



Energy in Perspective

BP Statistical Review of World Energy
2007

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London, 12 June 2007

Outline

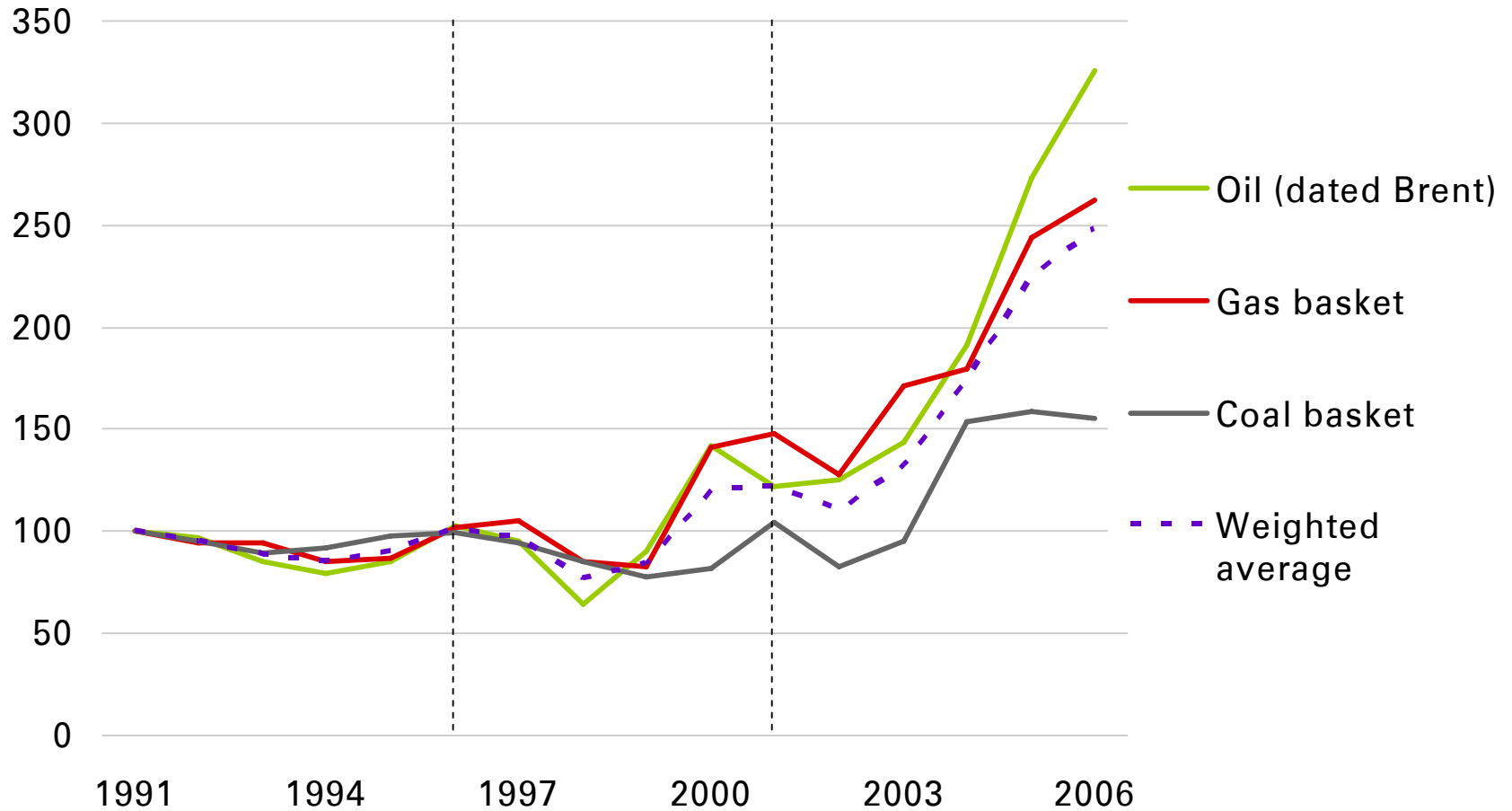


- Introduction
- What has changed? The medium term
- What is new? 2006 in review
- Conclusion

Energy Prices



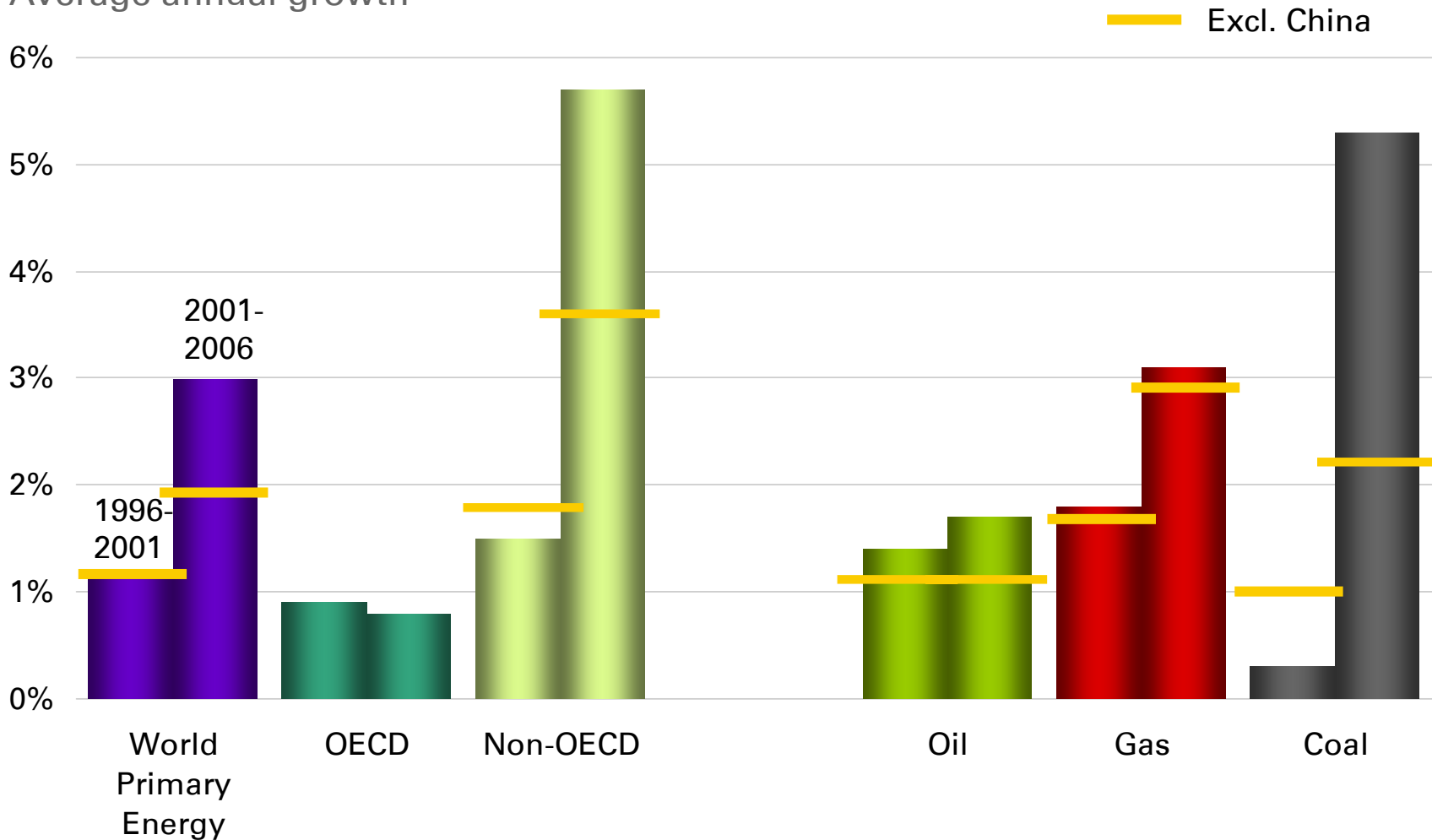
Index 1991=100



World Energy Consumption Growth



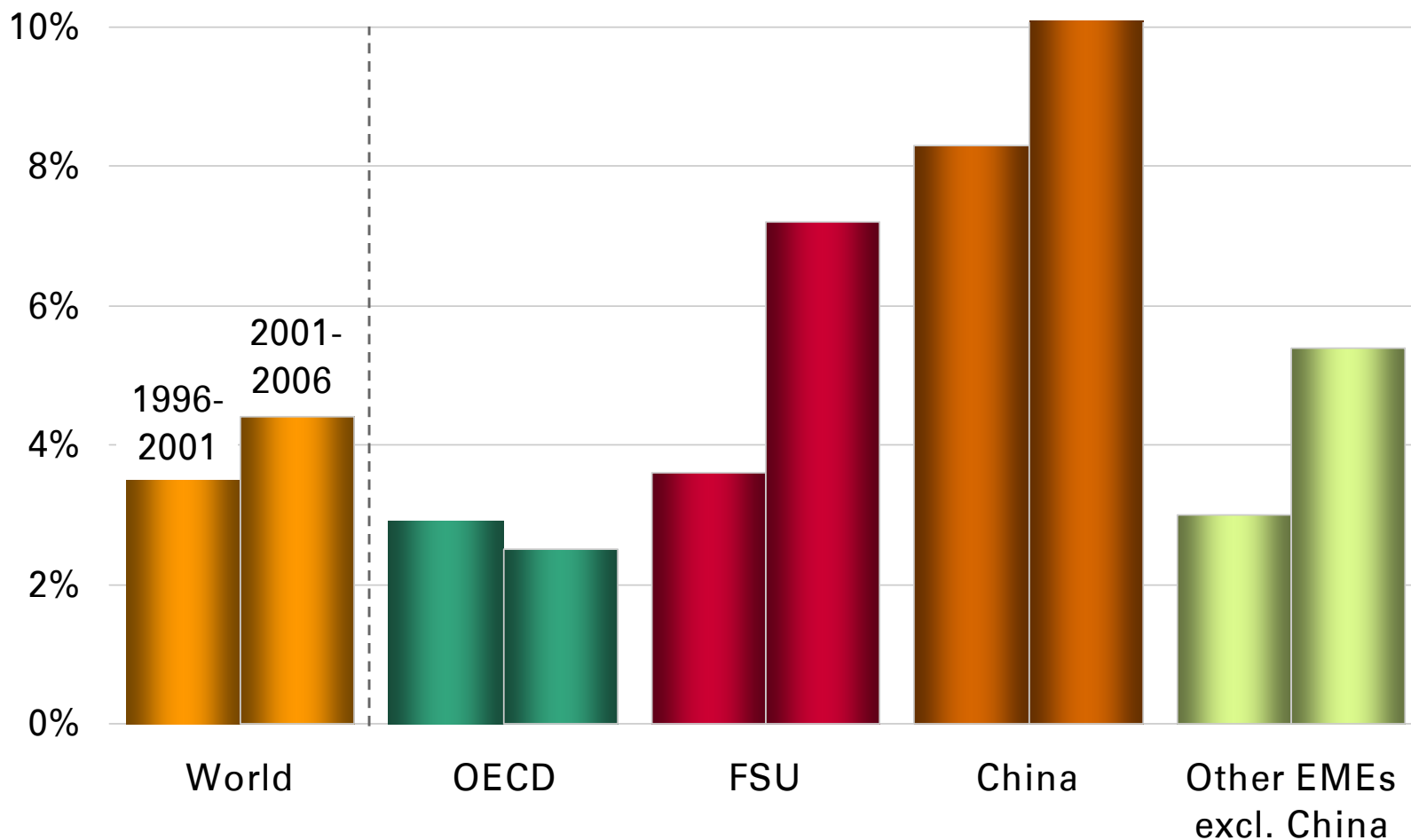
Average annual growth



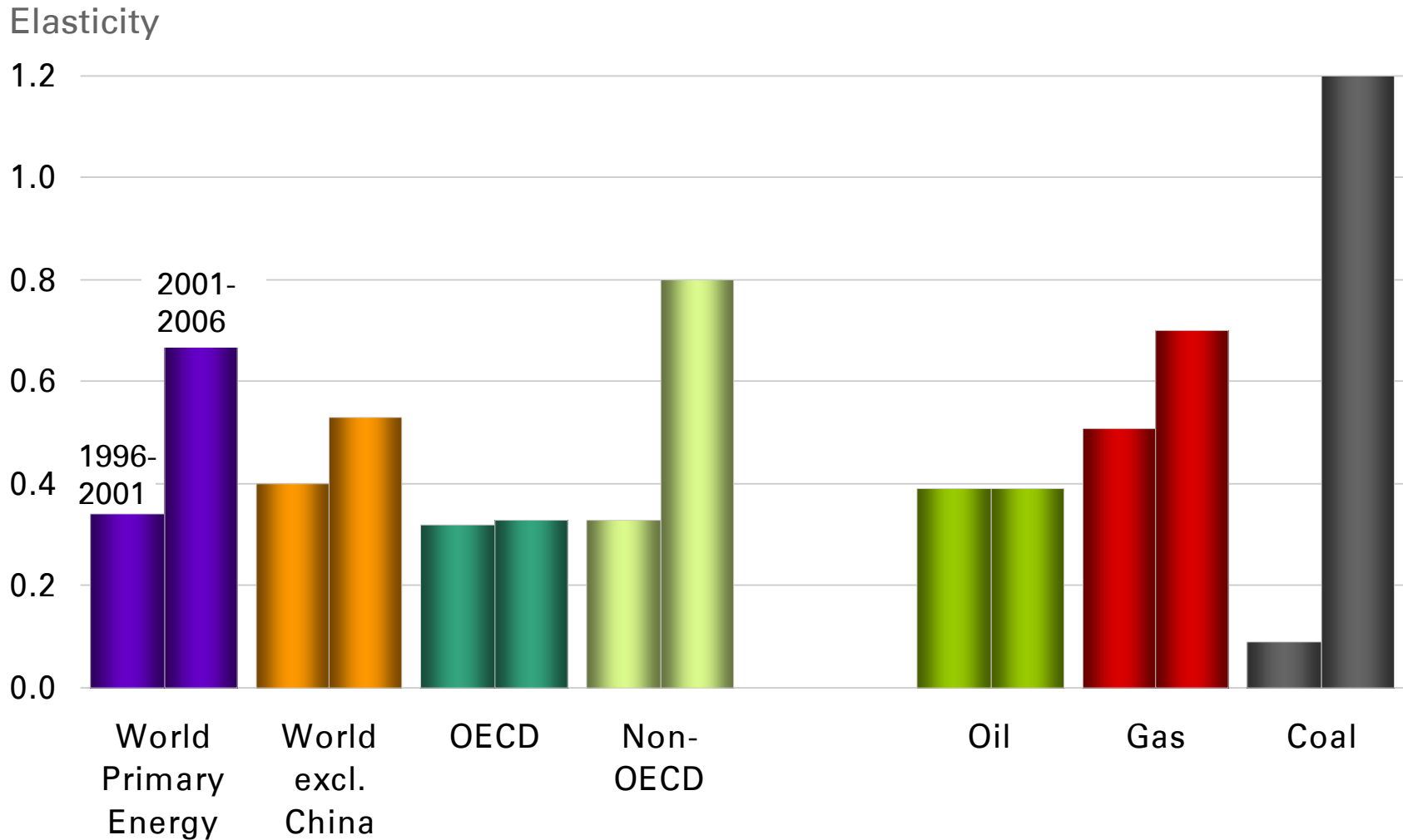
World Economic Growth



Average annual growth (PPP)



