Energy Markets: The Long And The Short Term

Christof Rühl, Group Chief Economist, BP plc.
Washington, April 2010

Outline

- Long term context
- Structural change in oil markets
- Natural gas: a new game
  - How does it matter?
- Conclusion

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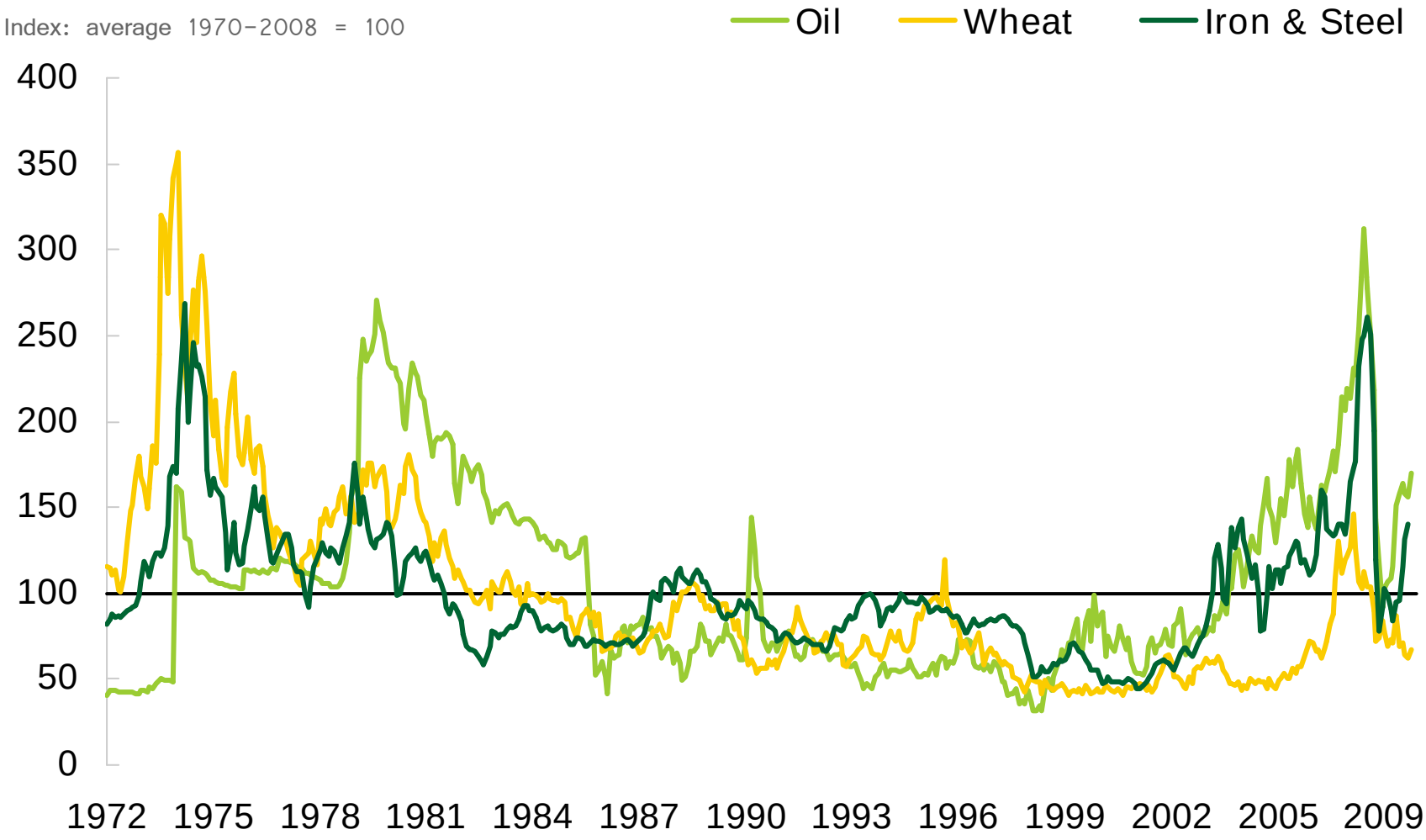
The Long Term: Real Commodity Prices



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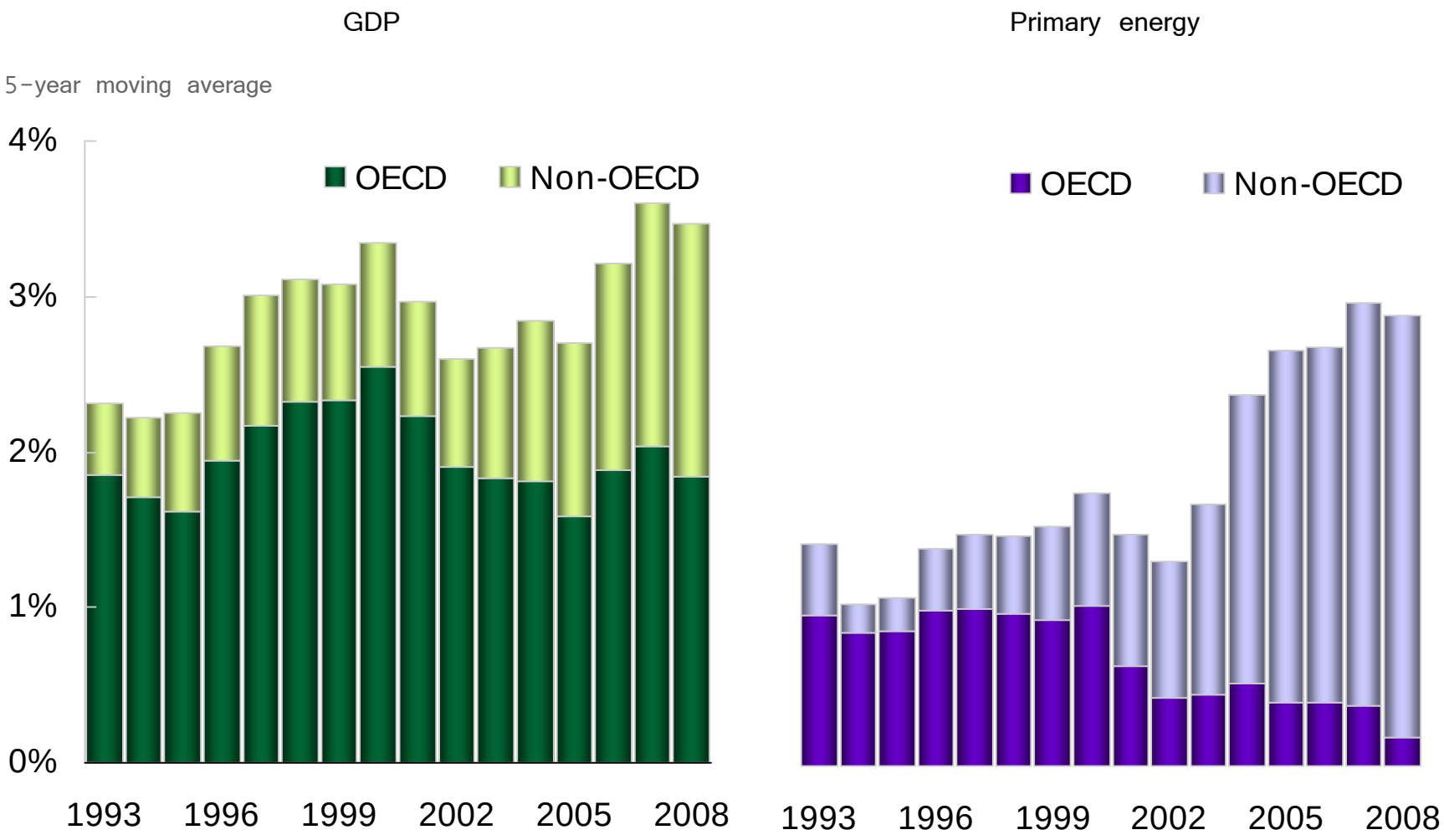
The Long Term: Contributions to Growth



