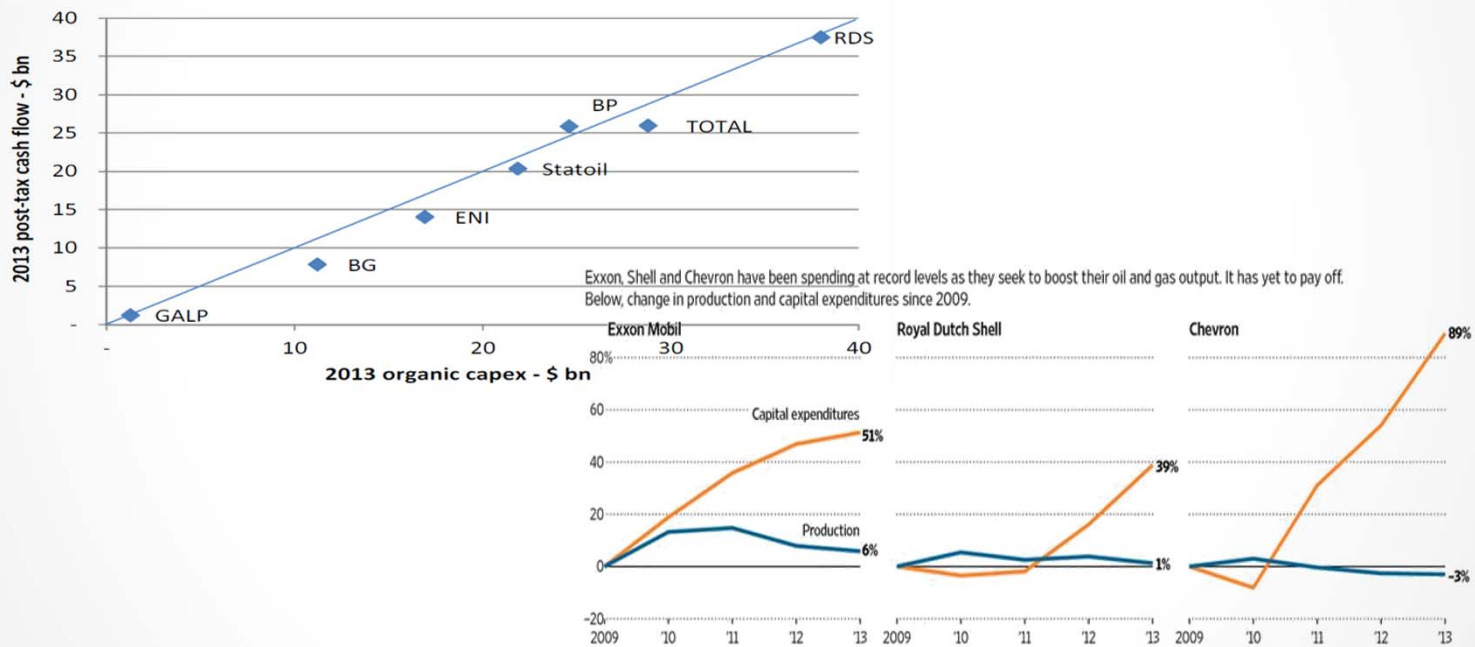
# IOC production falls short of promises