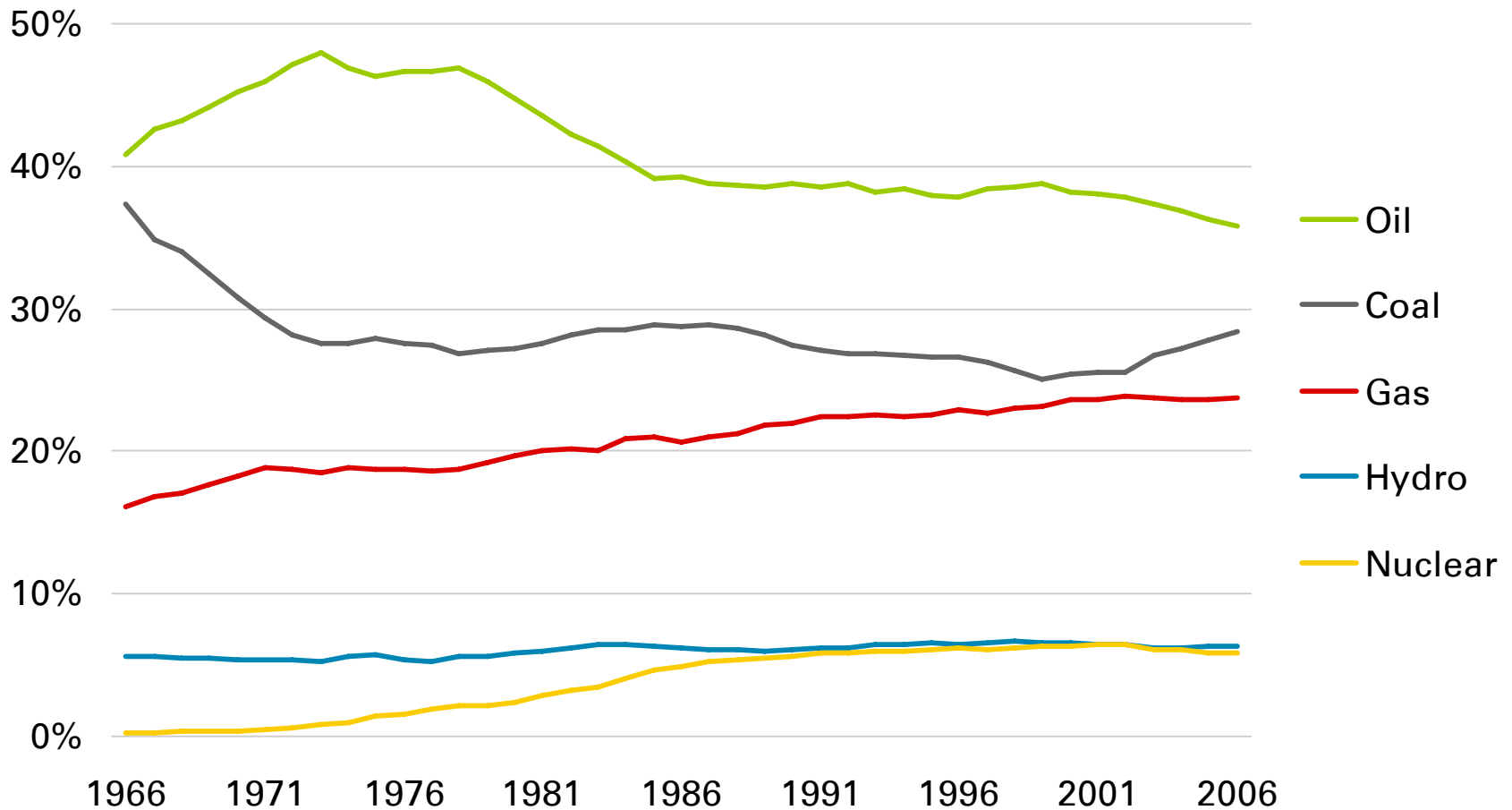
Income Elasticities of Energy Demand



World Fuel Shares



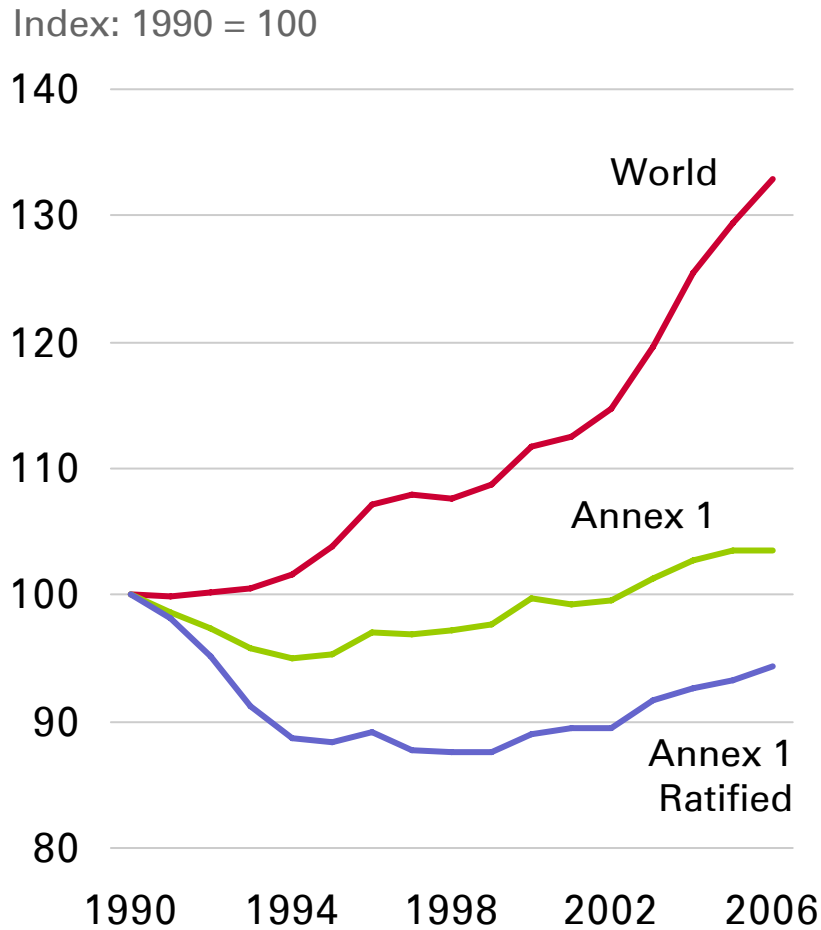
Share of global primary energy consumption