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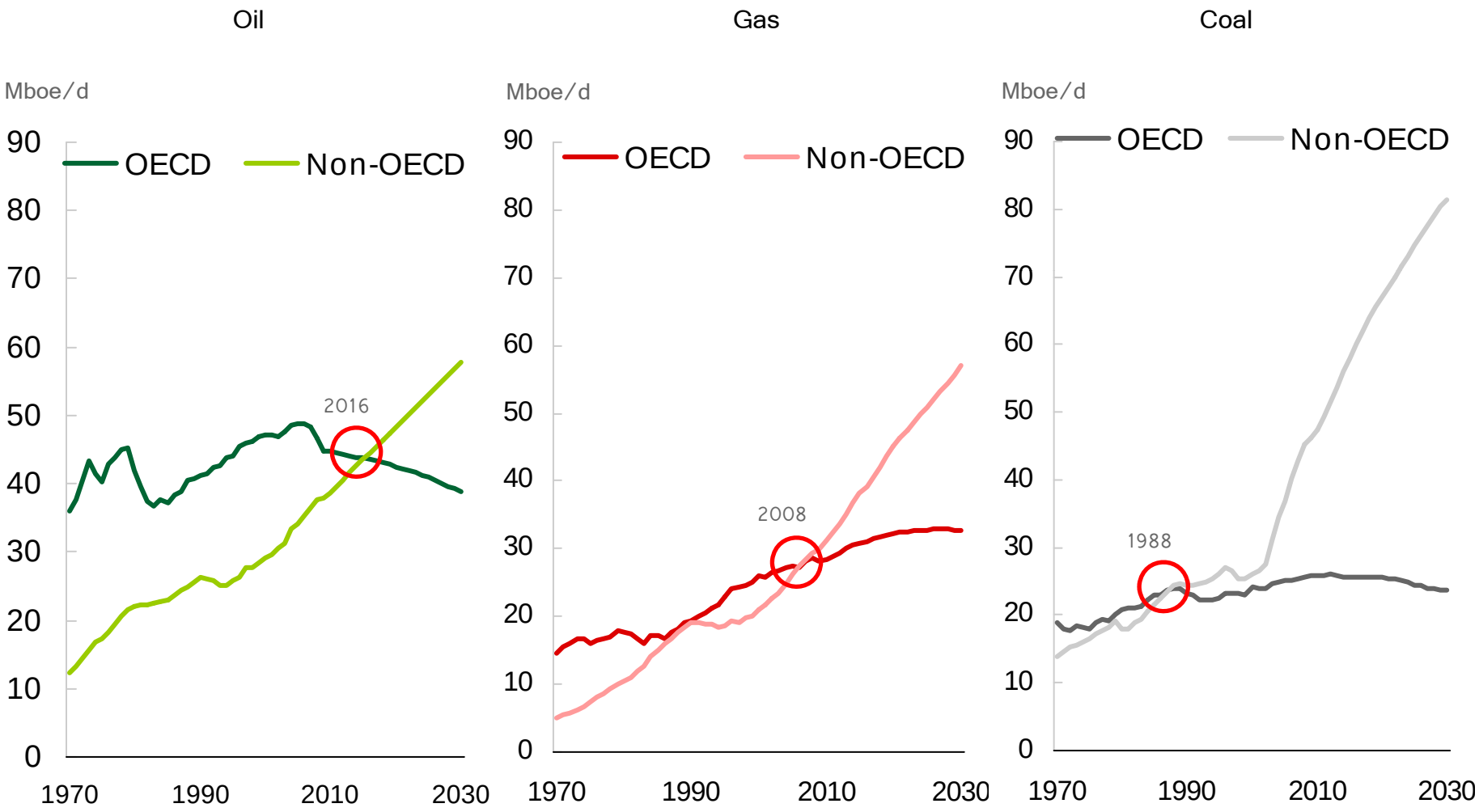
Energy Demand Growth



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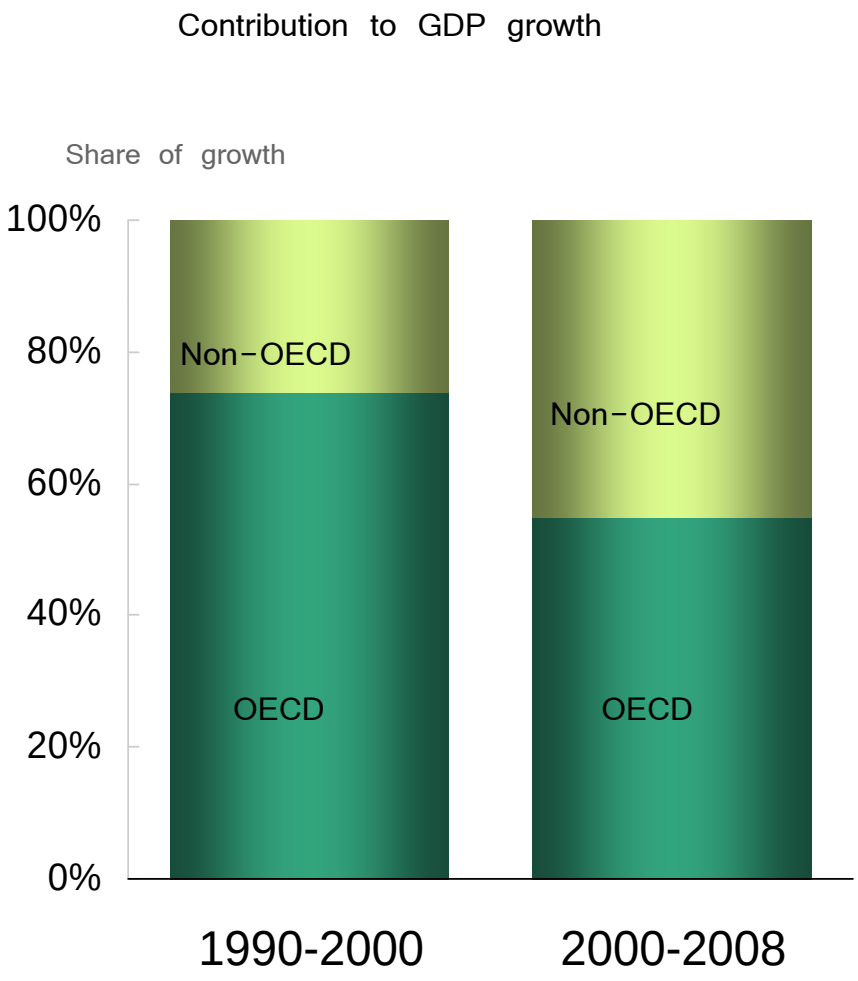
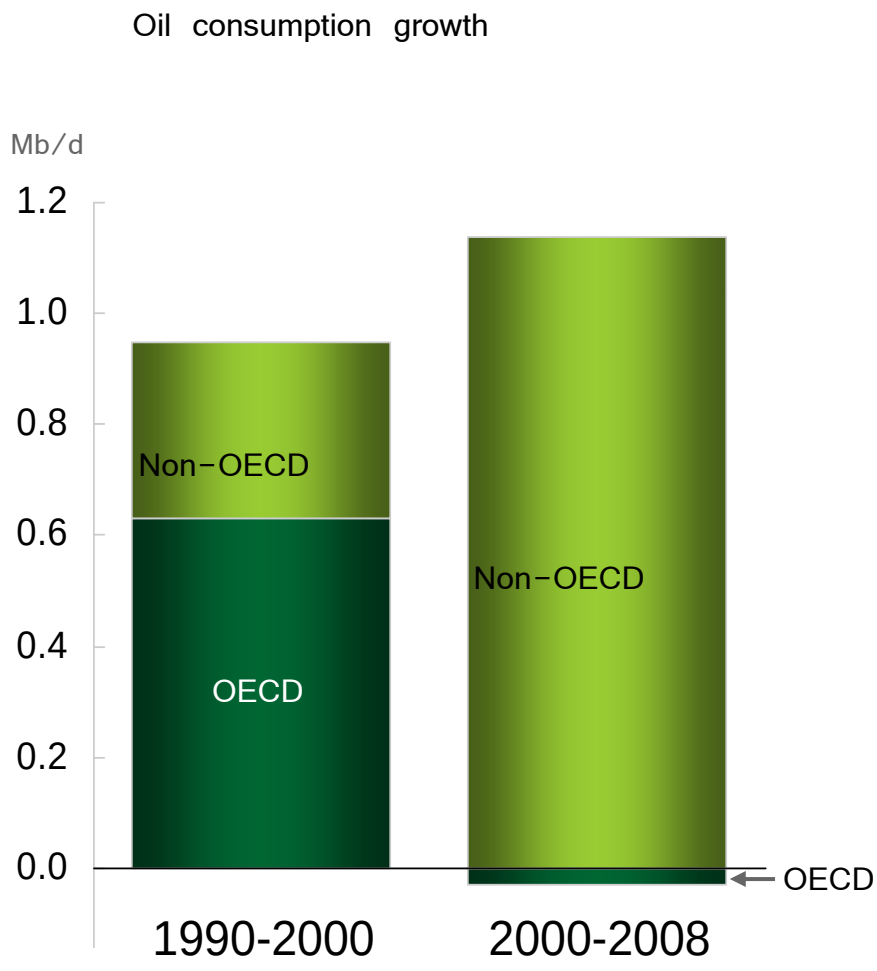
The Future Is Here: Oil Demand Growth





