



60 years
BP Statistical Review



2011 Update

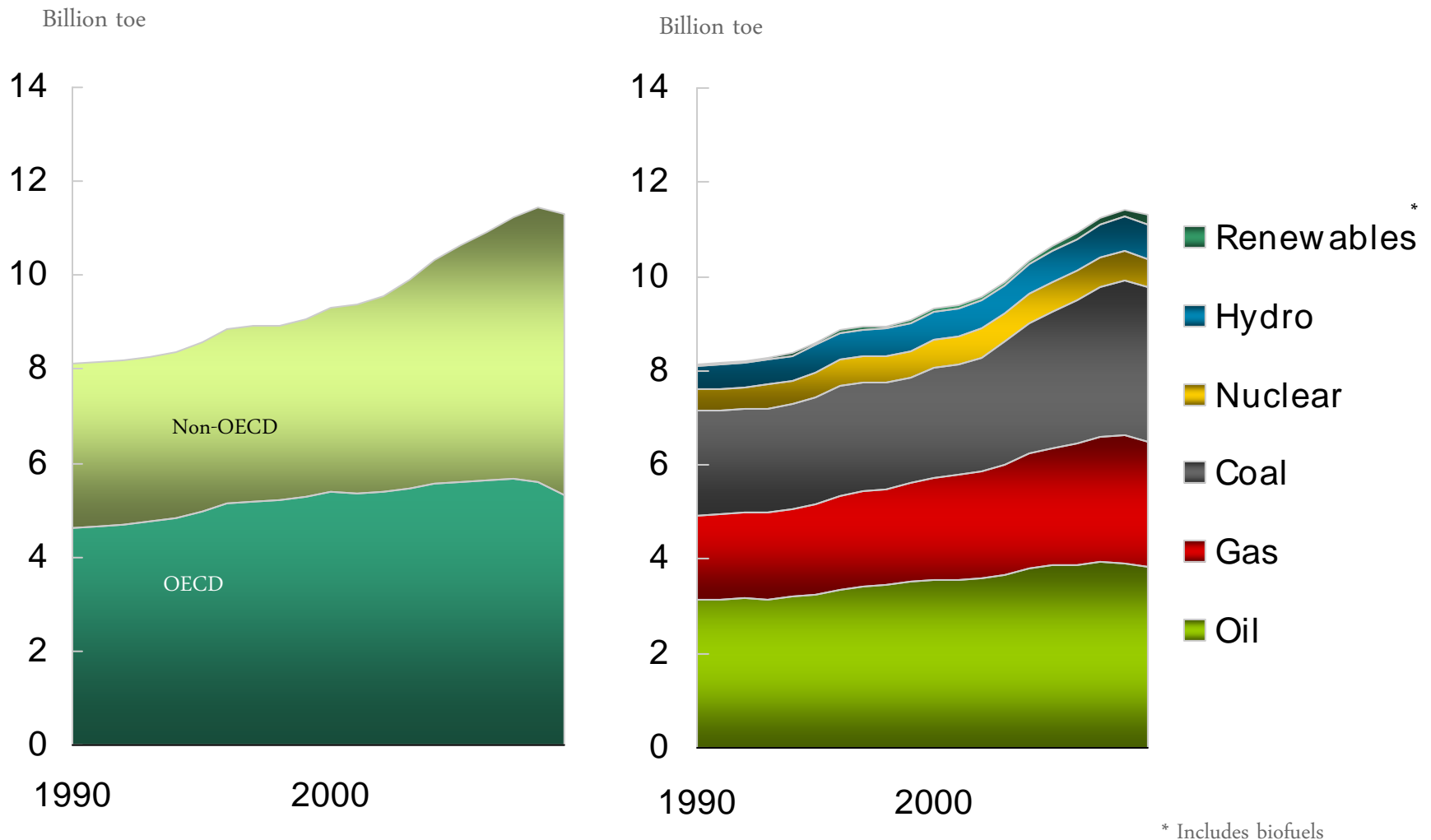
Mark Finley
Meet Alaska, January 21, 2011

Agenda



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- Where we've been
 - Trends in global energy
 - Where we are: The short-term outlook
 - Why has oil been different?
 - Where we are going (or might be!): The long-term outlook
 - Prospects for oil & gas
 - The policy case and implications