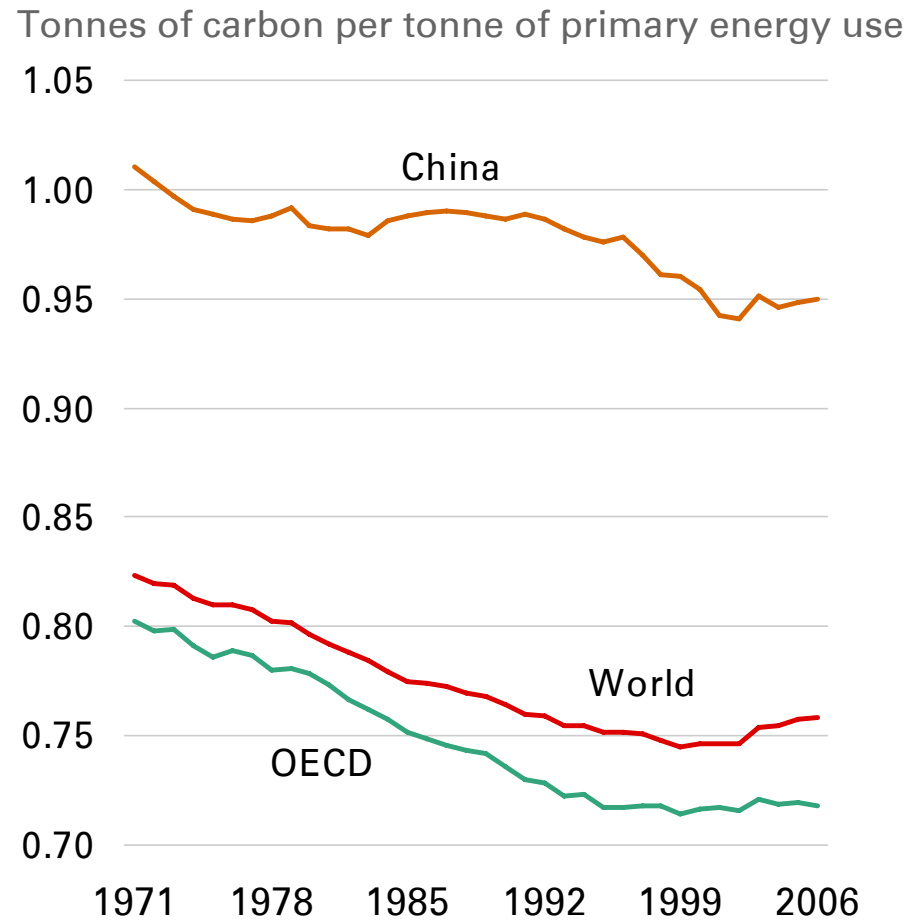
Carbon Emissions



World Carbon Emissions



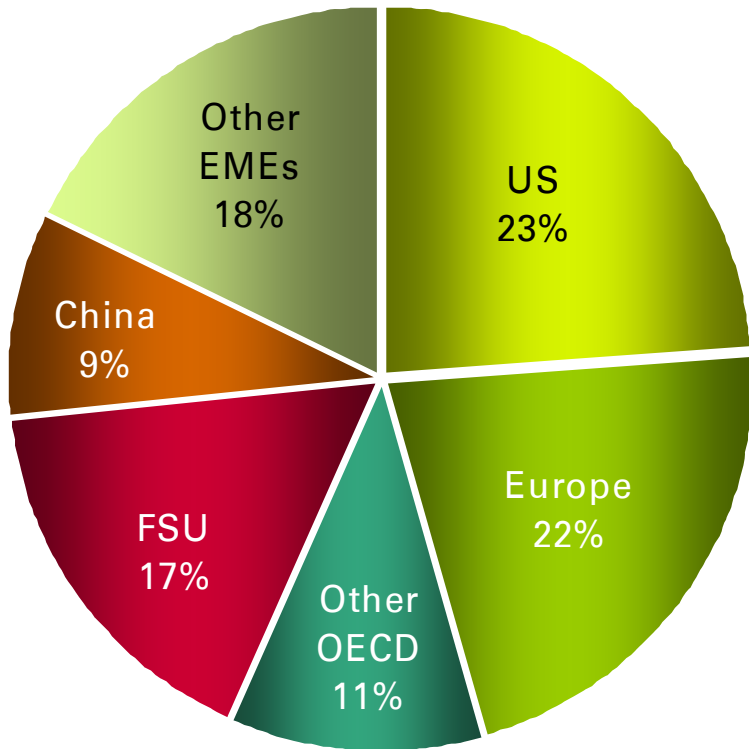
Carbon Intensity



Shares of World Energy Consumption

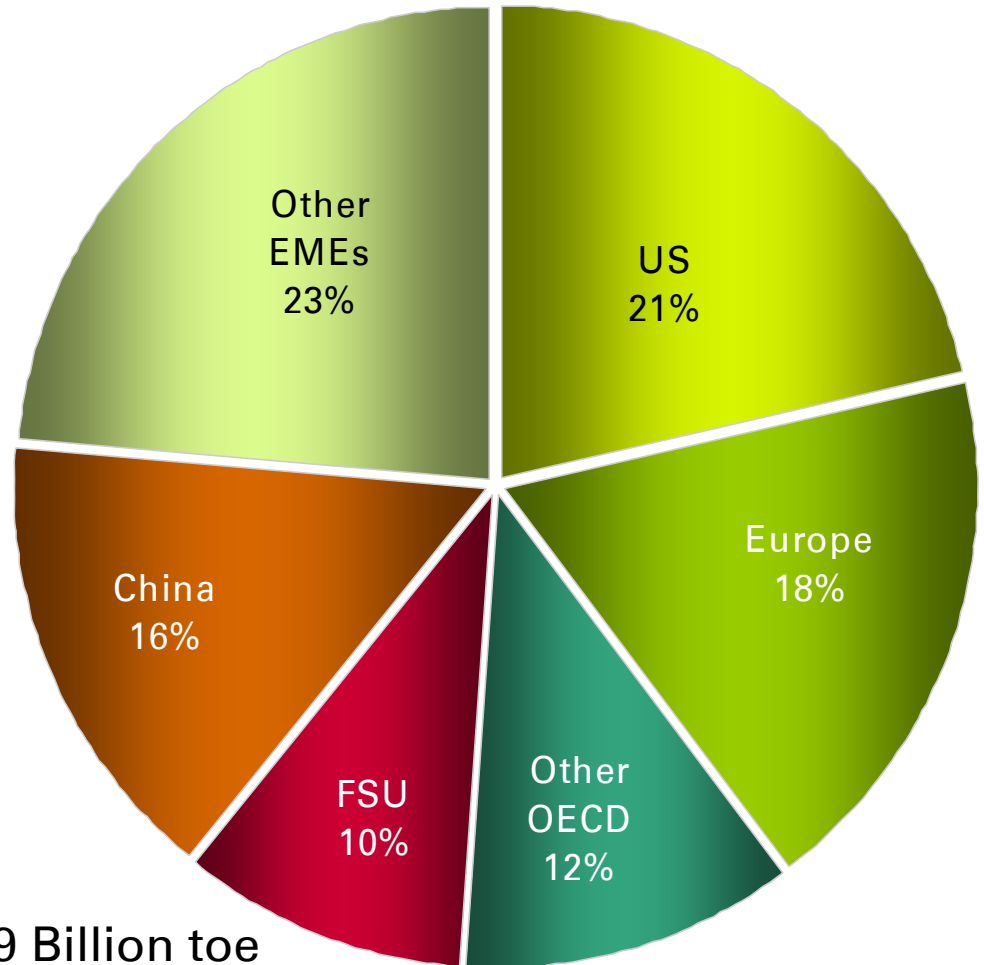


1991



8.2 Billion toe

2006



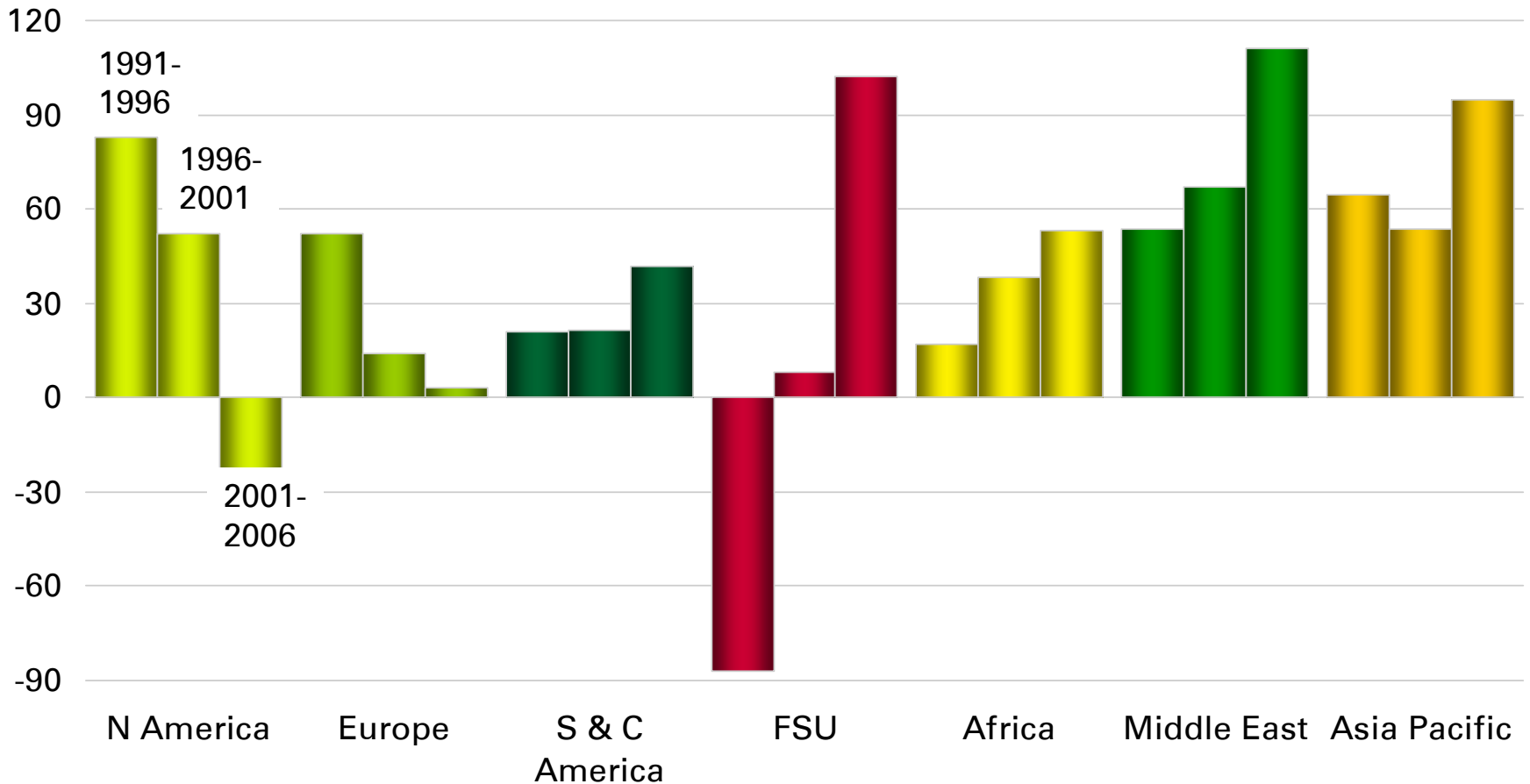
10.9 Billion toe

Regional Growth of Gas Production



5 year cumulative changes in natural gas production by region

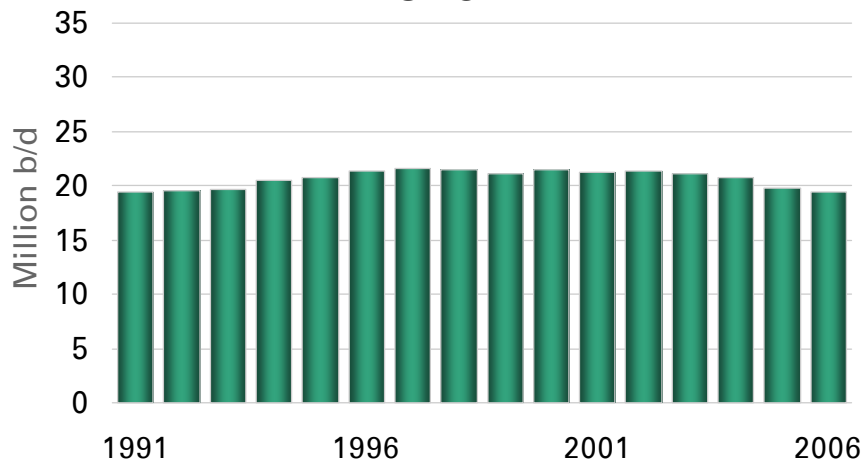
Billion cubic metres