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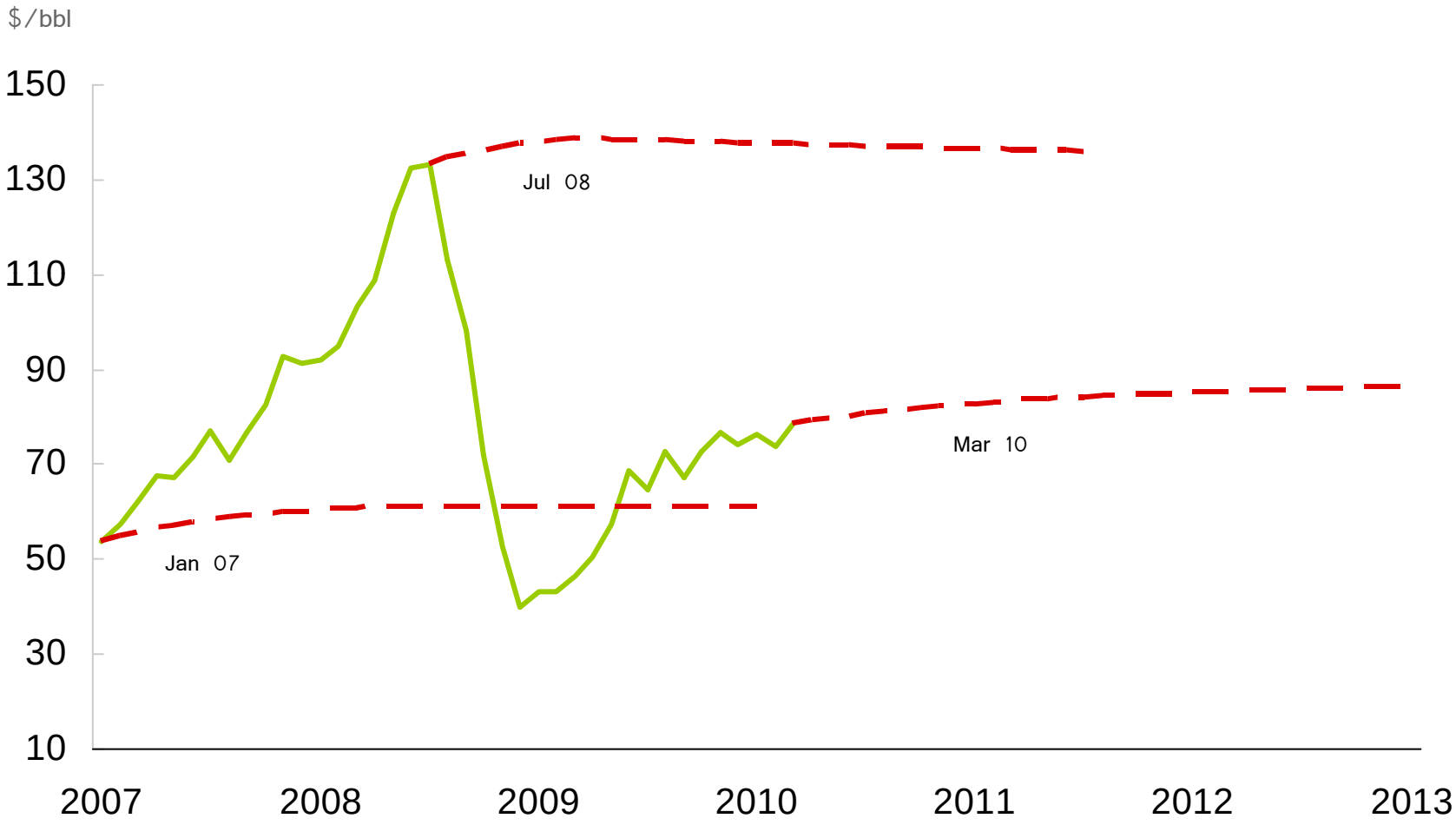
Spot and Futures Prices （Brent）



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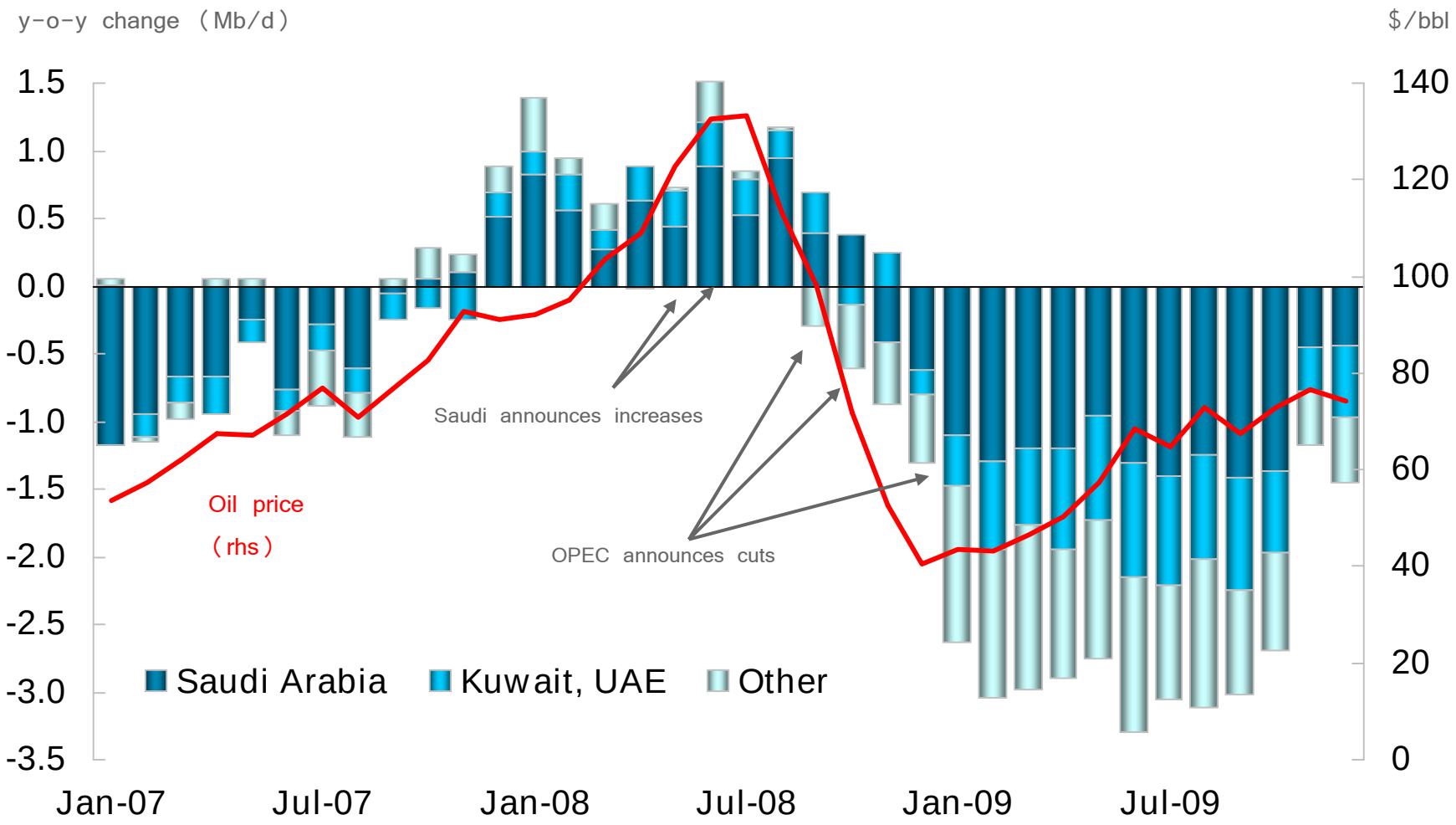
OPEC Supply Management, 2007-09



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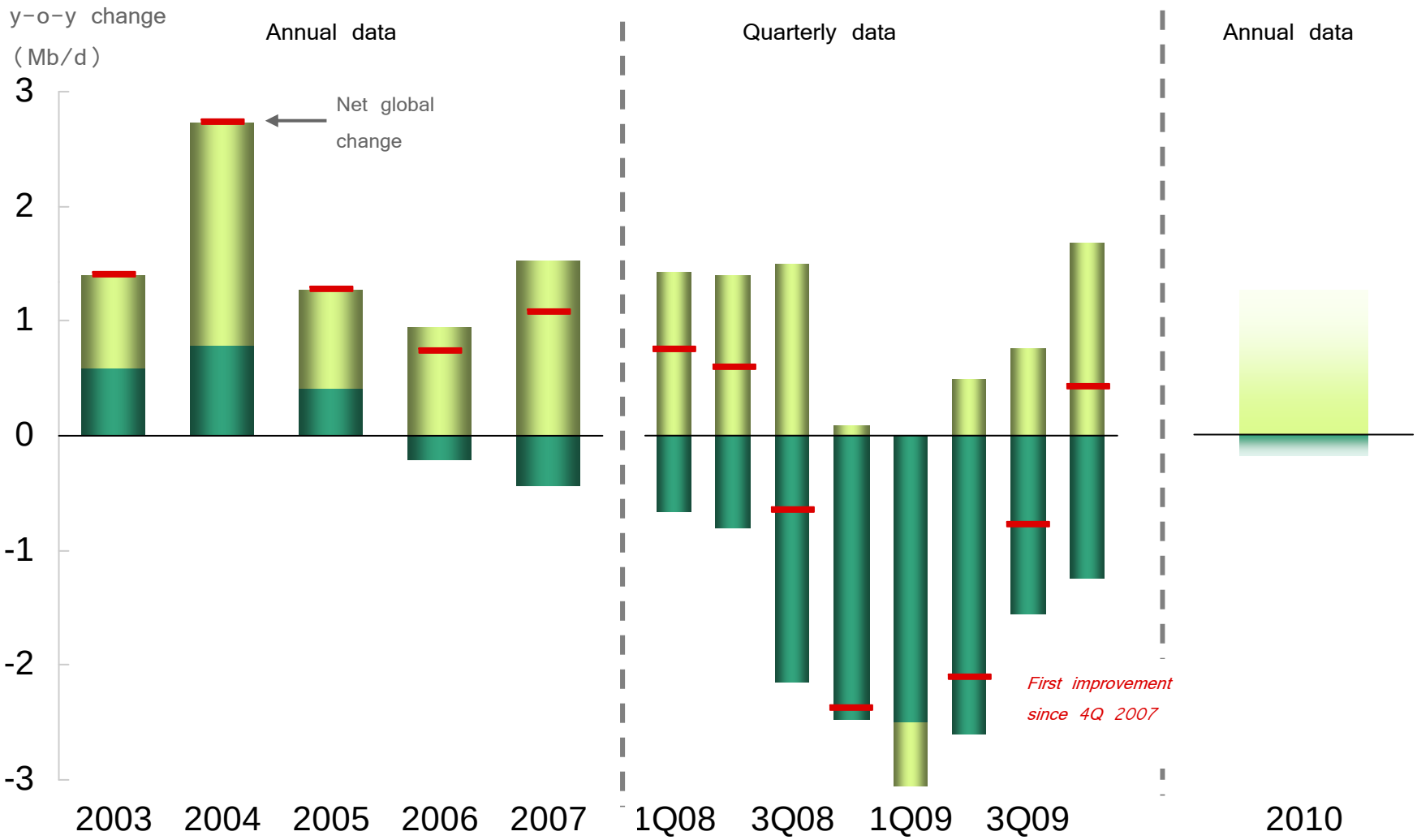
Consumption Growth, 2003-2009