Production growth versus targeted growth last four years



# IOC cash-flows fall short of investments

Only BP funded its capex with cash-flow in 2013



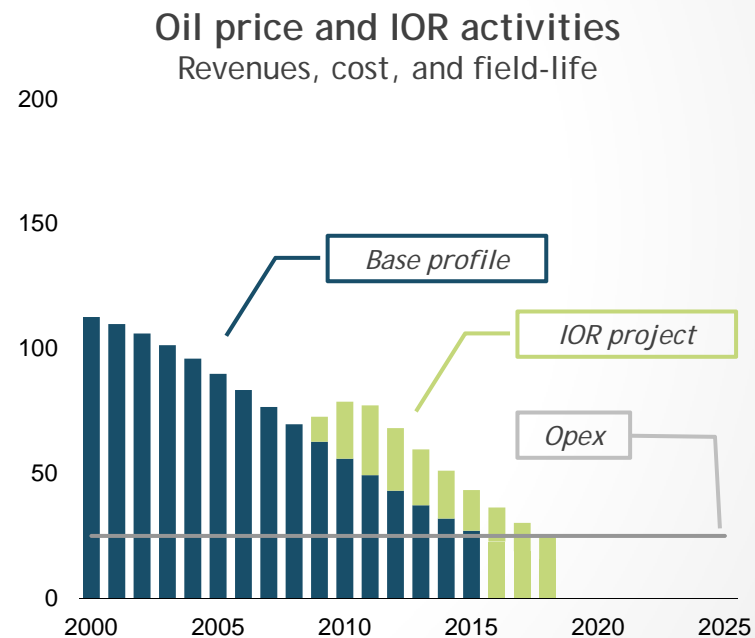
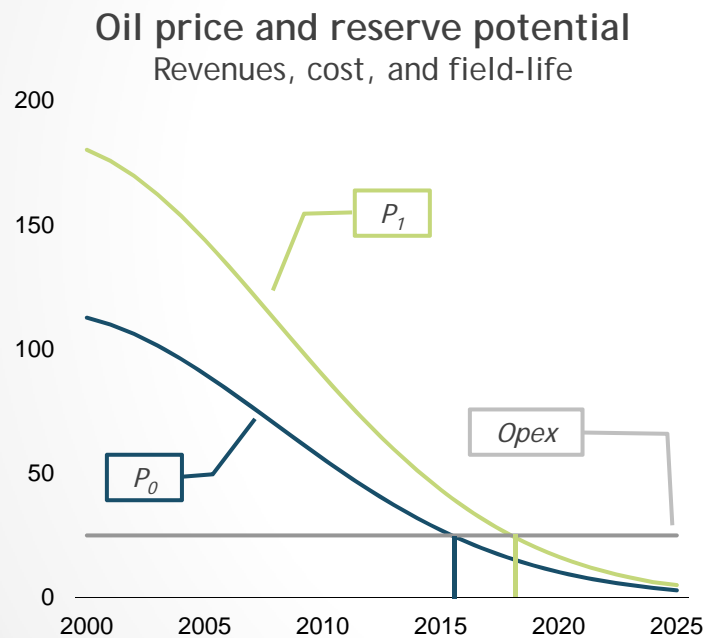
Exxon, Shell and Chevron have been spending at record levels as they seek to boost their oil and gas output. It has yet to pay off. Below, change in production and capital expenditures since 2009.