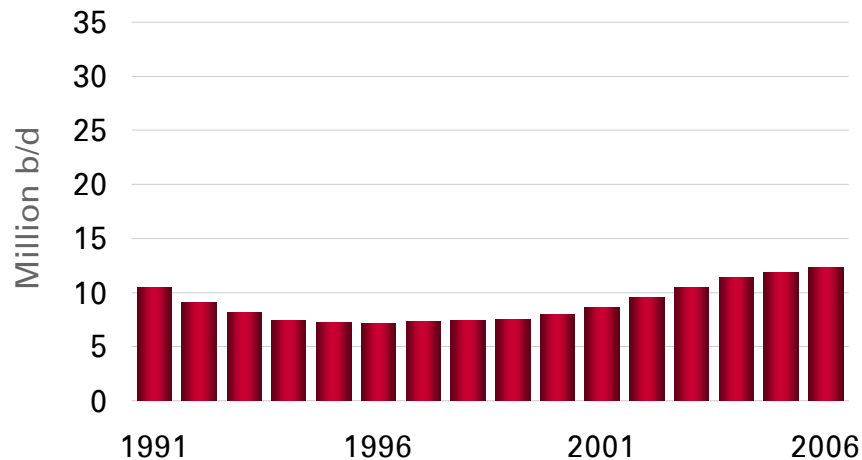
World Oil Production



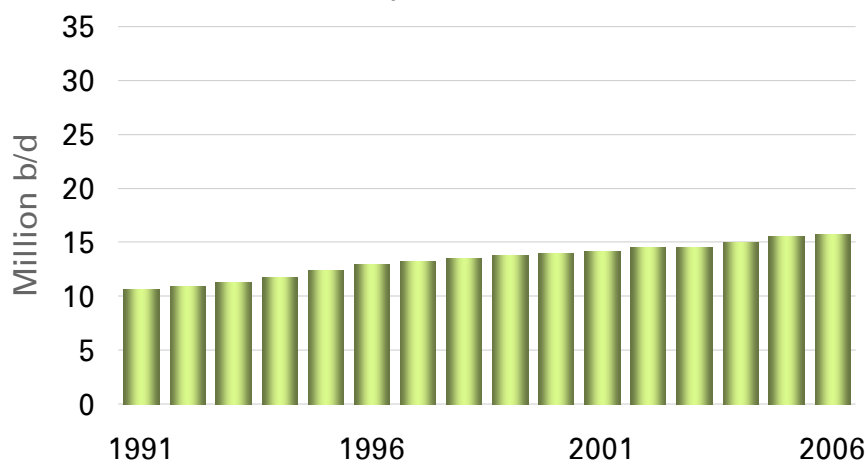
OECD



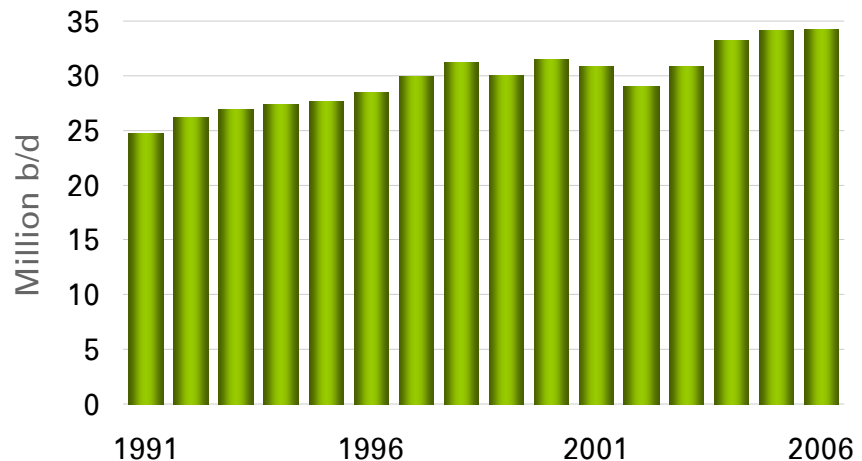
FSU



Non-OPEC, ex OECD and FSU



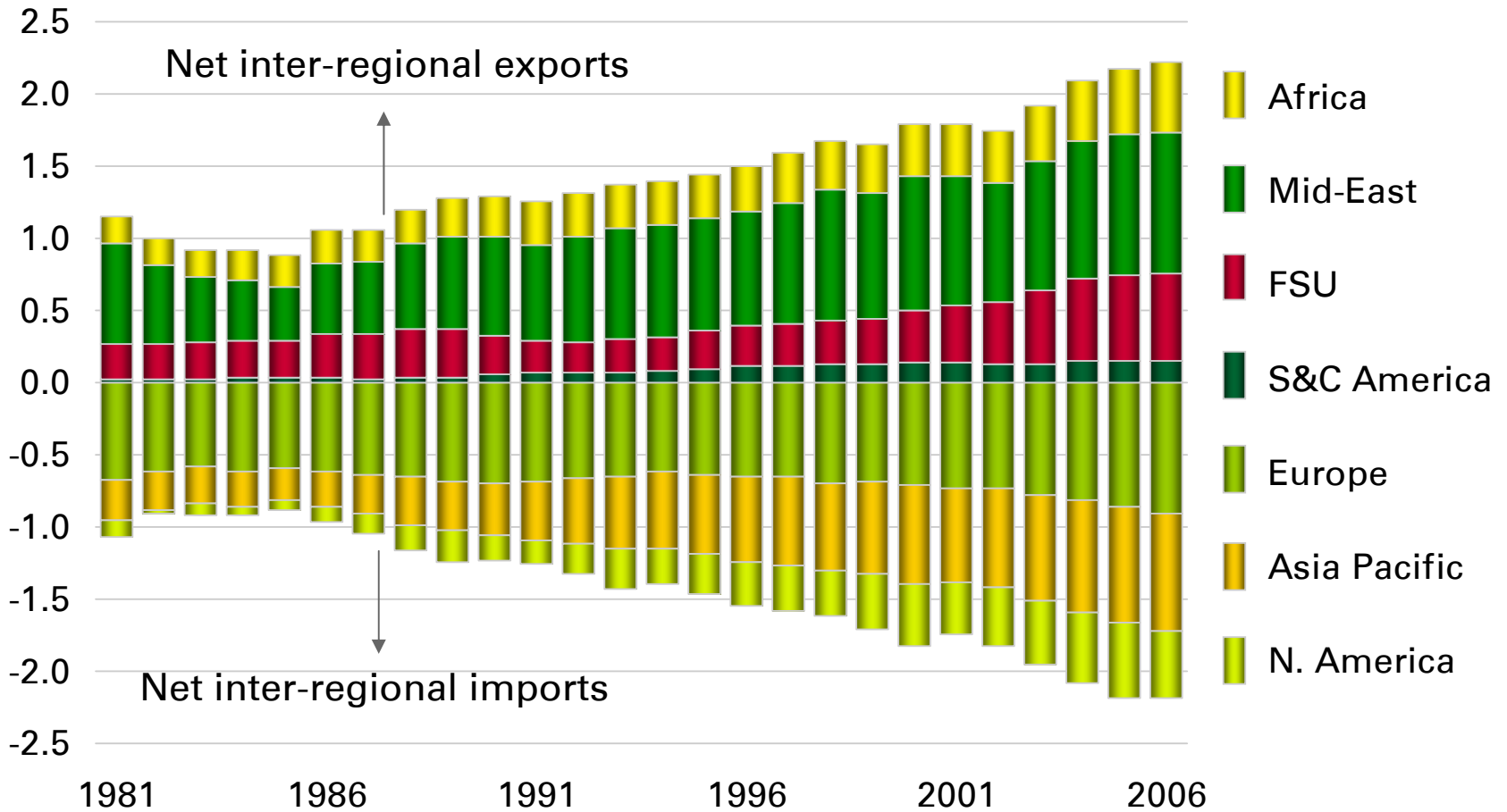
OPEC



Energy Trade



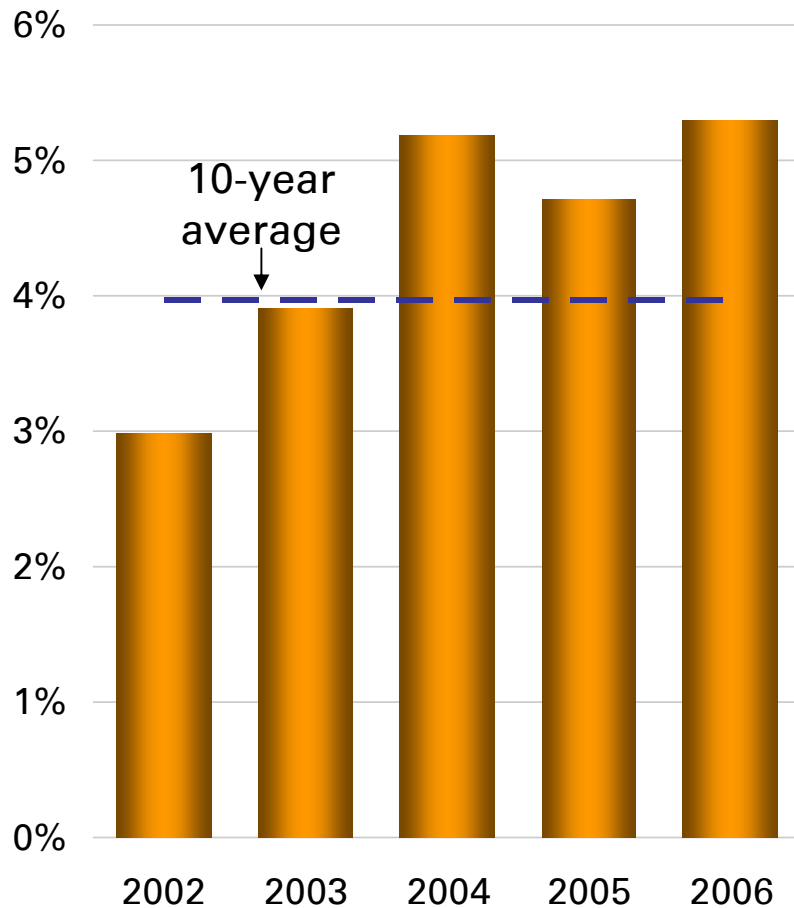
Billion tonnes oil equivalent



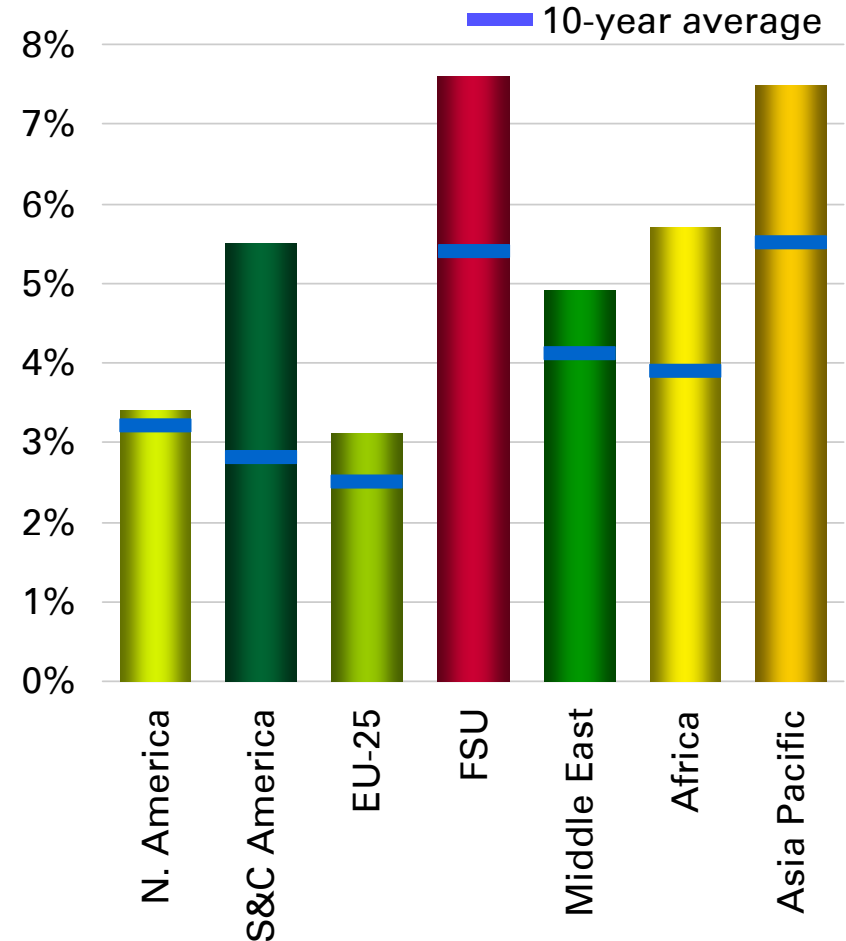
World Economic Growth



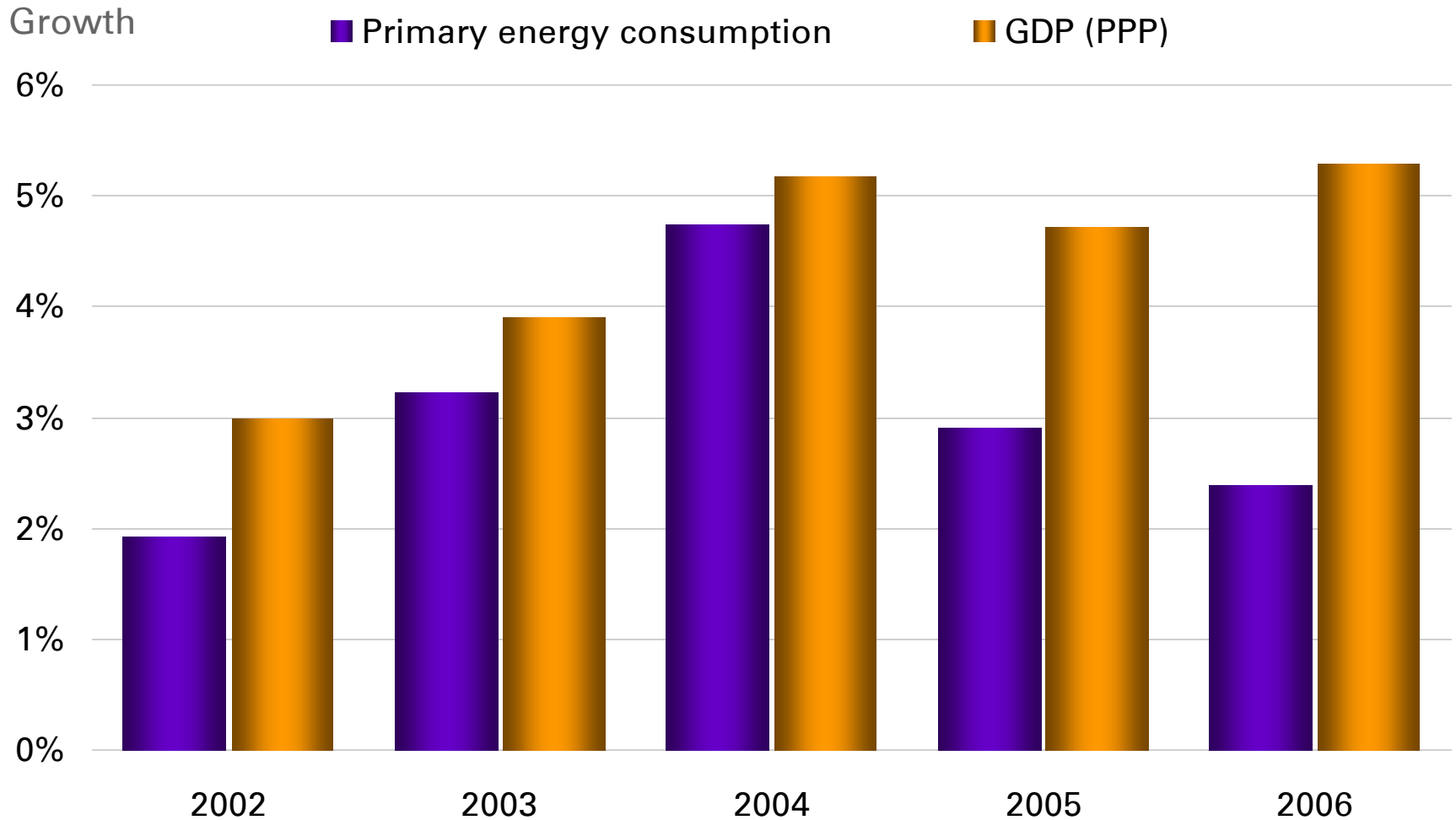
Global GDP growth (PPP)



Regional GDP growth in 2006 (PPP)