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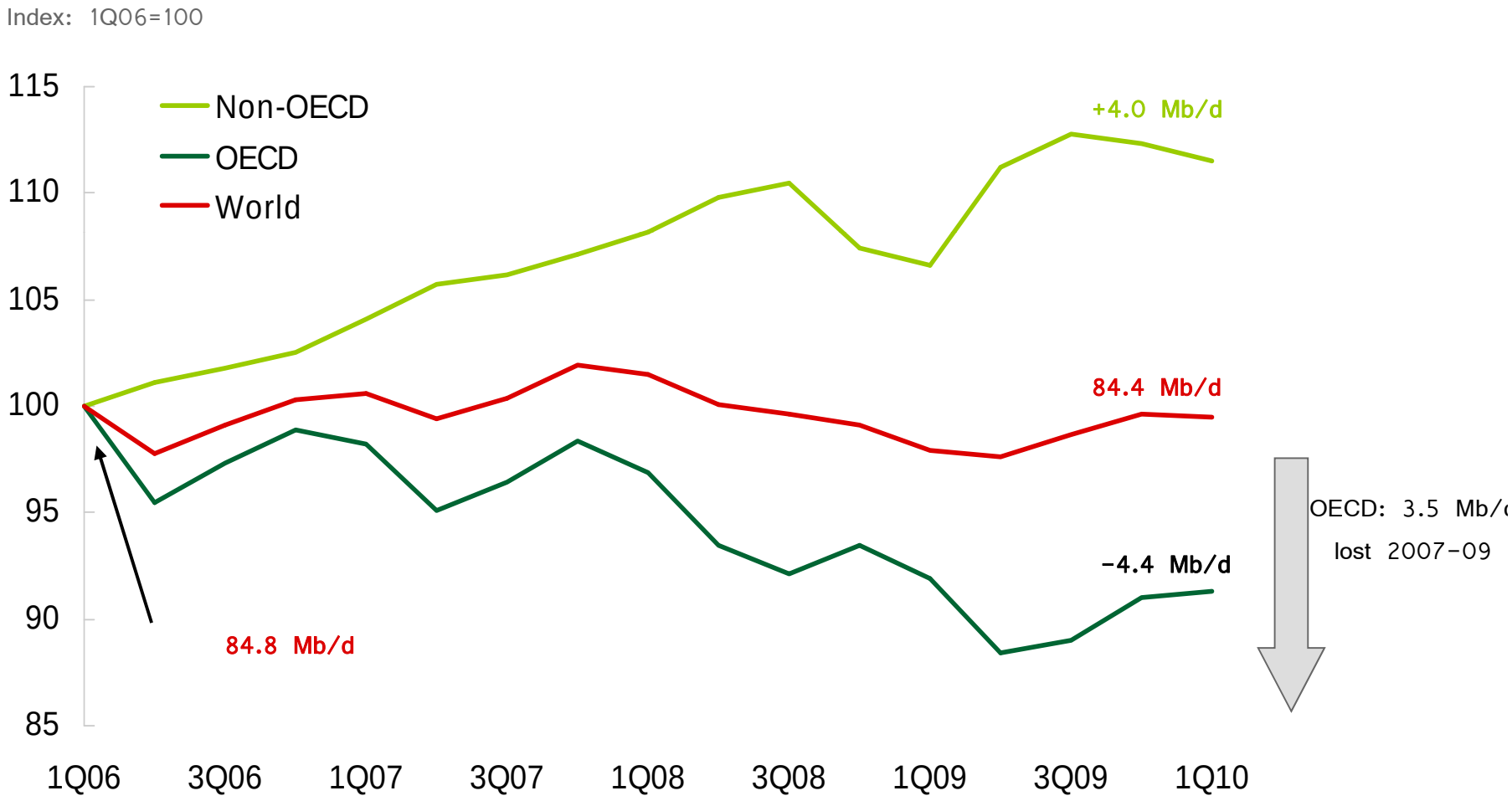
1. Demand: OECD Has Peaked



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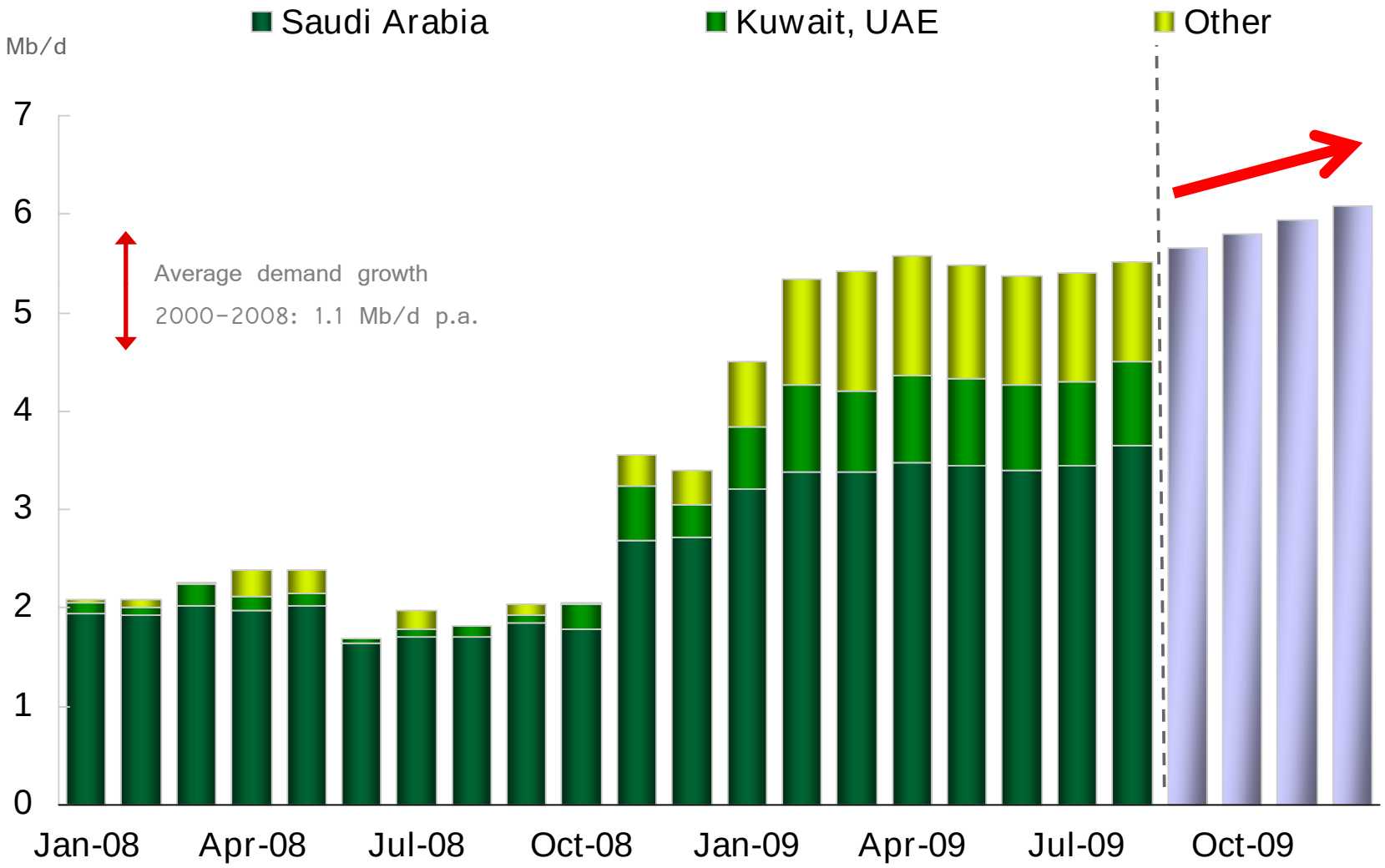
2. Supply: The Spare Capacity Challenge