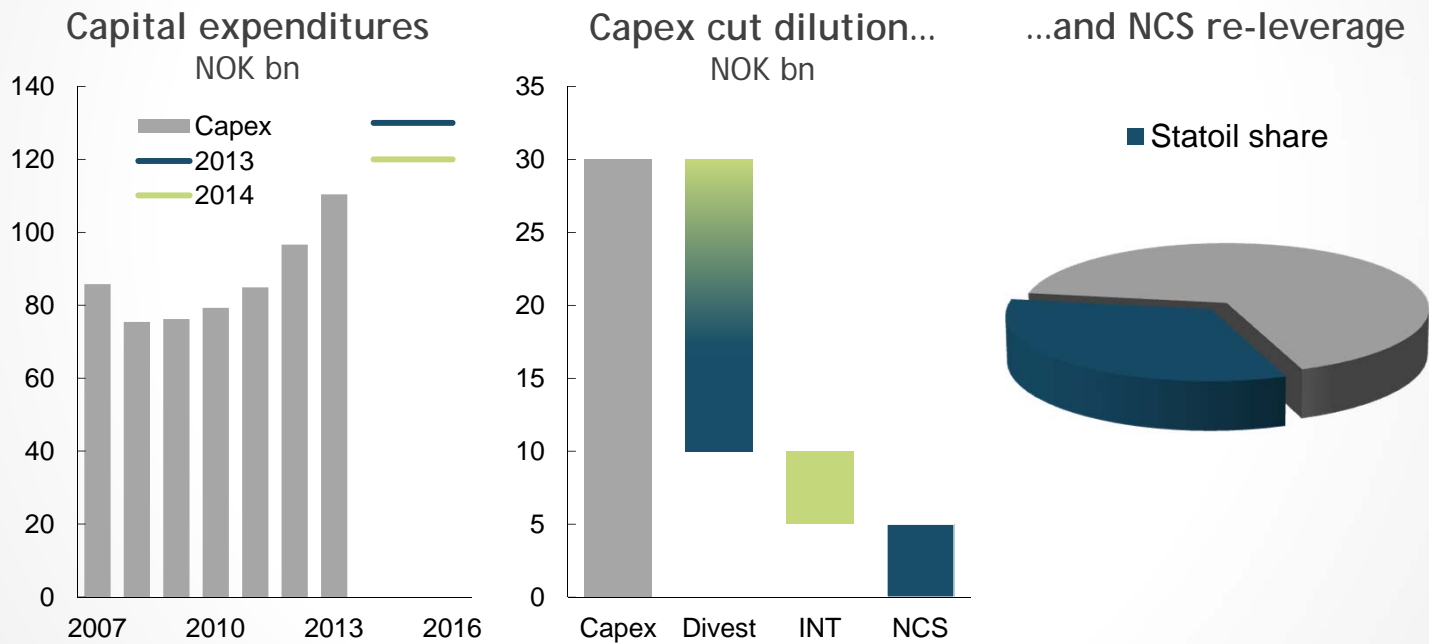
# The oil price matters...