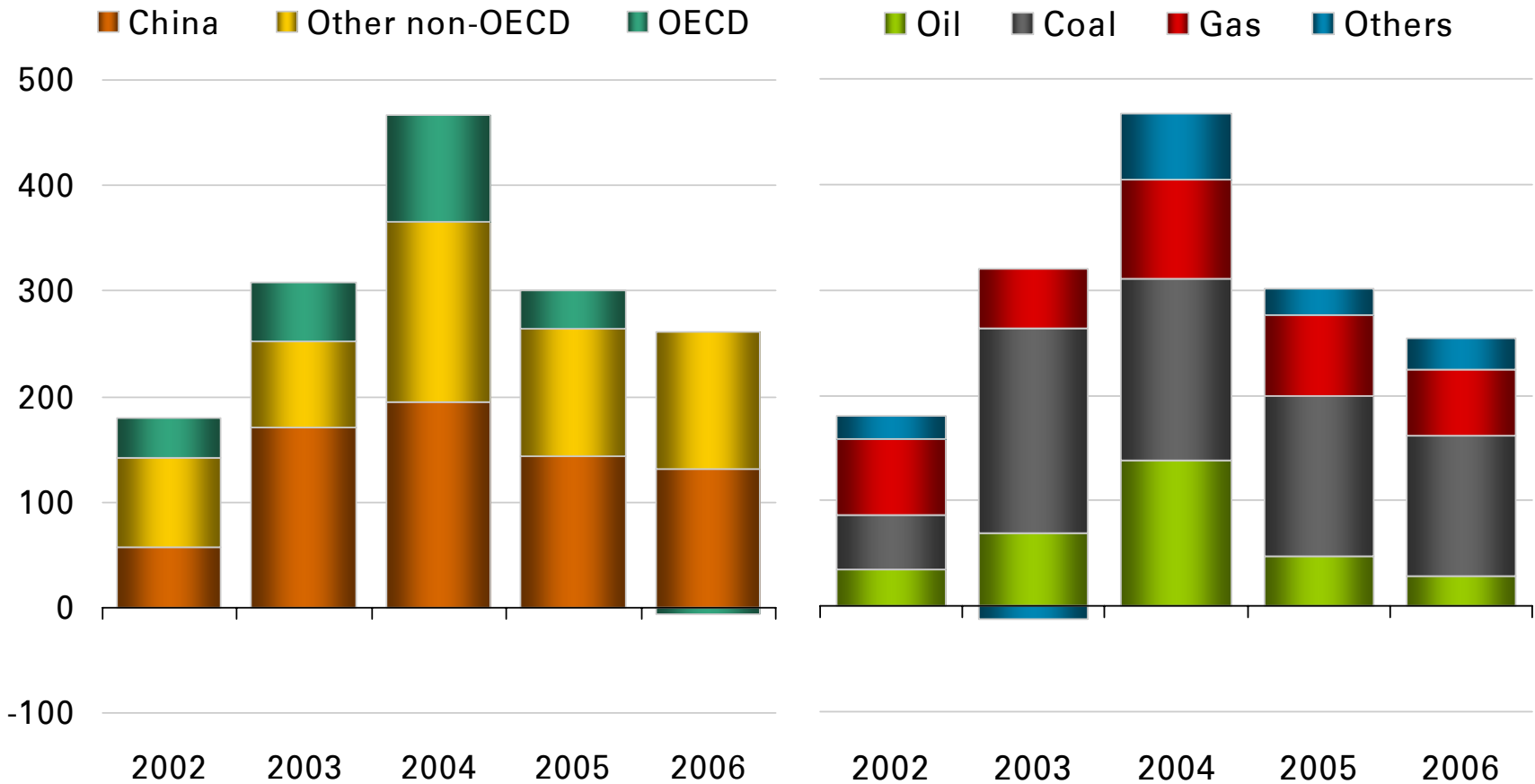
GDP and Primary Energy Growth



World Energy Consumption Growth



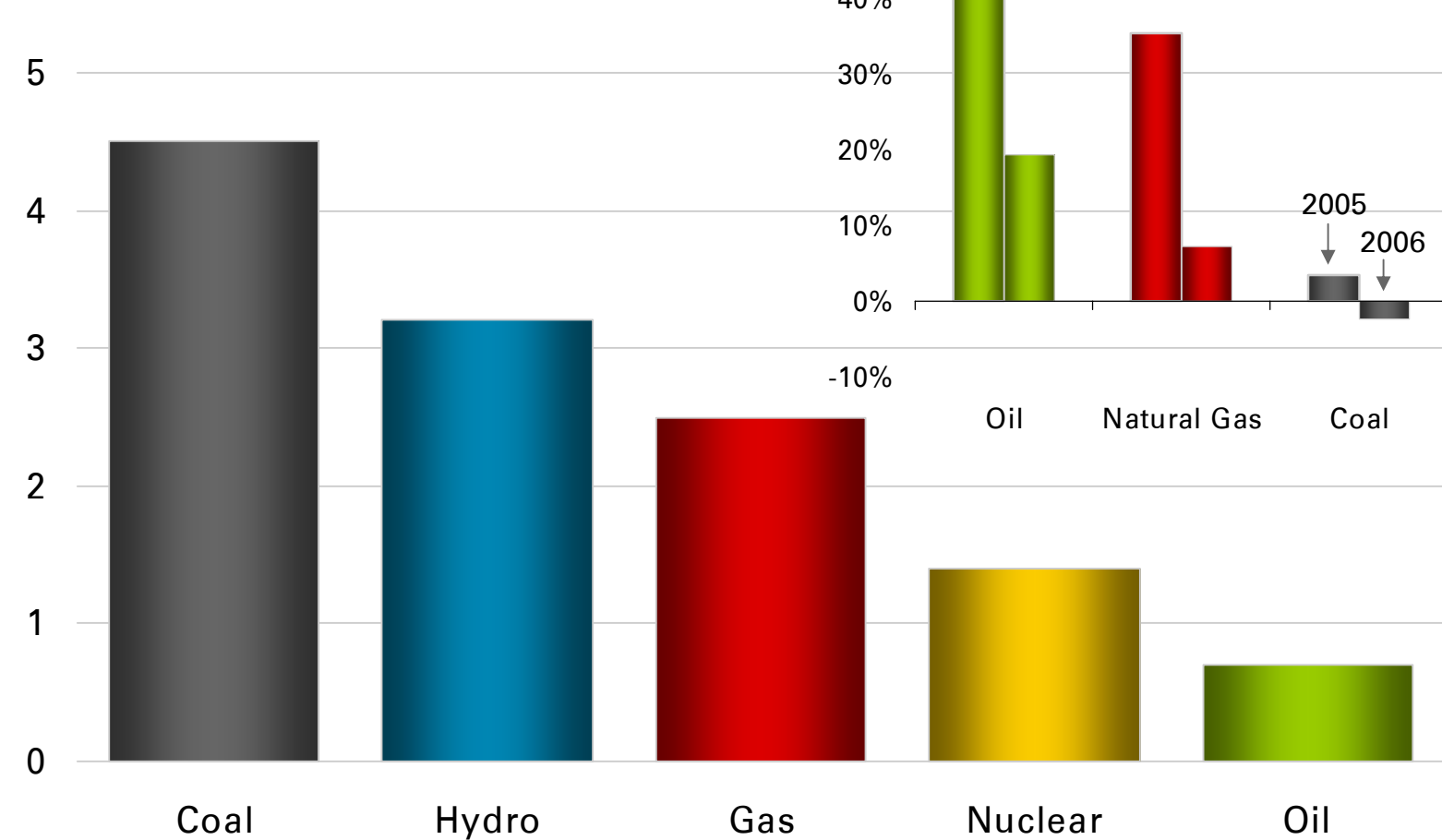
Million tonnes oil equivalent



Primary Energy Growth by Fuel



% Growth in 2006

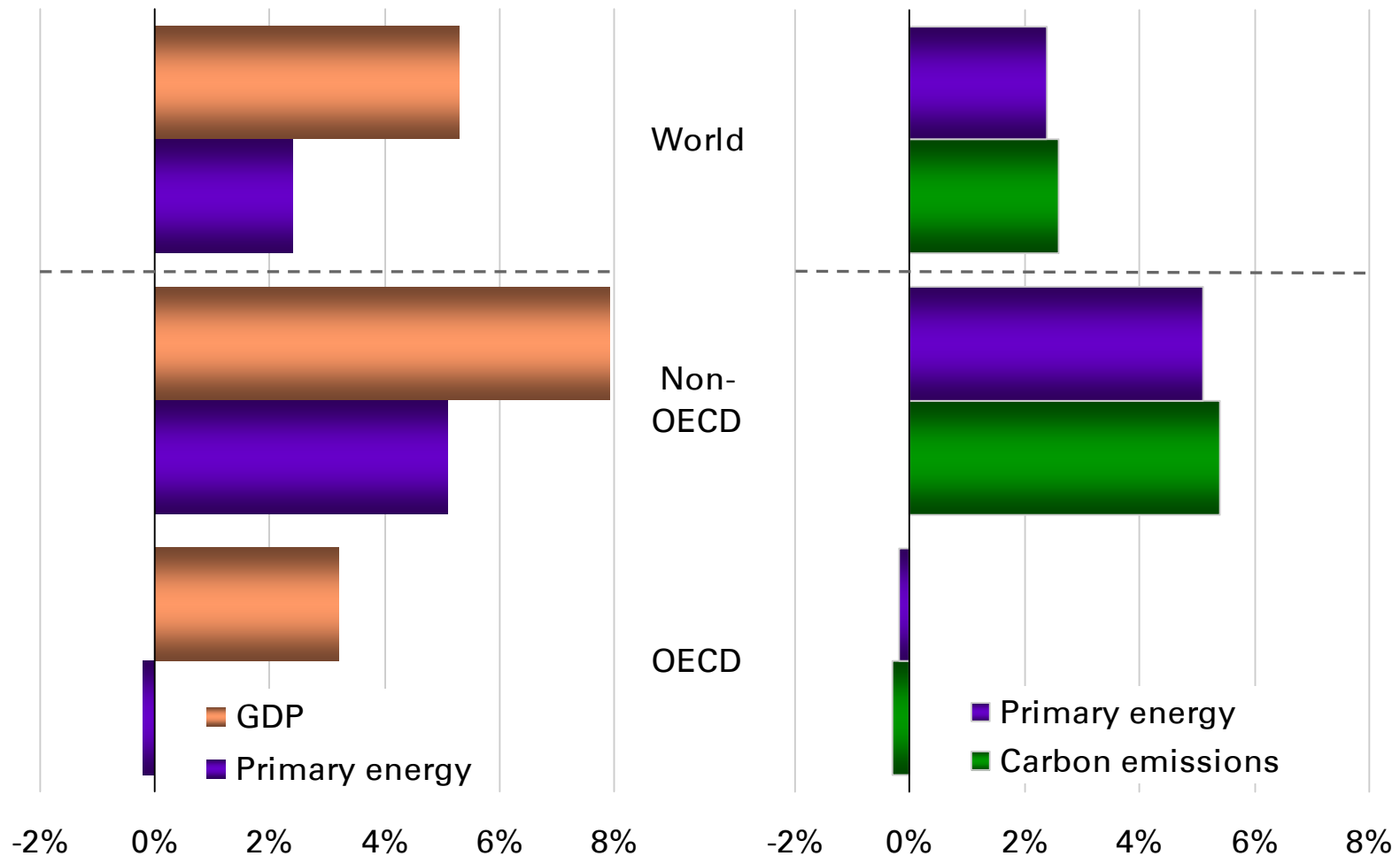


GDP, Energy and Carbon Emissions



Growth of GDP and energy in 2006

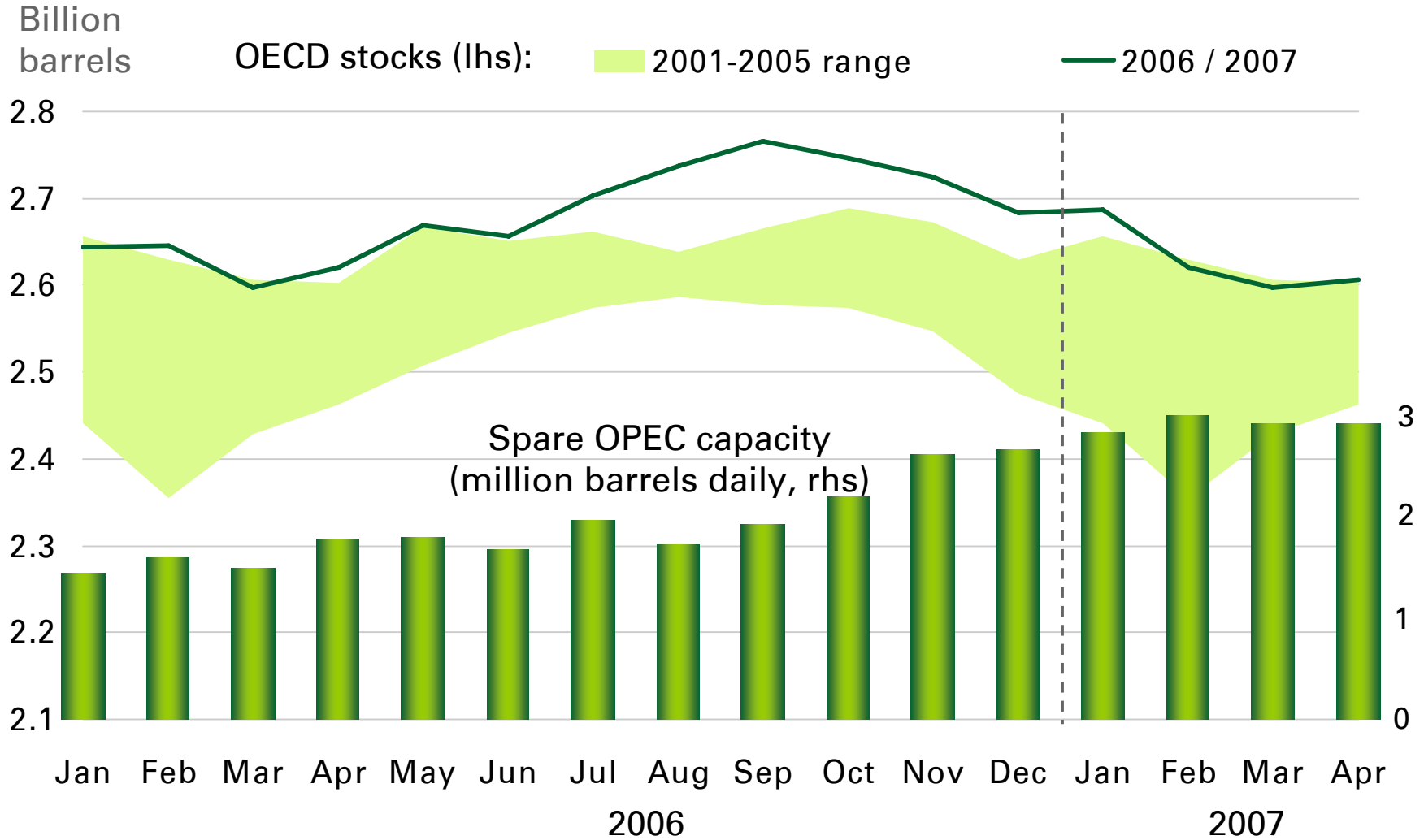
Growth of energy and carbon emissions in 2006