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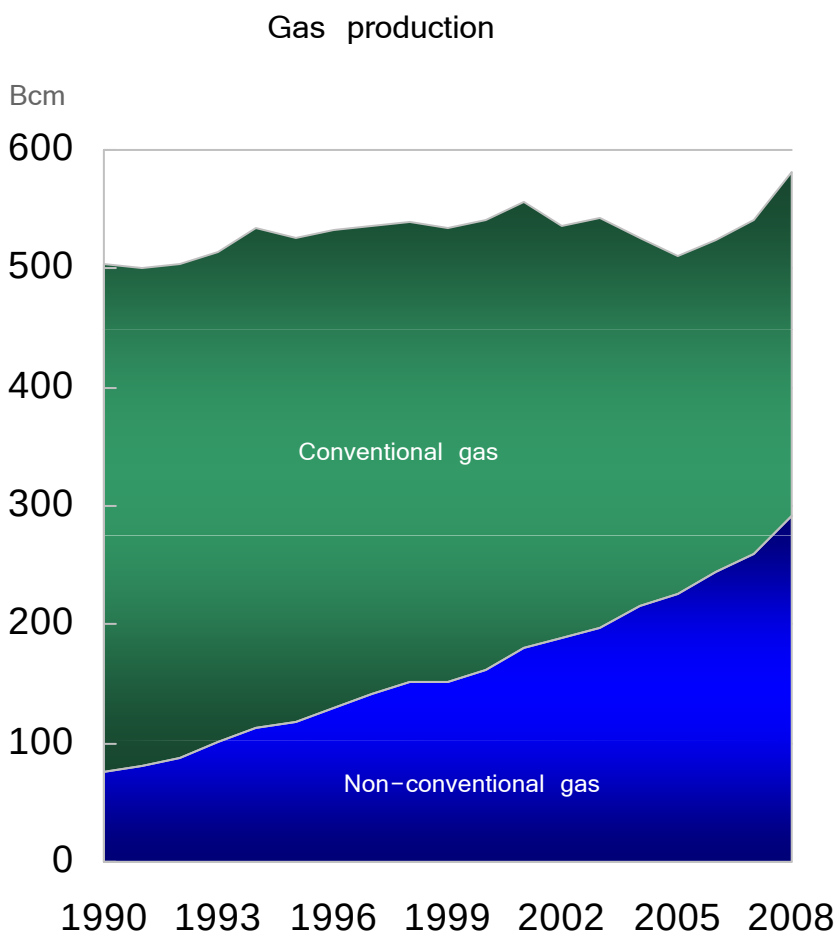
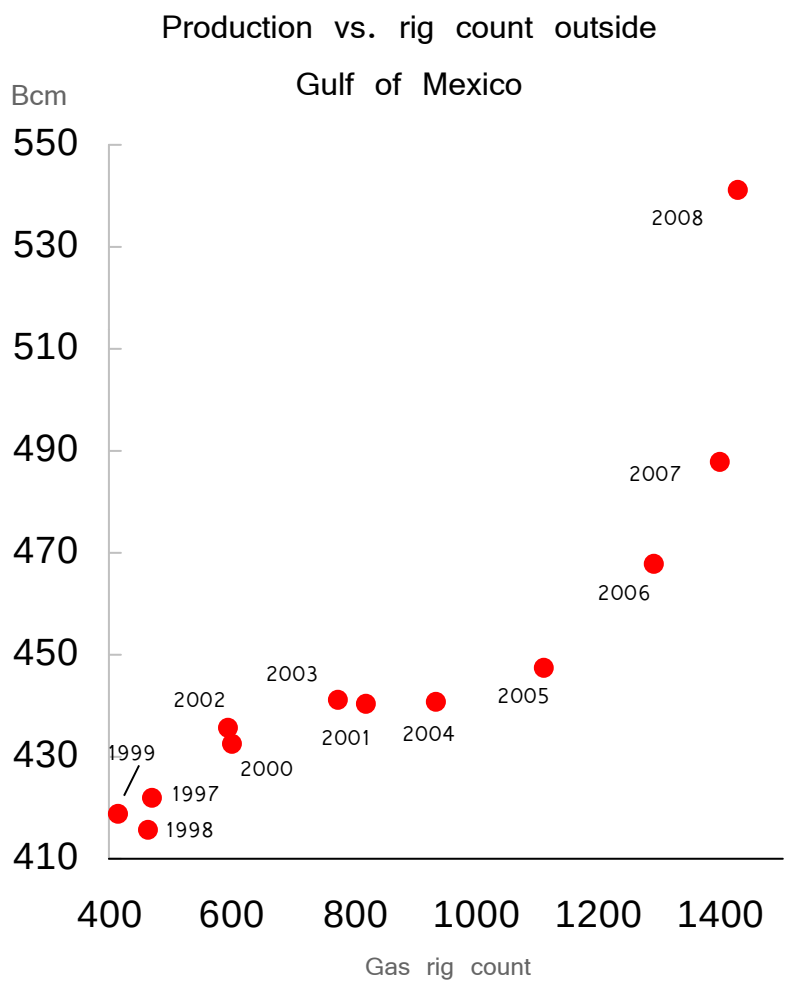
US Gas Production





Sources: Includes data from US DOE and Baker Hughes

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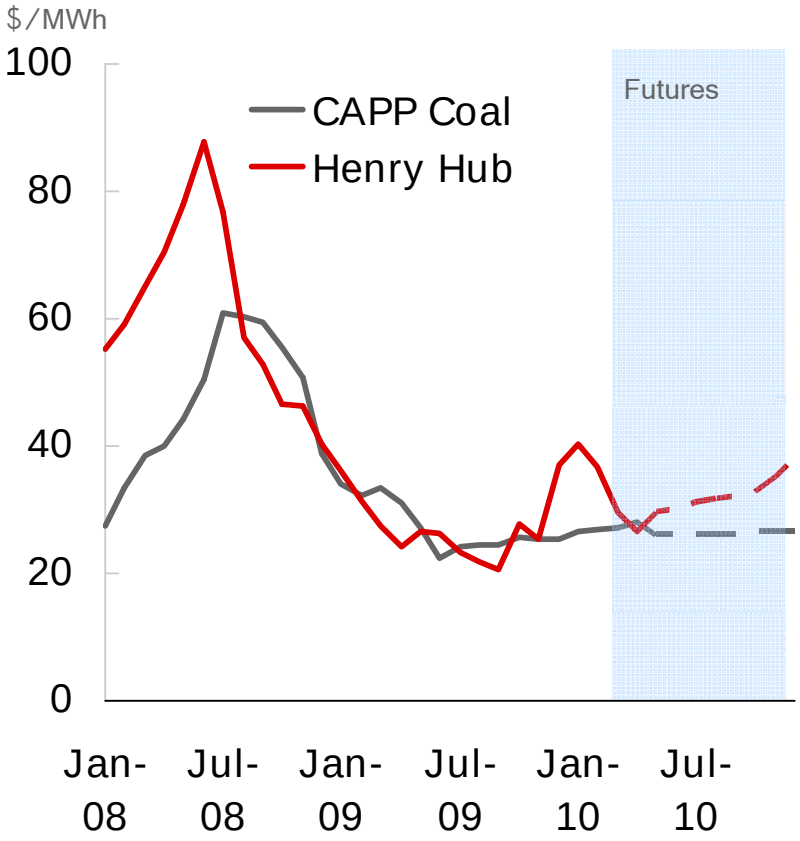
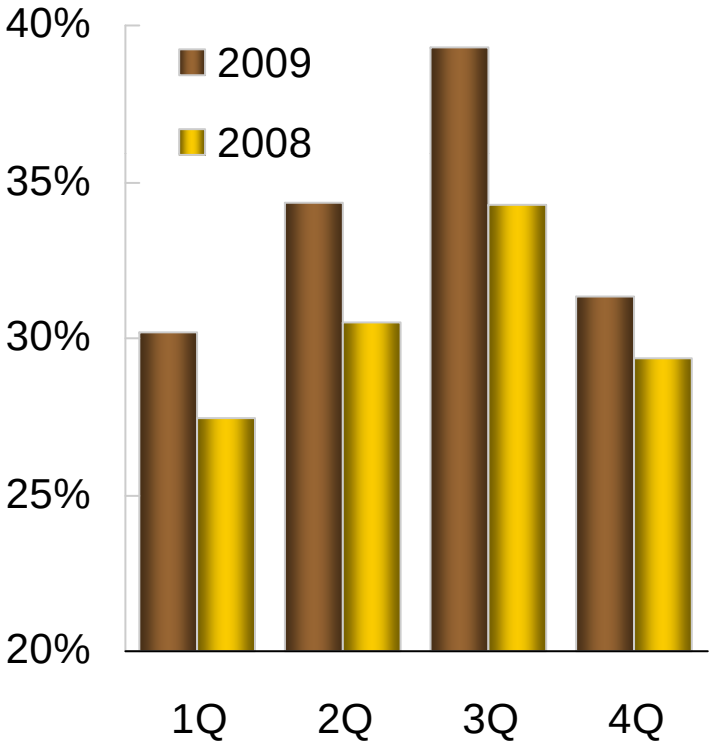
US Prices Chasing Coal Parity