Global energy: Changing center of gravity, but fossil fuels still dominate

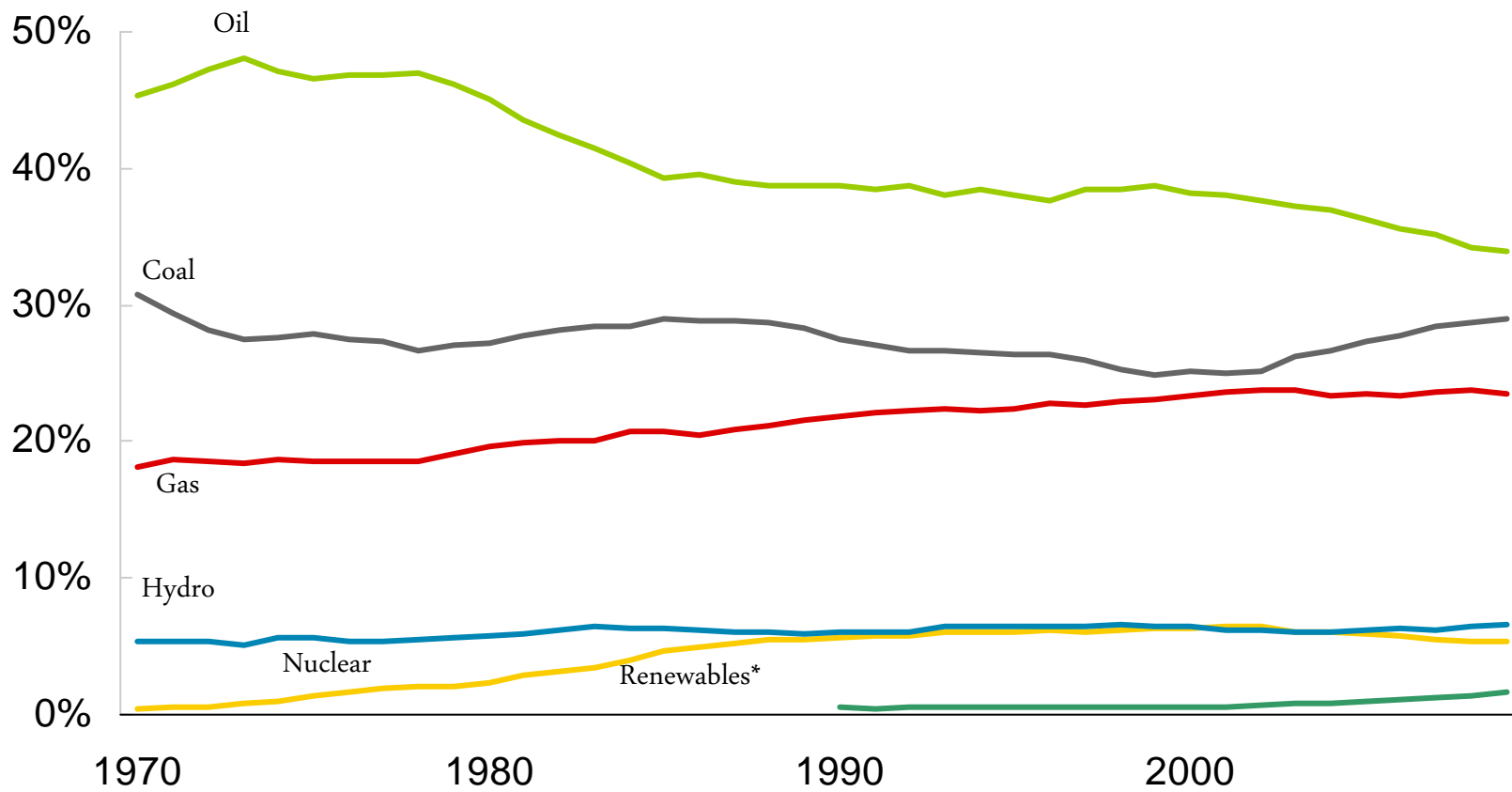


Source: BP Statistical Review of World Energy

Coal has gained market share



Shares of world primary energy