Oil Prices



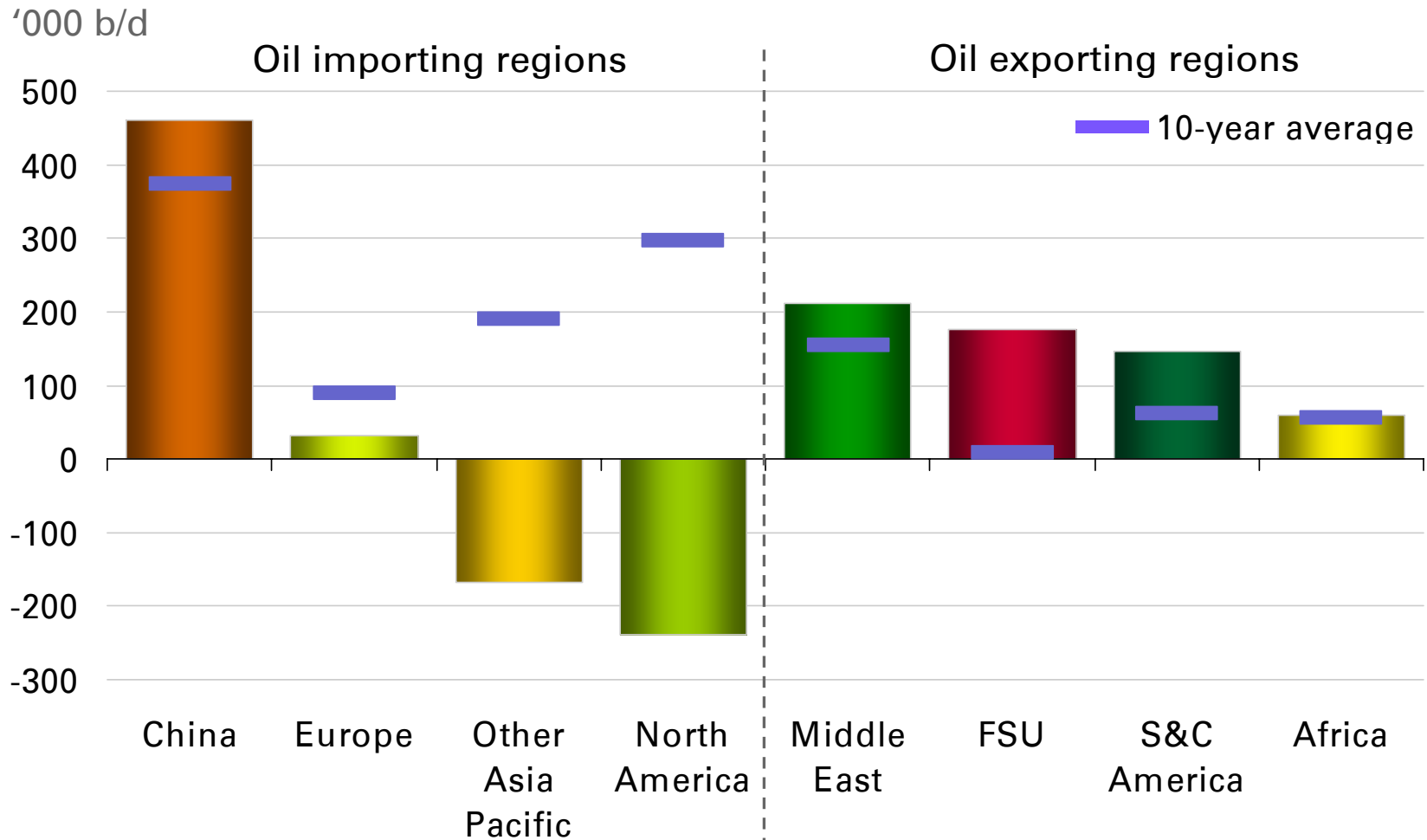
OECD Total Commercial Stocks



Oil Consumption



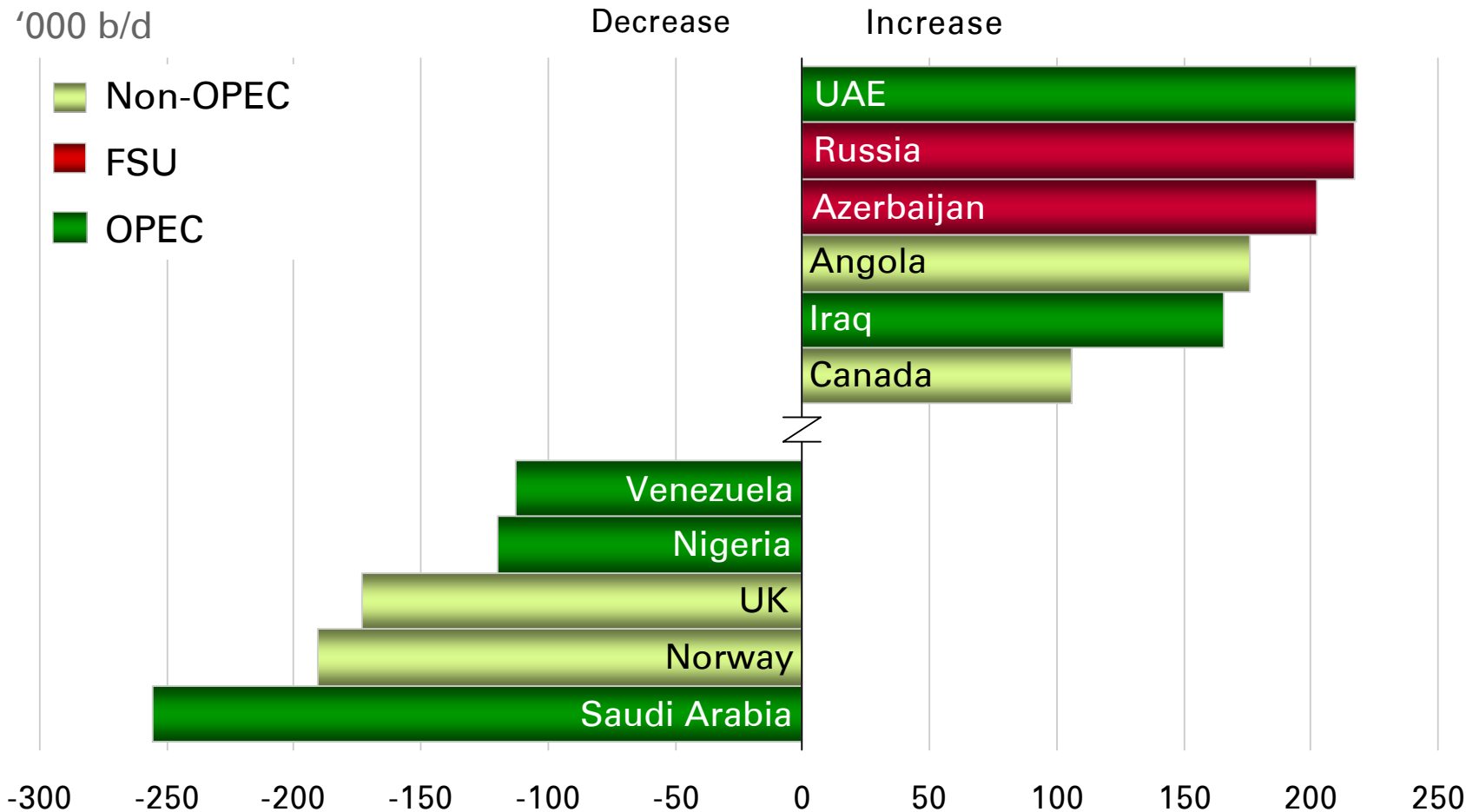
Growth in 2006 by region



Oil Production



Changes in 2006 in excess of 100,000 b/d

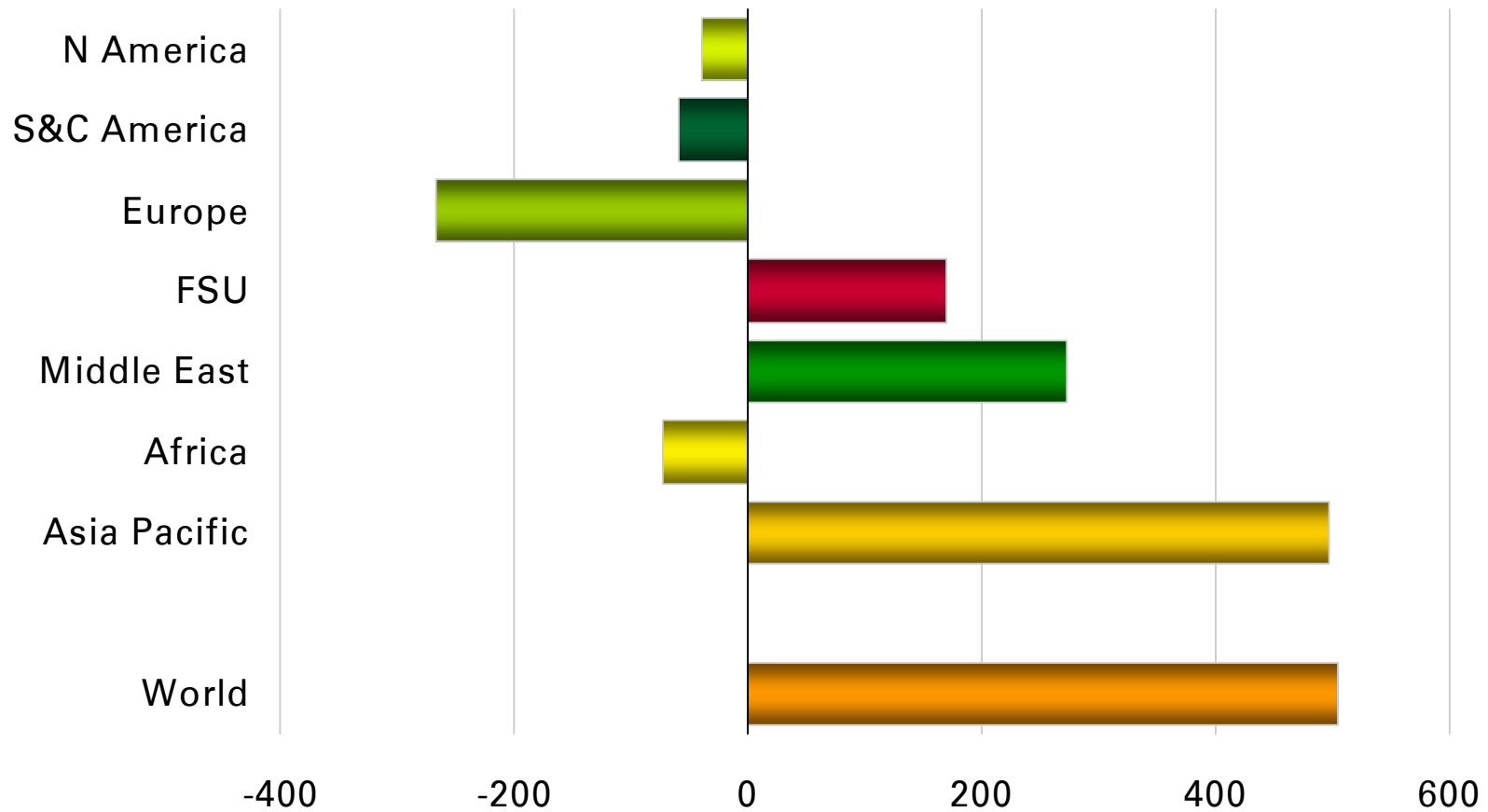


Refining Throughput



Changes in 2006

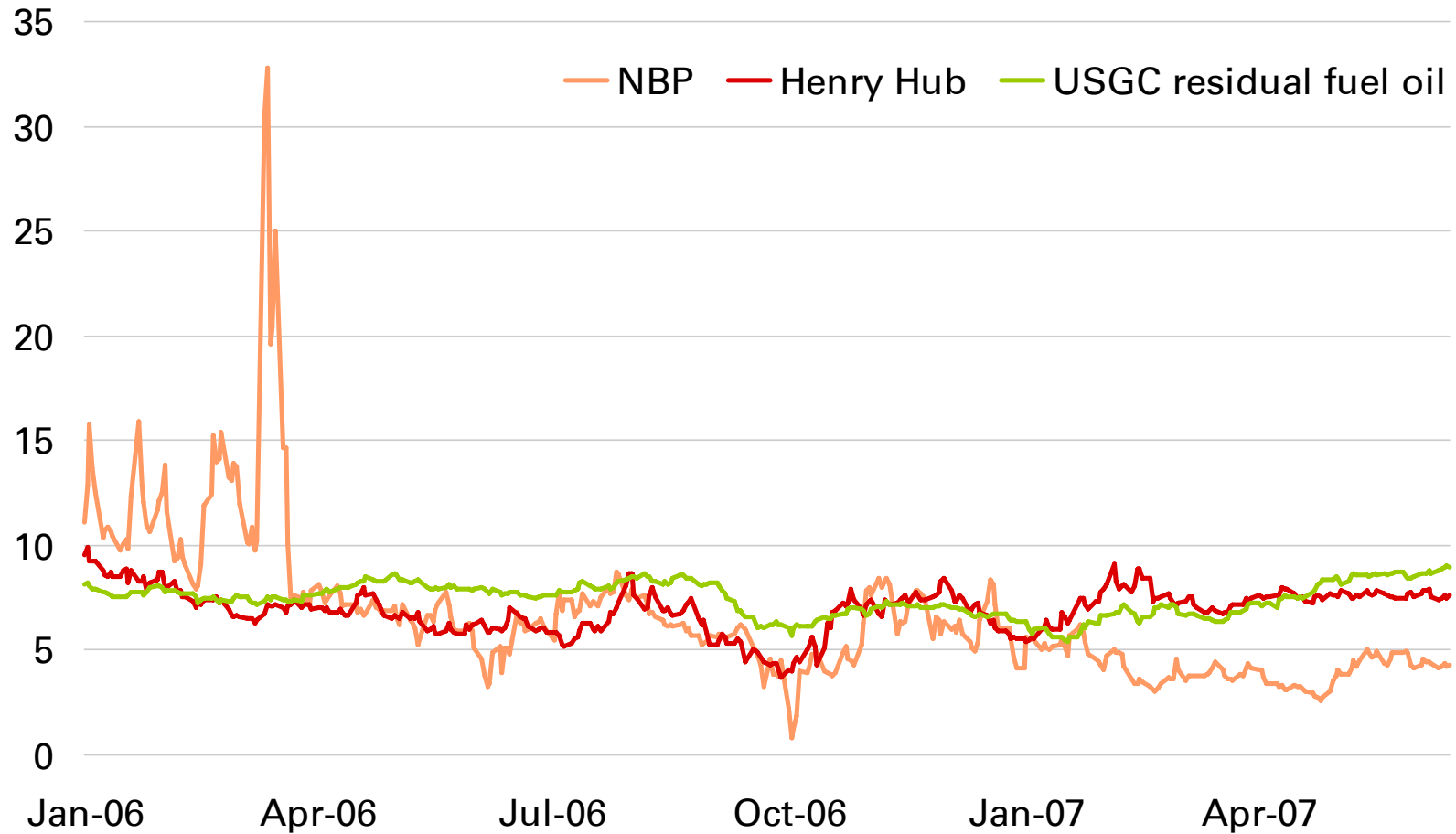
'000 b/d



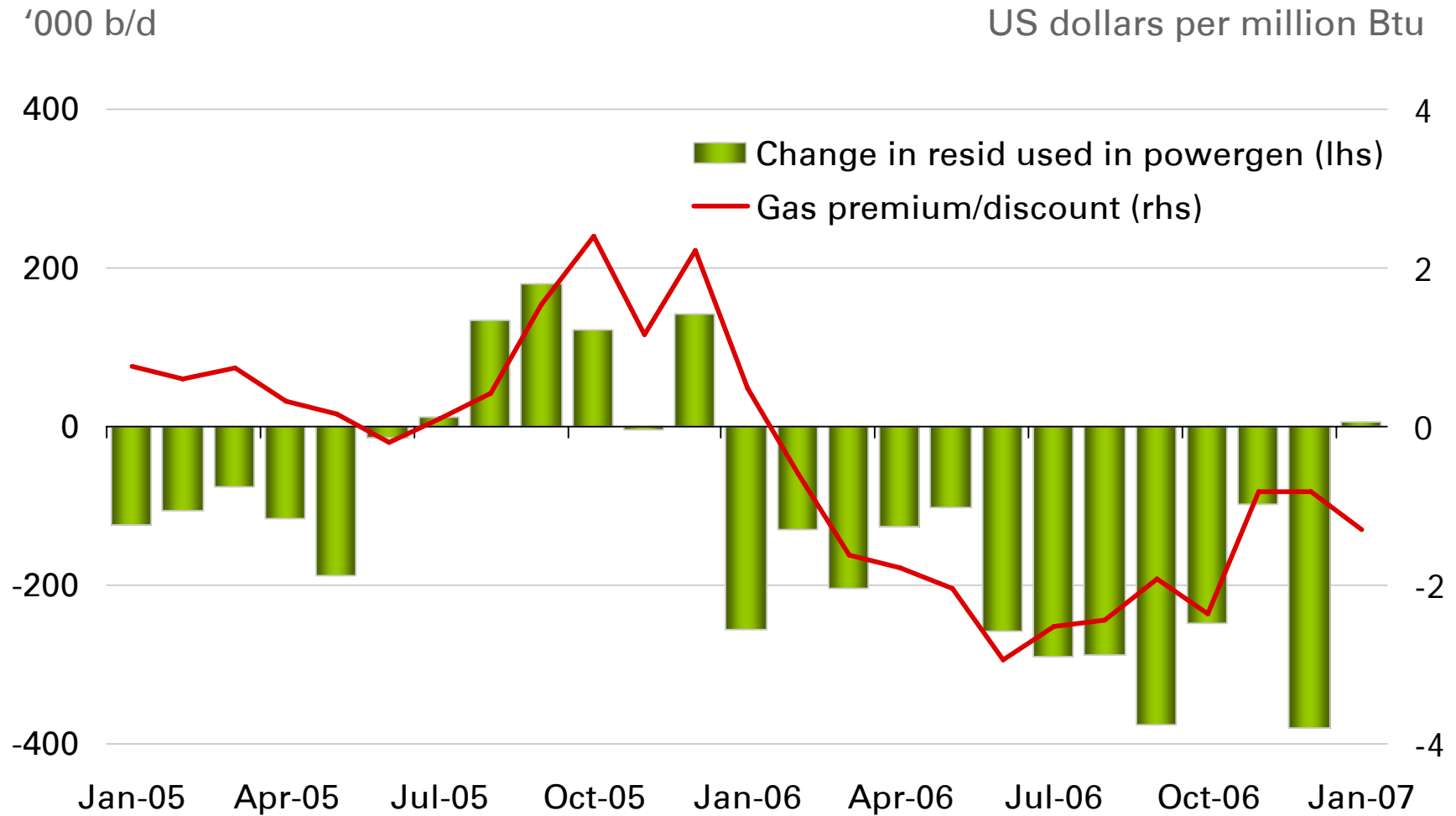
Natural Gas Prices



US dollars per million Btu



US Inter-fuel Substitution

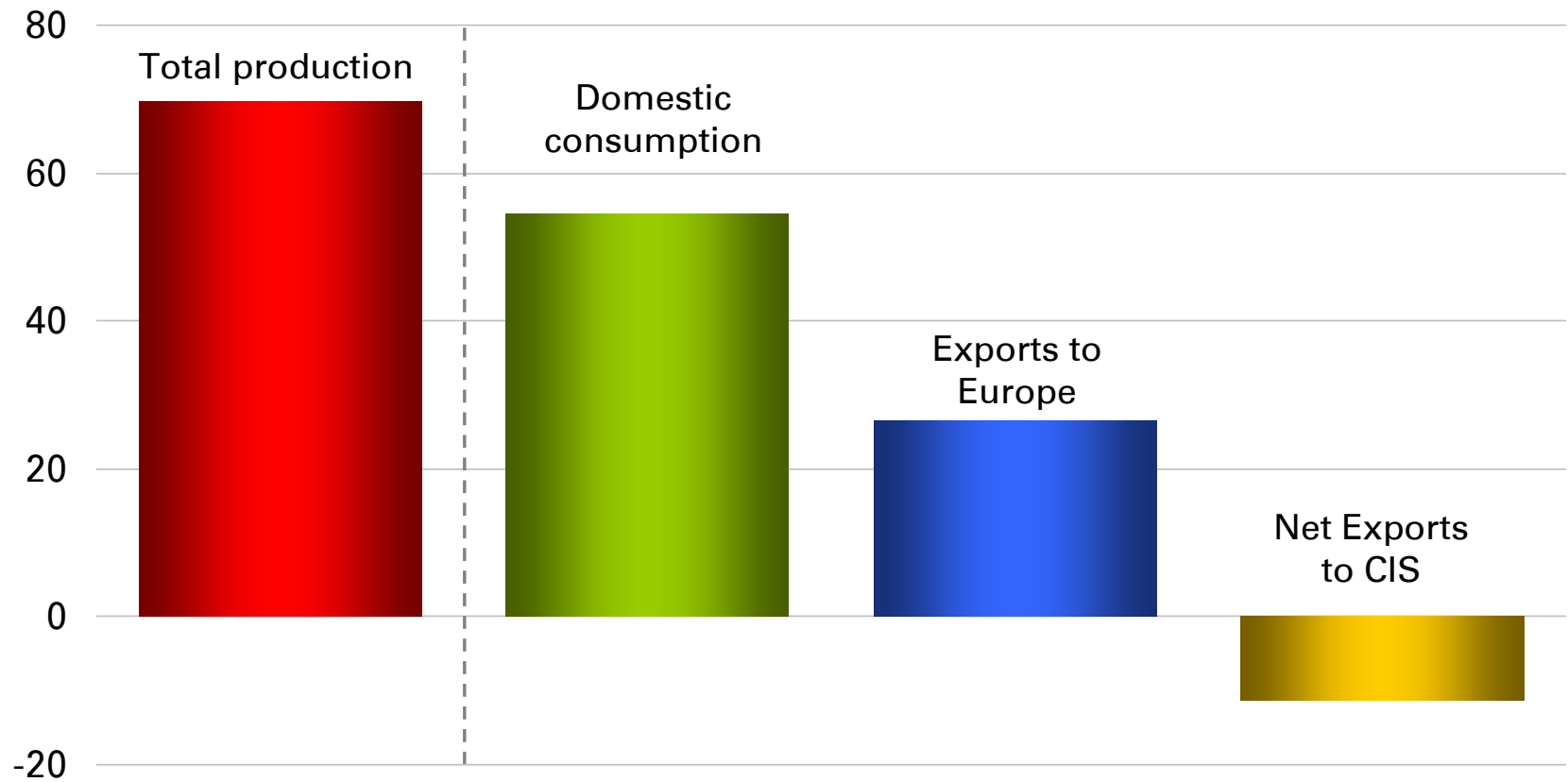


Russia Gas



Supply and demand changes between 2001 and 2006

Billion cubic metres



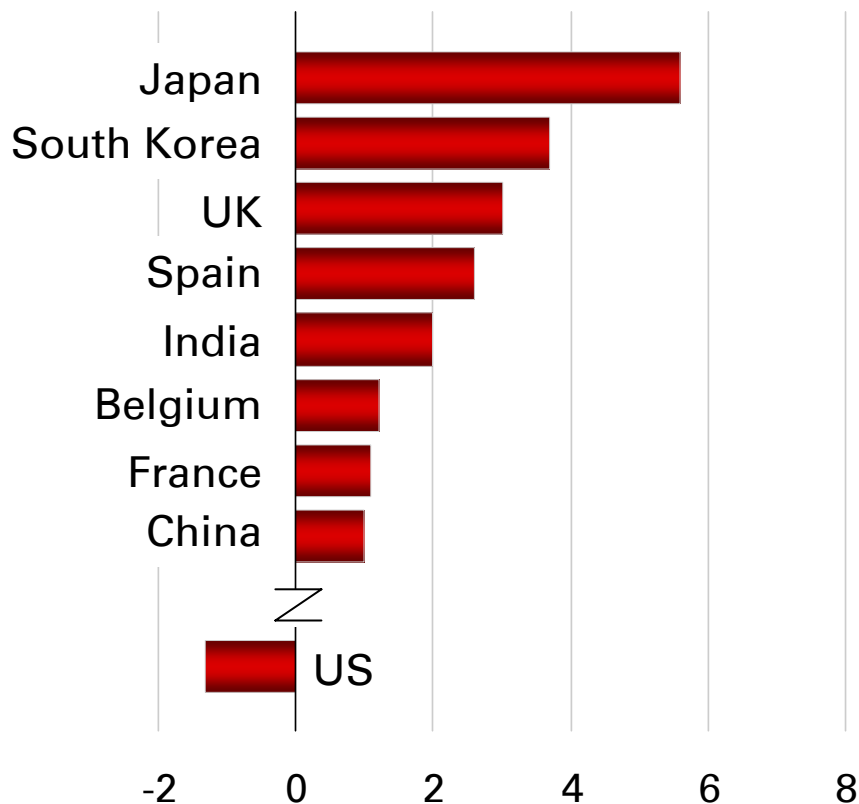
LNG Trade