Gas Gains Cost Advantage In Power Generation*



US Gas-Coal Substitution

Gas share in total electricity generation from coal and gas



* Accounting for thermal efficiencies and transport cost of coal

Sources: includes data from Platts, NYMEX, EIA STEO

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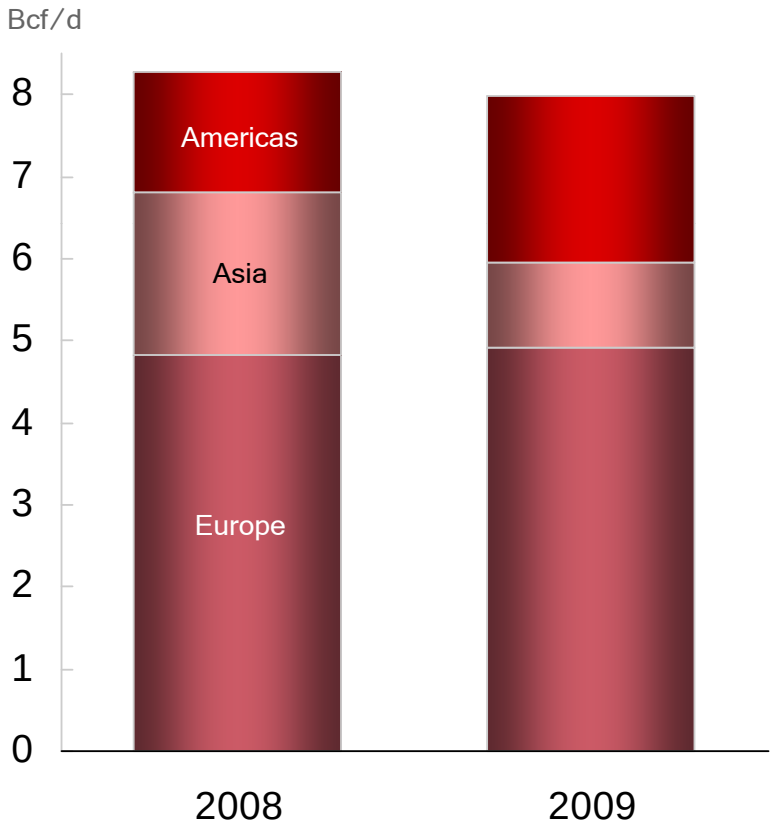
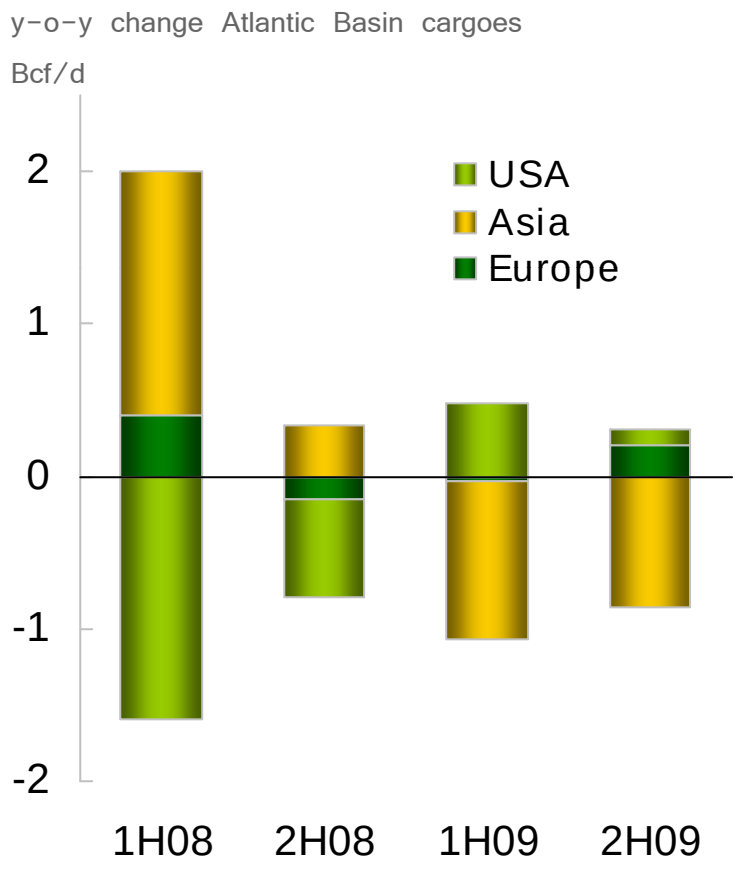
Meanwhile, LNG* Integrates…

By importer



Flexible LNG Switching Markets



* LNG from Algeria, Belgium, Egypt, Nigeria, Norway, Trinidad and Equatorial Guinea

Sources: Includes data from Waterborne LNG

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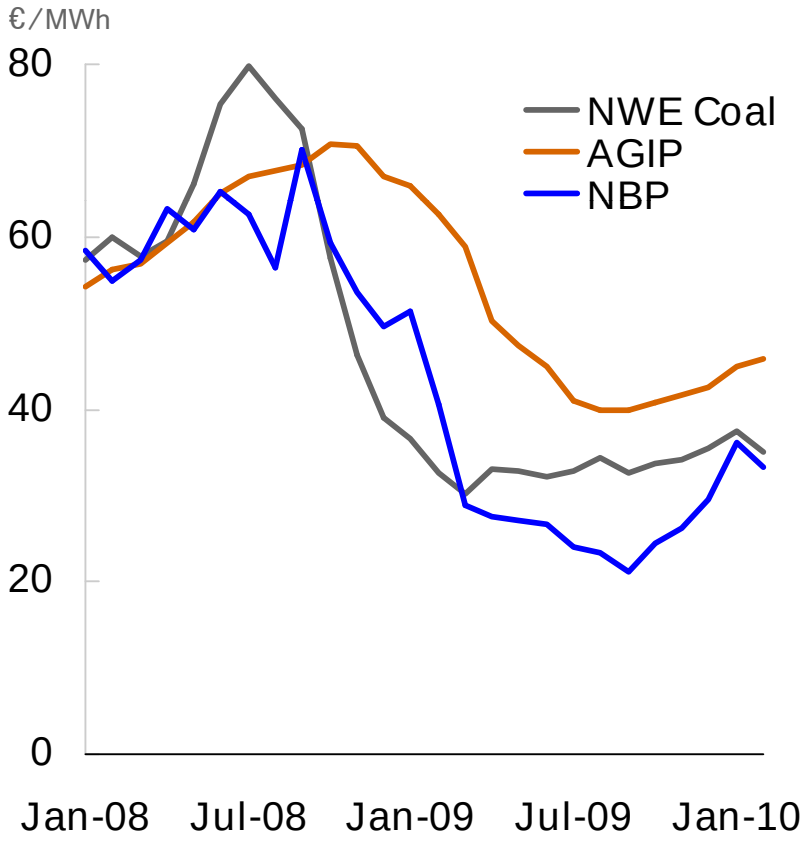
European Spot Prices Competing with Coal

Spot Gas At Cost Advantage In Power Generation*



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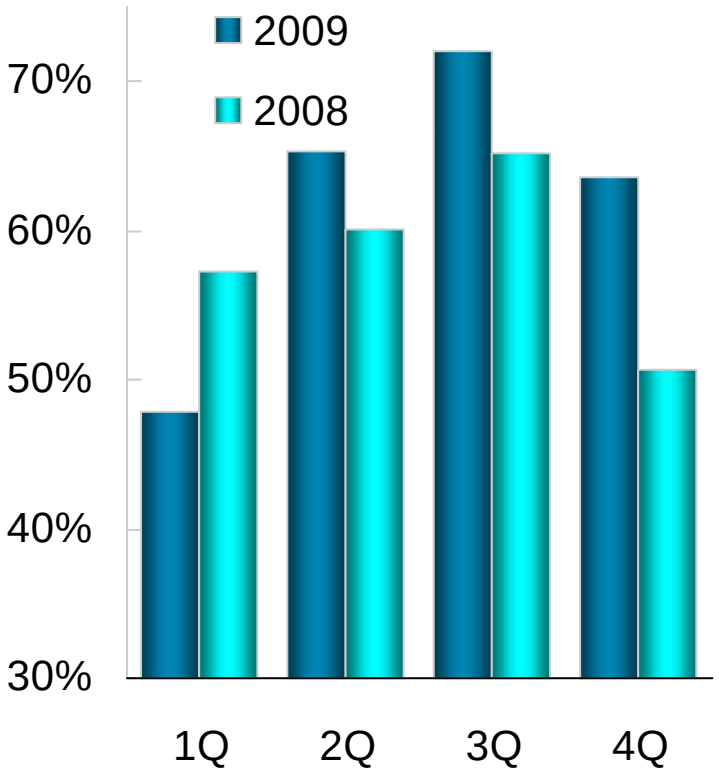