... for activity, production, and recoverable reserves



# Statoil's revised capex plans

Tracing the NCS activity impact: A thought experiment

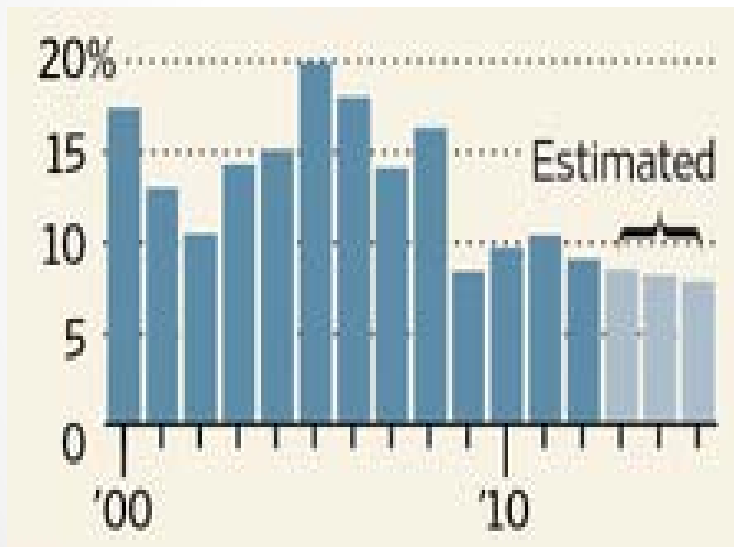


# IOC short-term challenge: Profitability

Increasing focus on cash-flow management and capital discipline

## “Leaking profits”

Return on capital employed for major oil companies

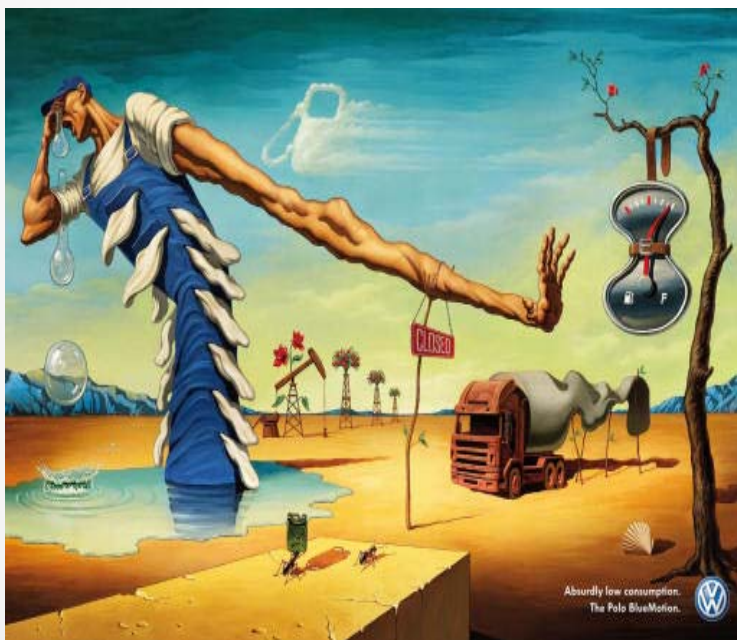


- Shareholder skepticism
  - Production short of targets
  - Sky-rocketing costs
  - Erosion of returns
- Worries over oil price outlook
  - Weak economic growth
  - New floods of supplies
  - Policy uncertainty looms
- Business model under pressure
  - Scarcity and access dilemmas
  - «Carbon bubble» challenge
- “Cash is King!”



# IOC long-term challenge: Growth

Will the world turn its back on fossil fuels?



- Energy and climate policies
- Role of oil in transport
- Eastward bound energy
- Shale gale globalisation
- Emerging technologies
- Access, returns, and risk
- Changes in OPEC behaviour

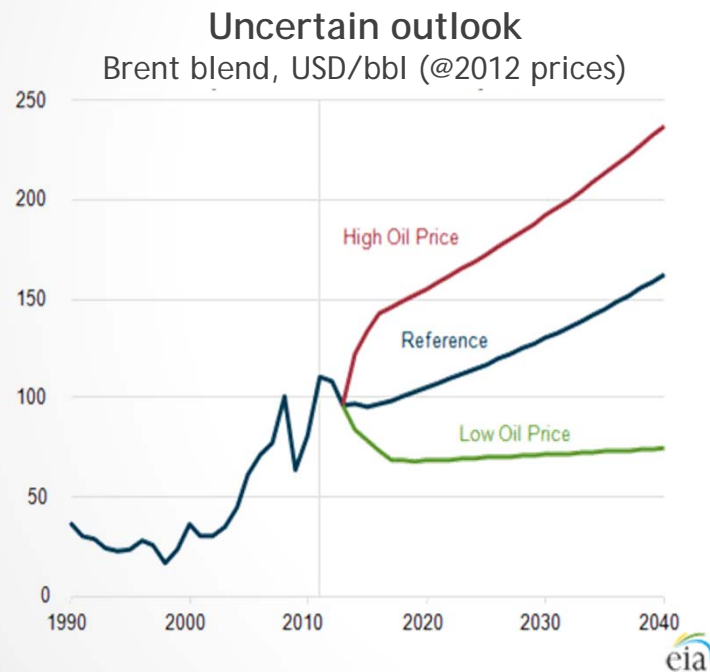


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Source: Mitchell, John, Marcel, Valerie and Beth Mitchell. 2012. «What next for the oil and gas industry?». Chatham House. October 2012.

# Concluding remarks

Build resilience, prepare for change



- Energy is getting more expensive
- Oil price outlook is very uncertain
- Oil price drives activity and cost
- Boom arrested by market concerns
- New shocks and cycles in the cards
- IOC business model under pressure



# Thank you for your attention!

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