Trade changes in 2006 in excess of 1 billion cubic metres

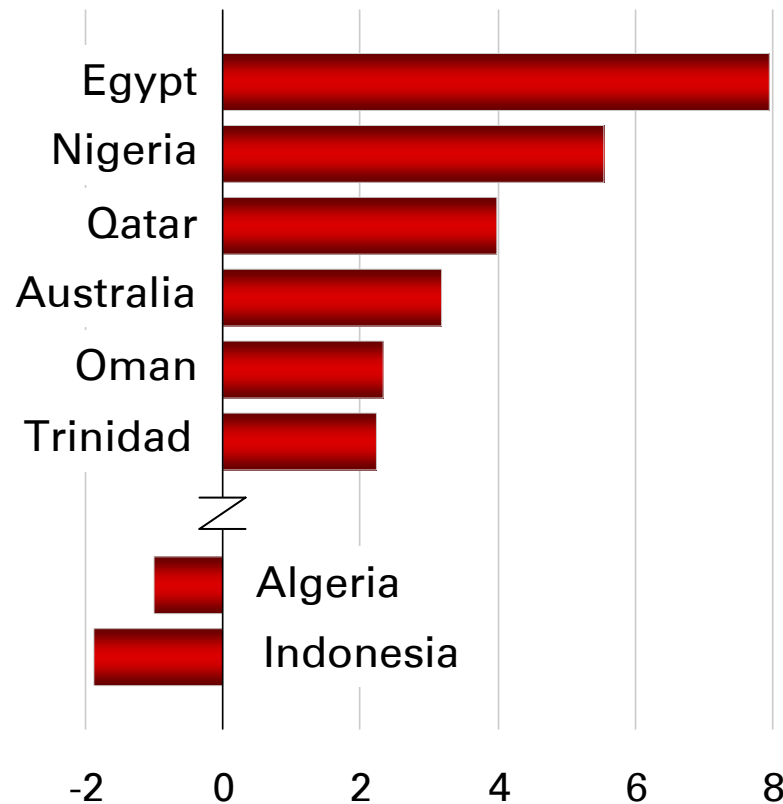
Billion cubic metres

Importers



Billion cubic metres

Exporters

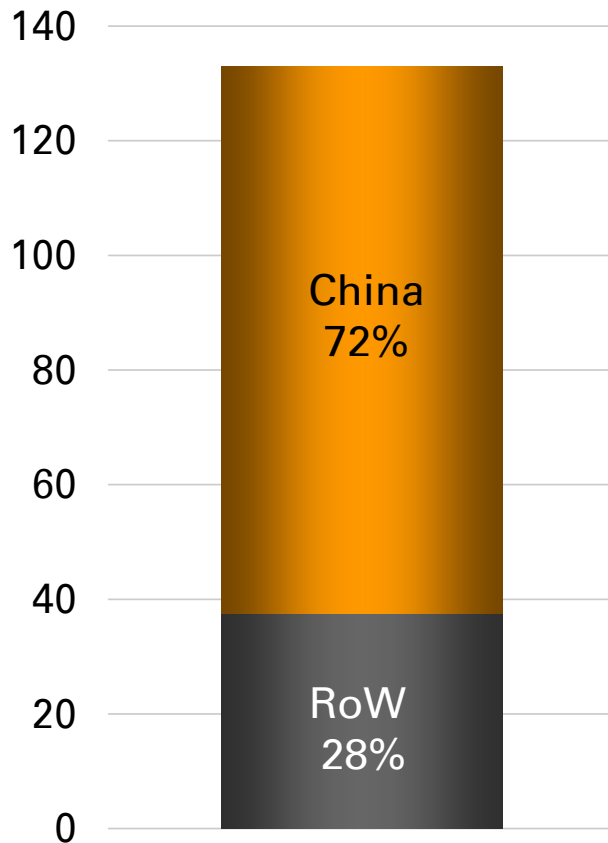


Coal Consumption



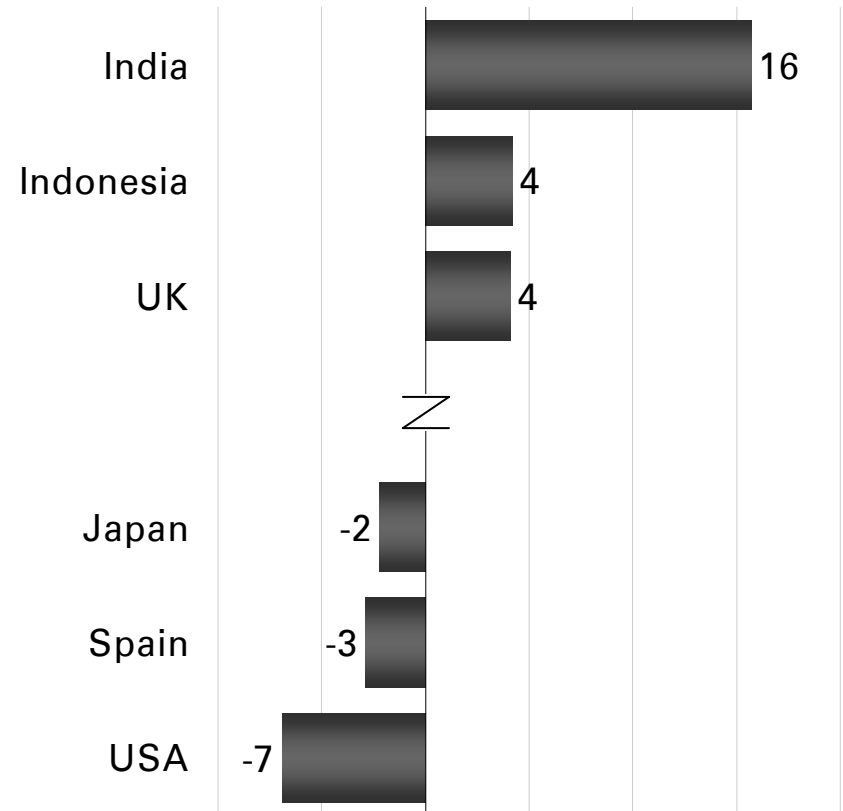
Global consumption growth 2006

Million tonnes oil equivalent



Consumption growth outside China 2006

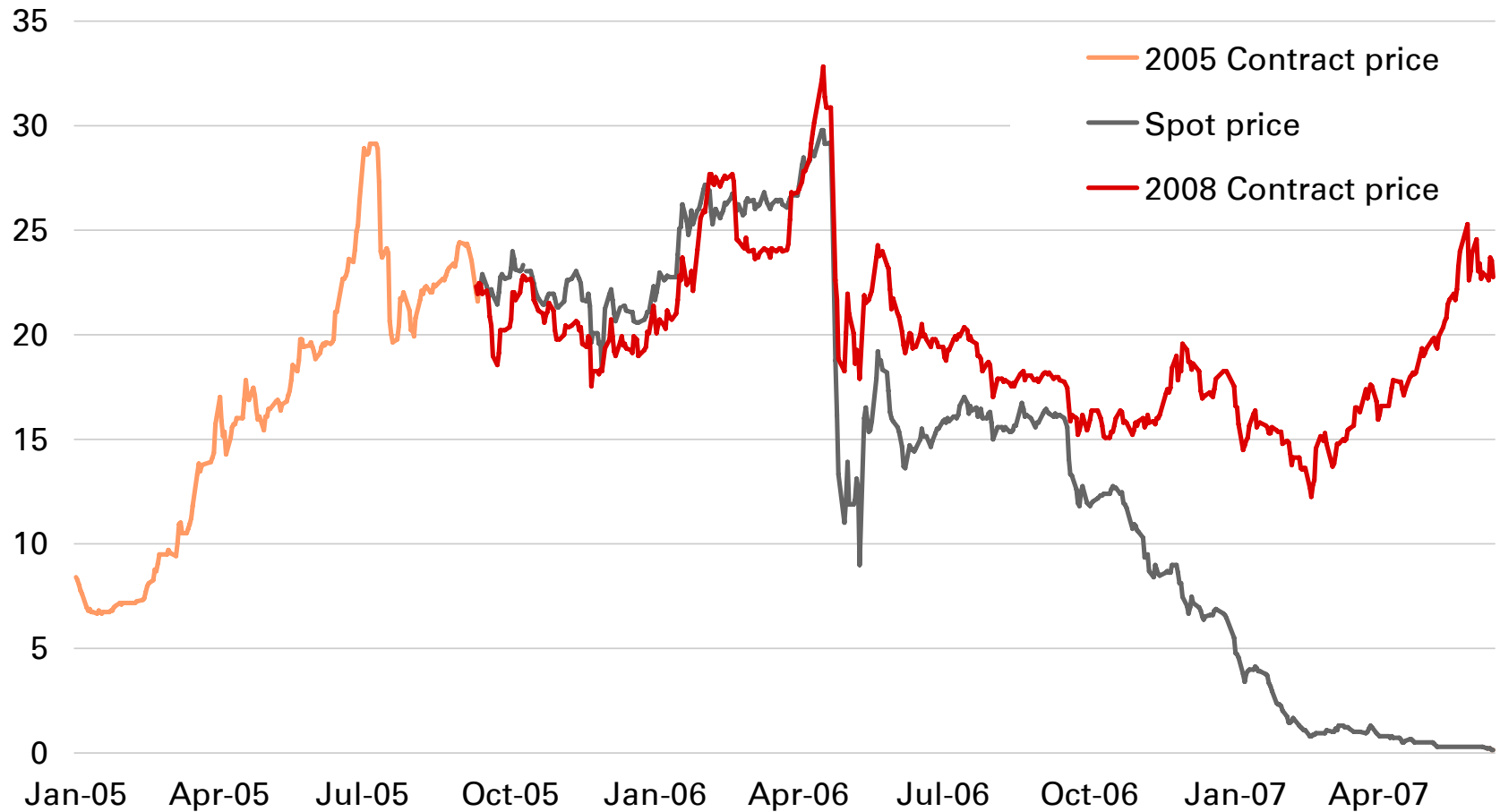
Million tonnes oil equivalent



EU Emissions Trading Scheme



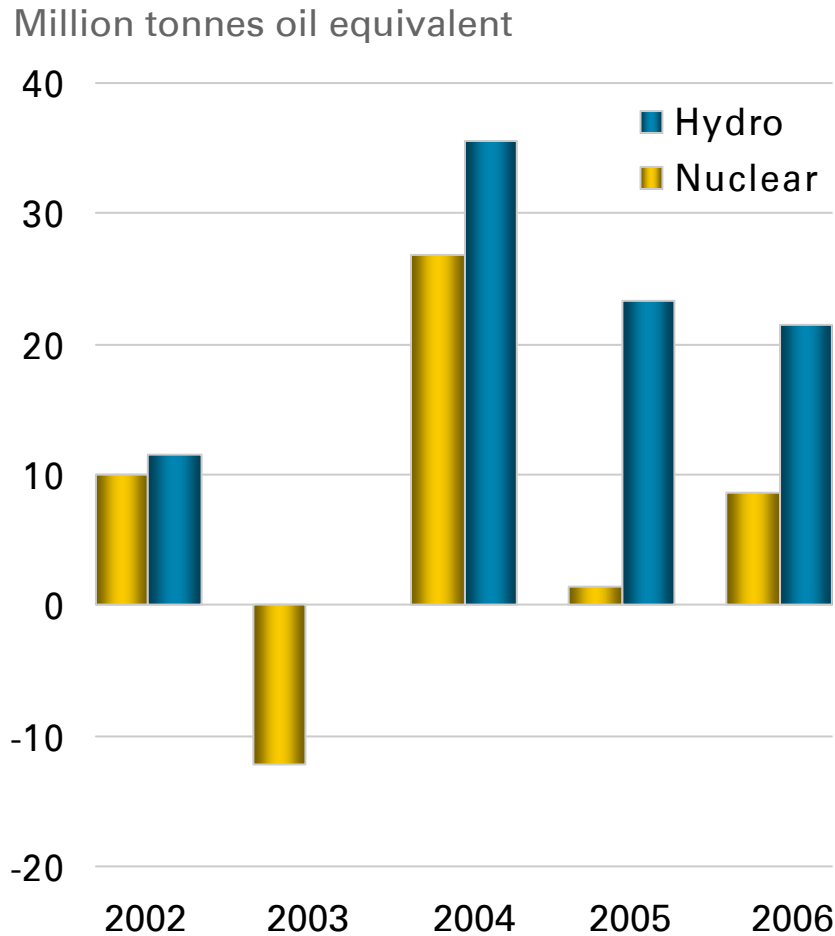
Euros per tonne of CO₂ equivalent



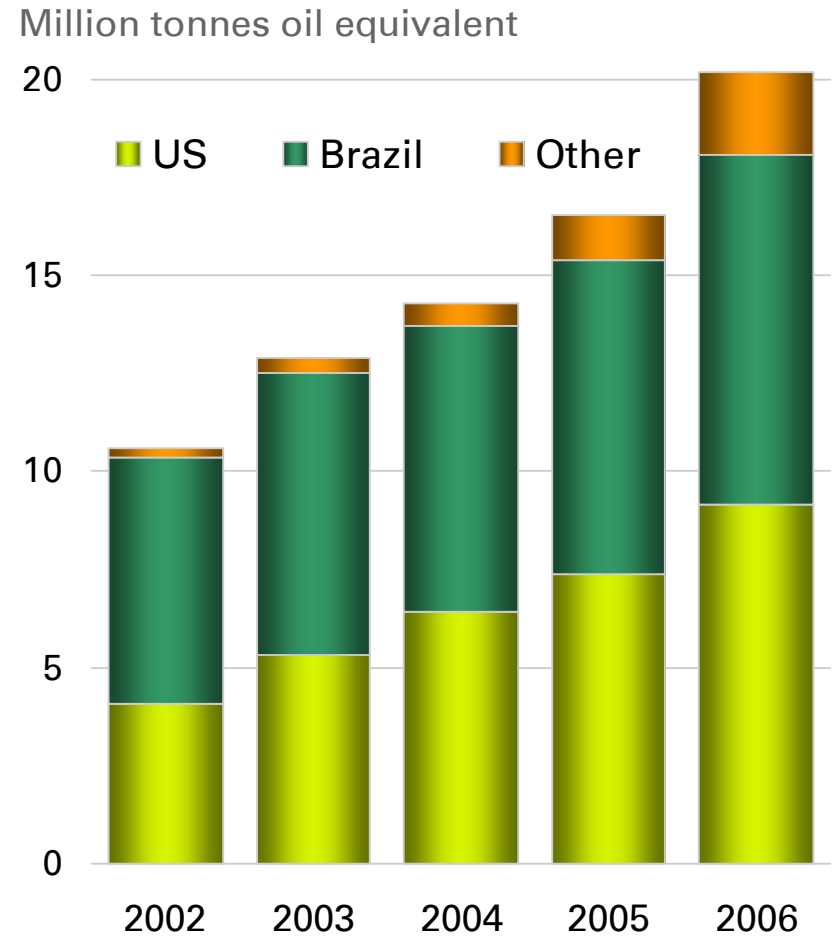
Non-Fossil Fuels



Change in Nuclear and Hydro generation