* Accounting for thermal efficiencies and CO_2 prices

Sources: includes data from Platts, McCloskey, European Climate Exchange, DECC

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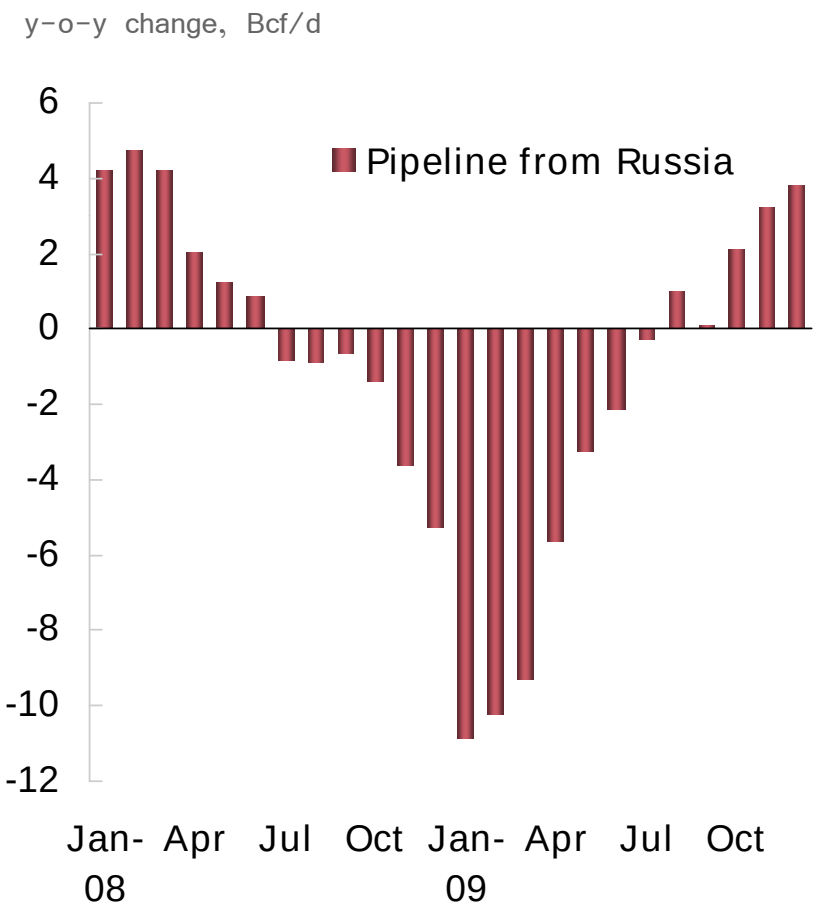
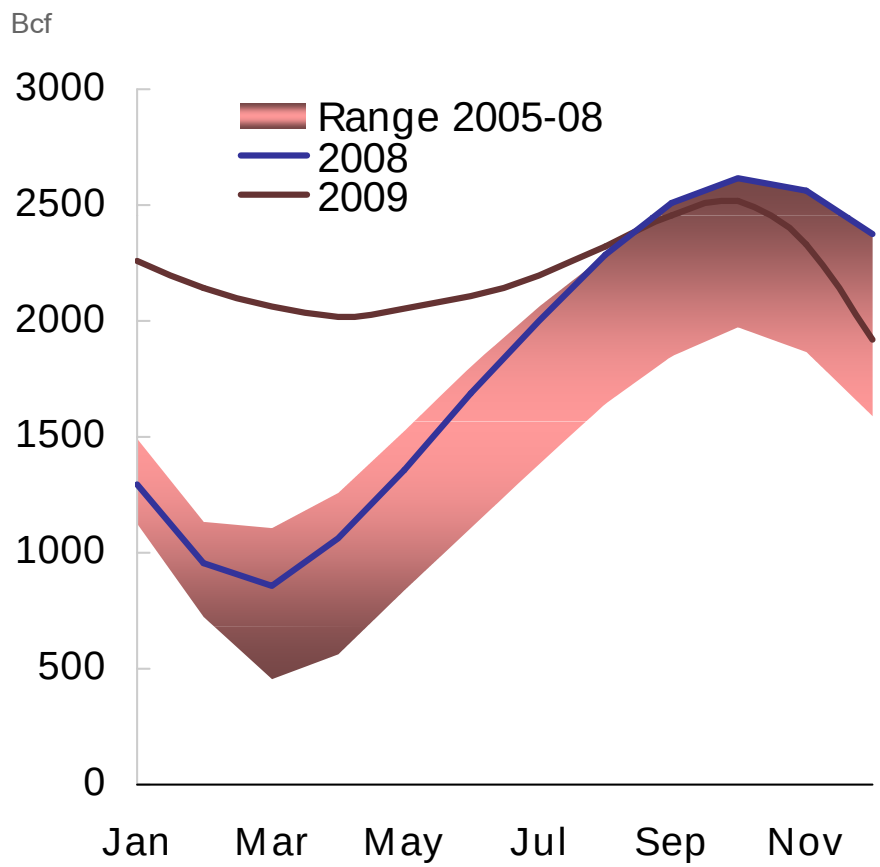
… With Consequences for Russia

Europe Switched Out of Pipelines



Impact on Russian Stocks



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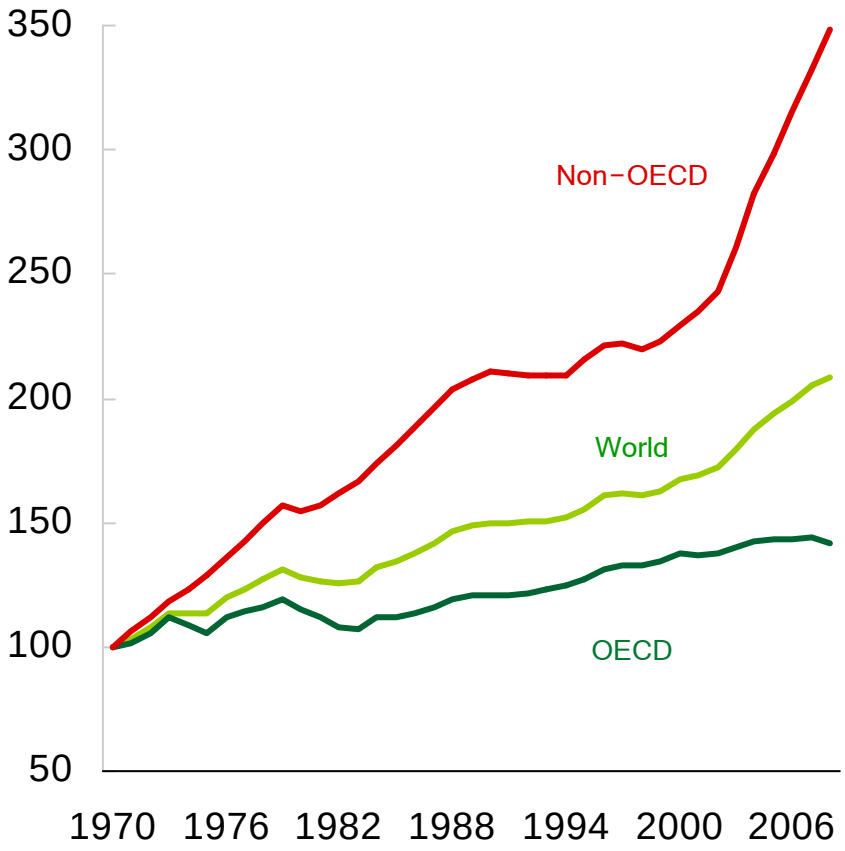
1. Climate Change Policies

World Carbon Emissions

Index:

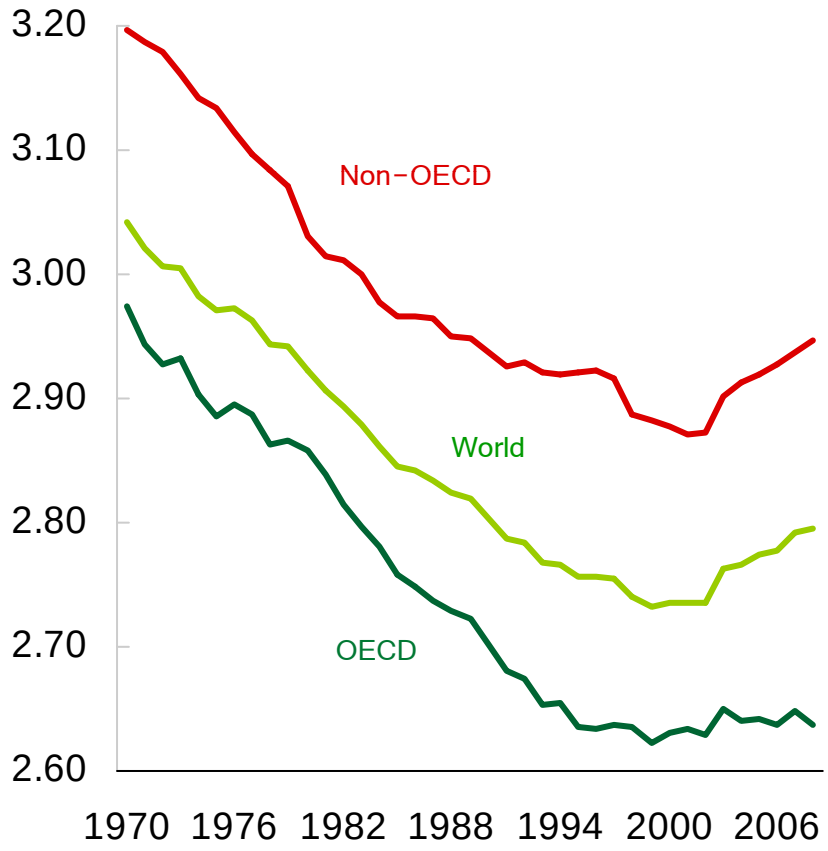
1970 = 100



CO2 Intensity of Energy

Tons of CO2

per toe



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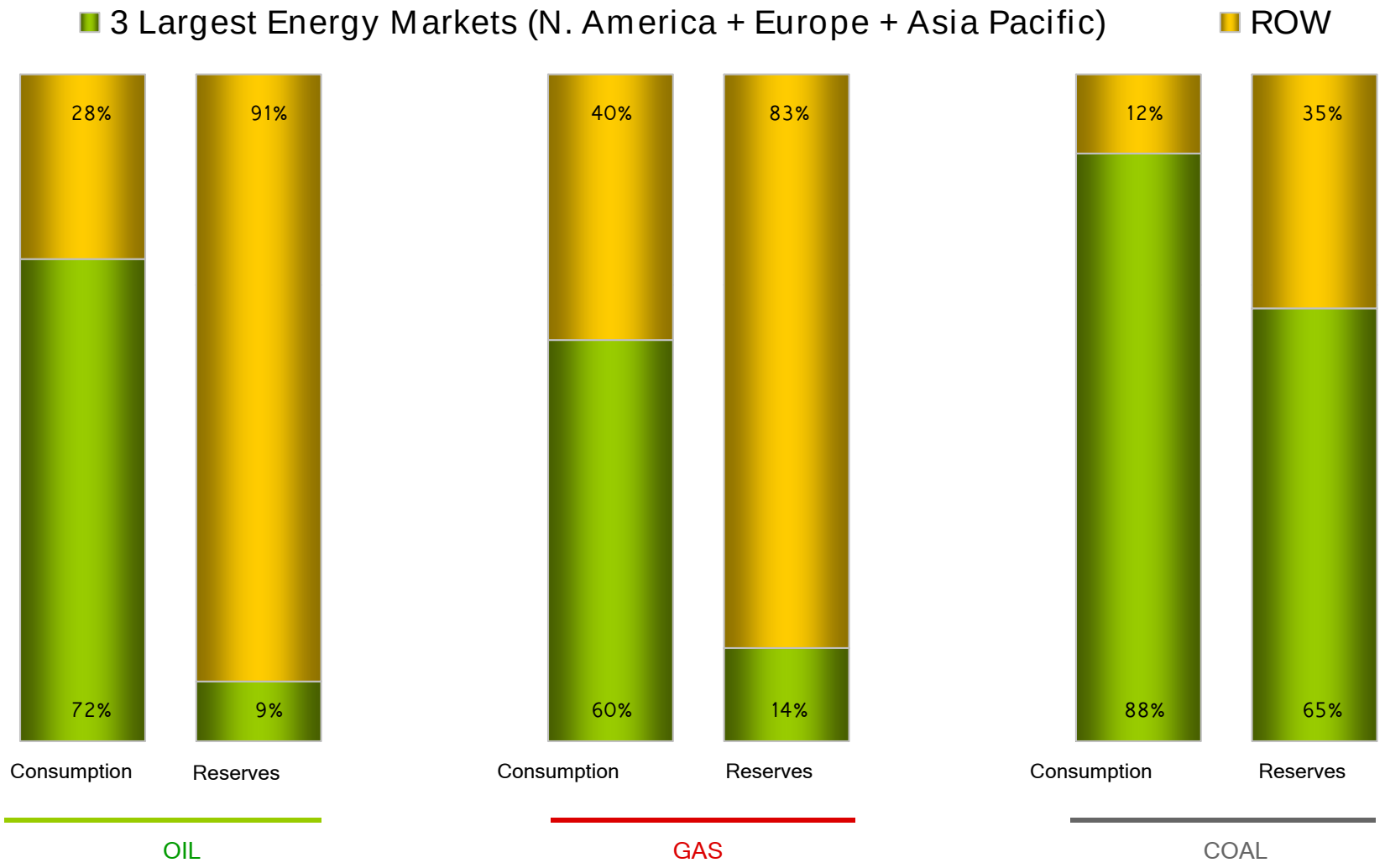
2. Energy Security



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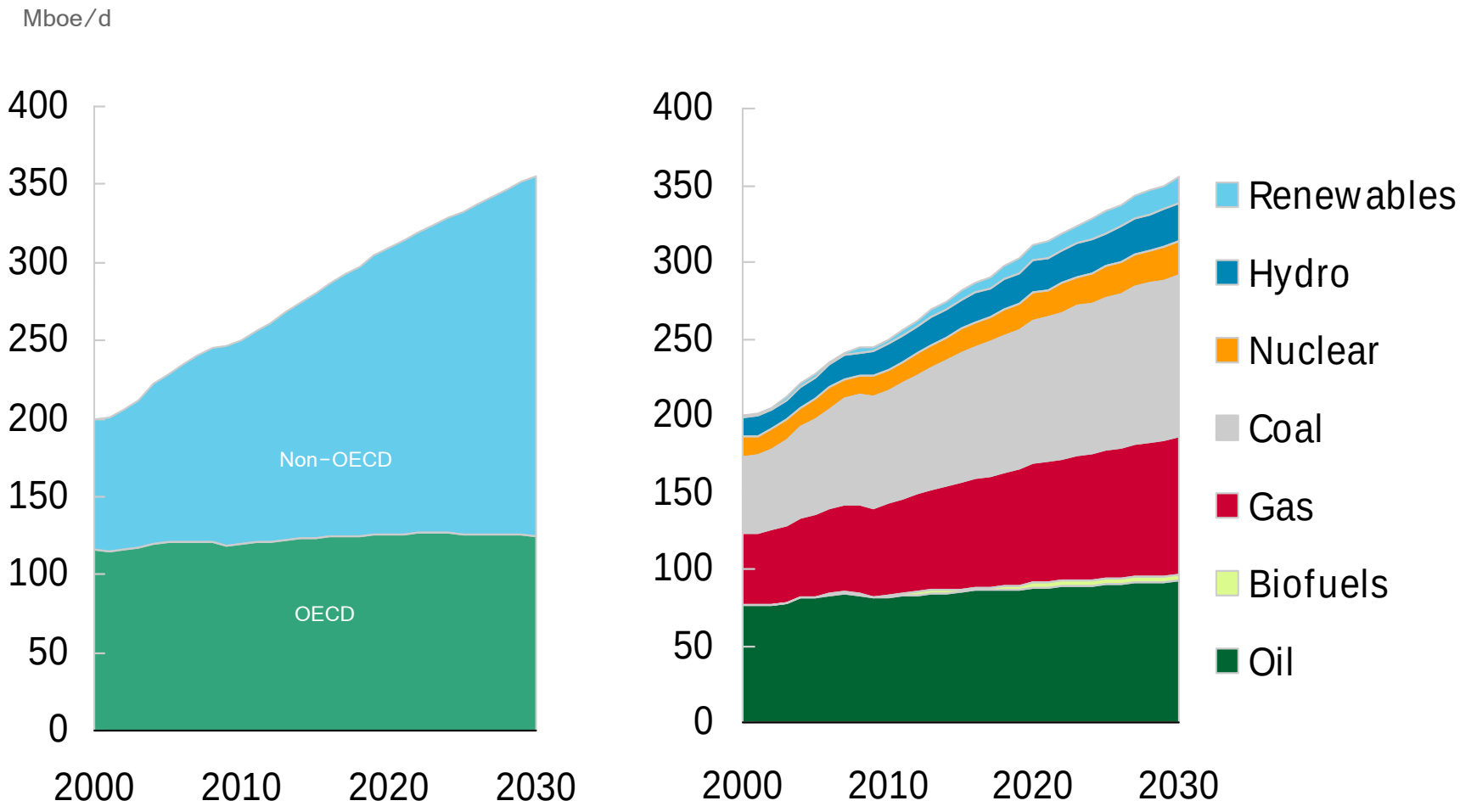
Will It Happen?



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