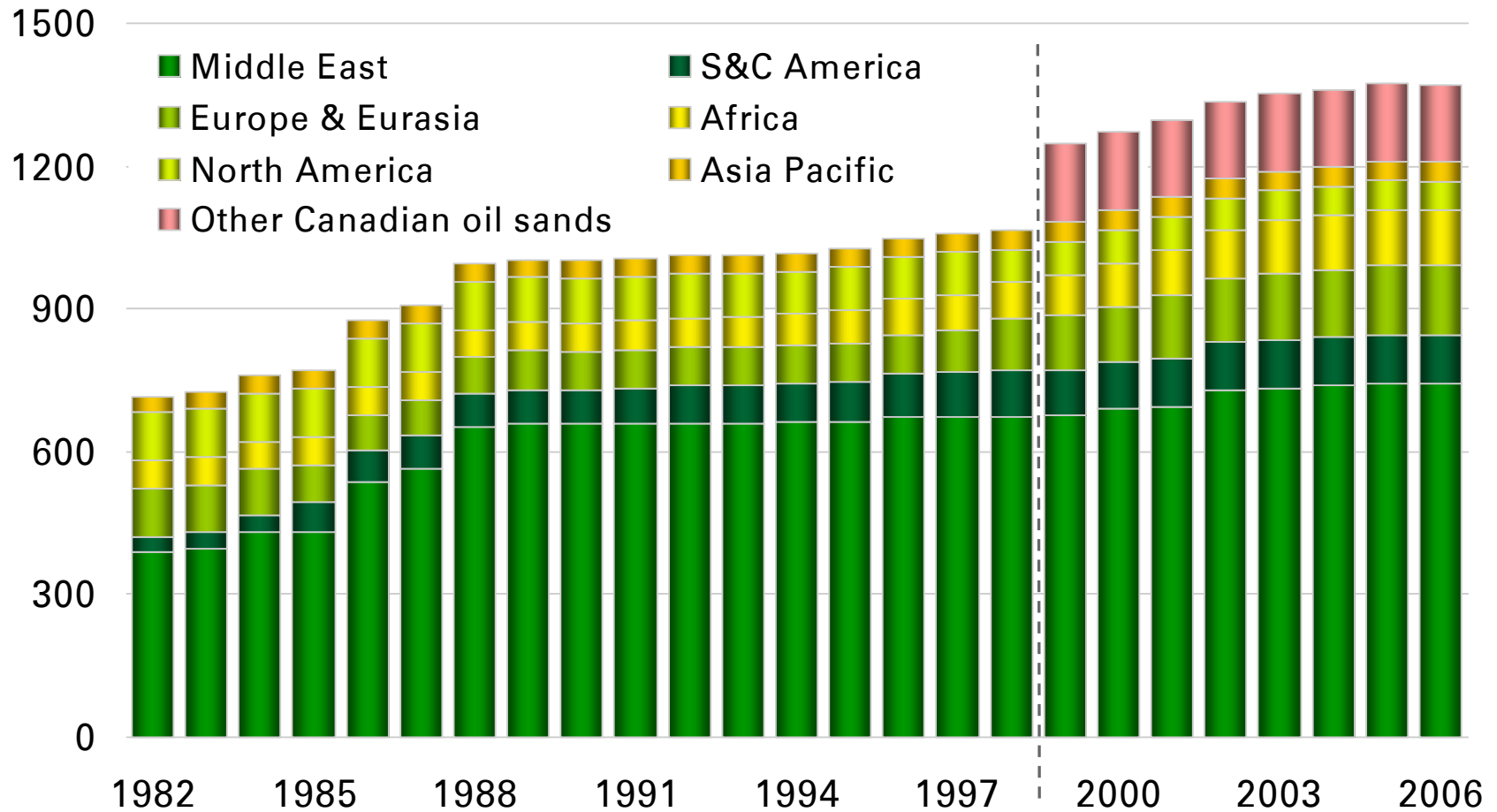
Ethanol production



World Oil Reserves



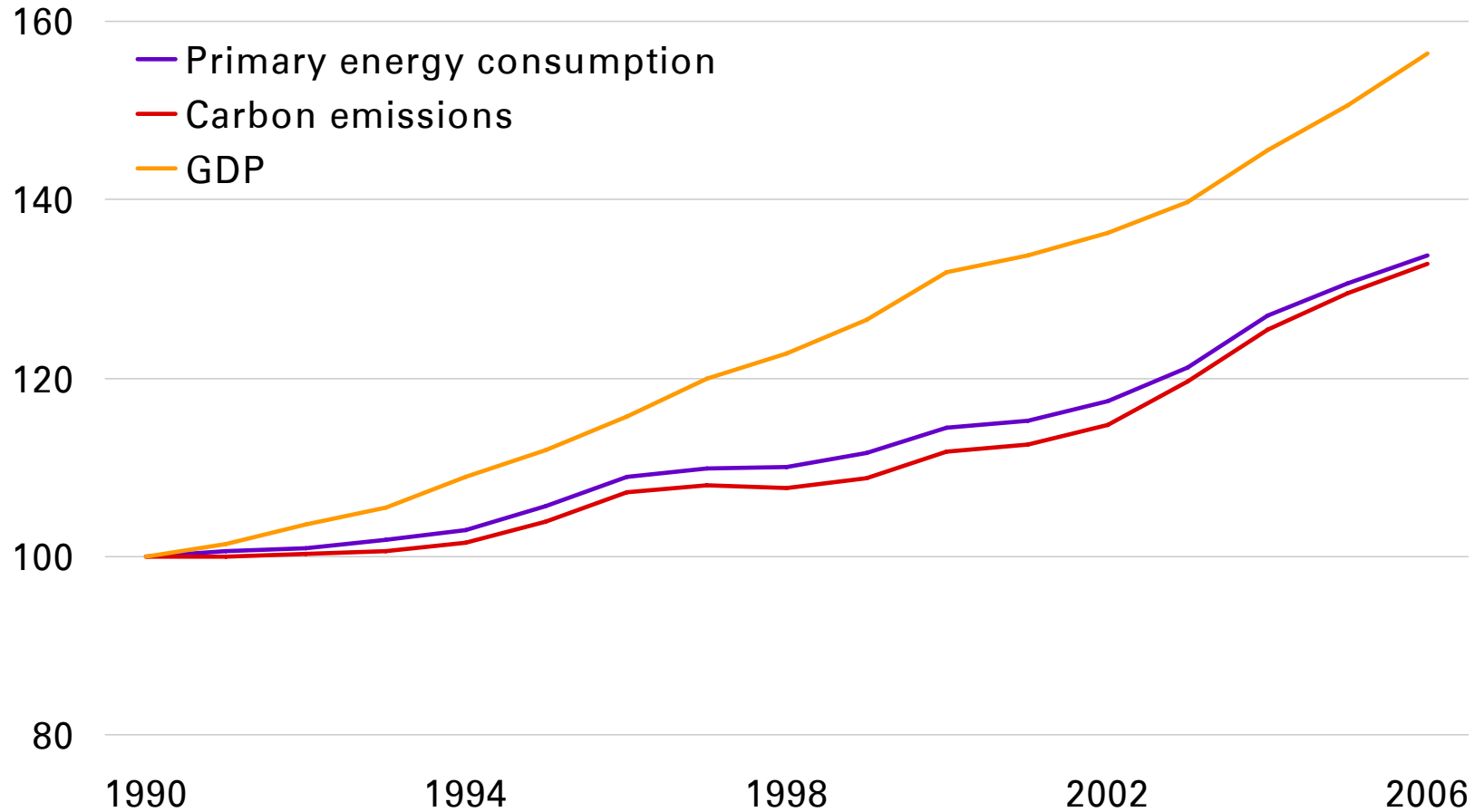
Billion barrels



GDP, Primary Energy and Carbon Emissions



Index: 1990 = 100



- Medium term
 - Fast economic growth driving energy consumption growth
 - Coal fastest growing fuel
 - Non-OECD growth trends generate more energy intensive and carbon intensive growth
 - Rising energy prices

- 2006 in review
 - Slower (but above average) consumption growth
 - Consumption responsive to price, especially in OECD
 - Rapid coal growth; carbon intensity increased
 - OPEC re-engages



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Q & A

Peter Davies
Christof Rühl