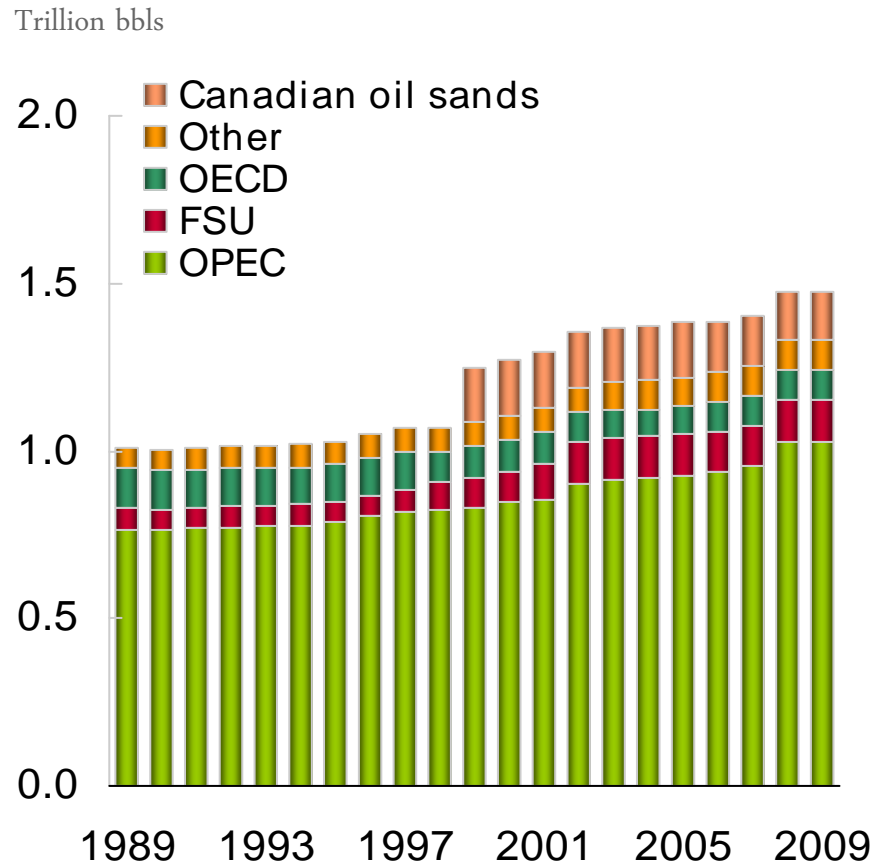
* Includes biofuels

Source: BP Statistical Review of World Energy

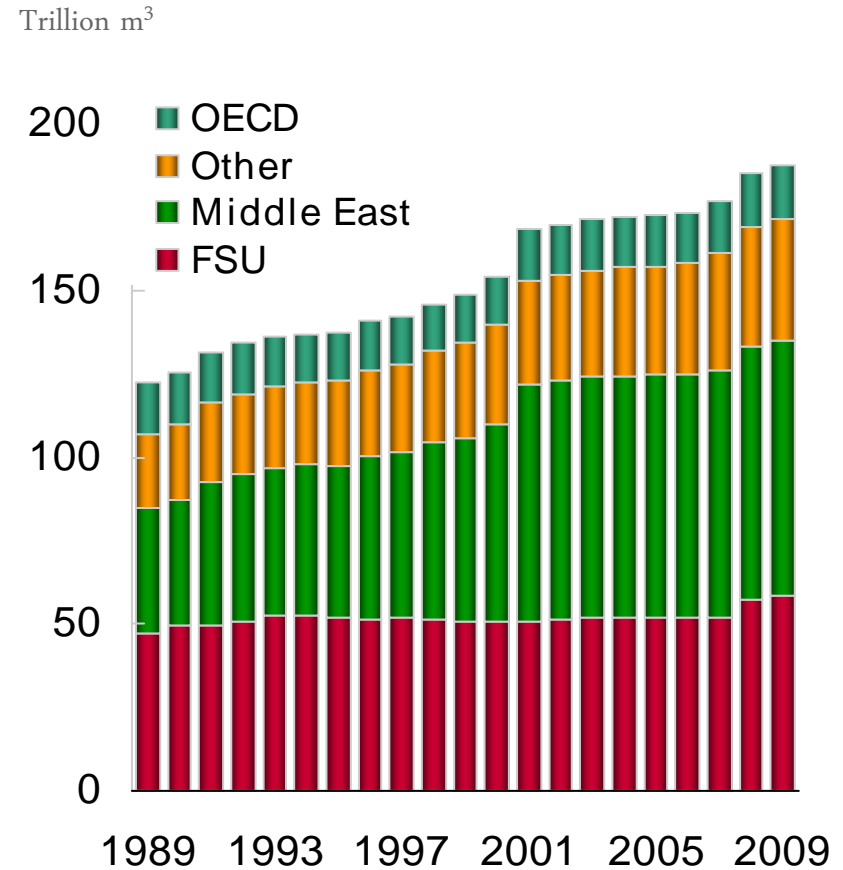
Ample oil and natural gas proved reserves



Oil



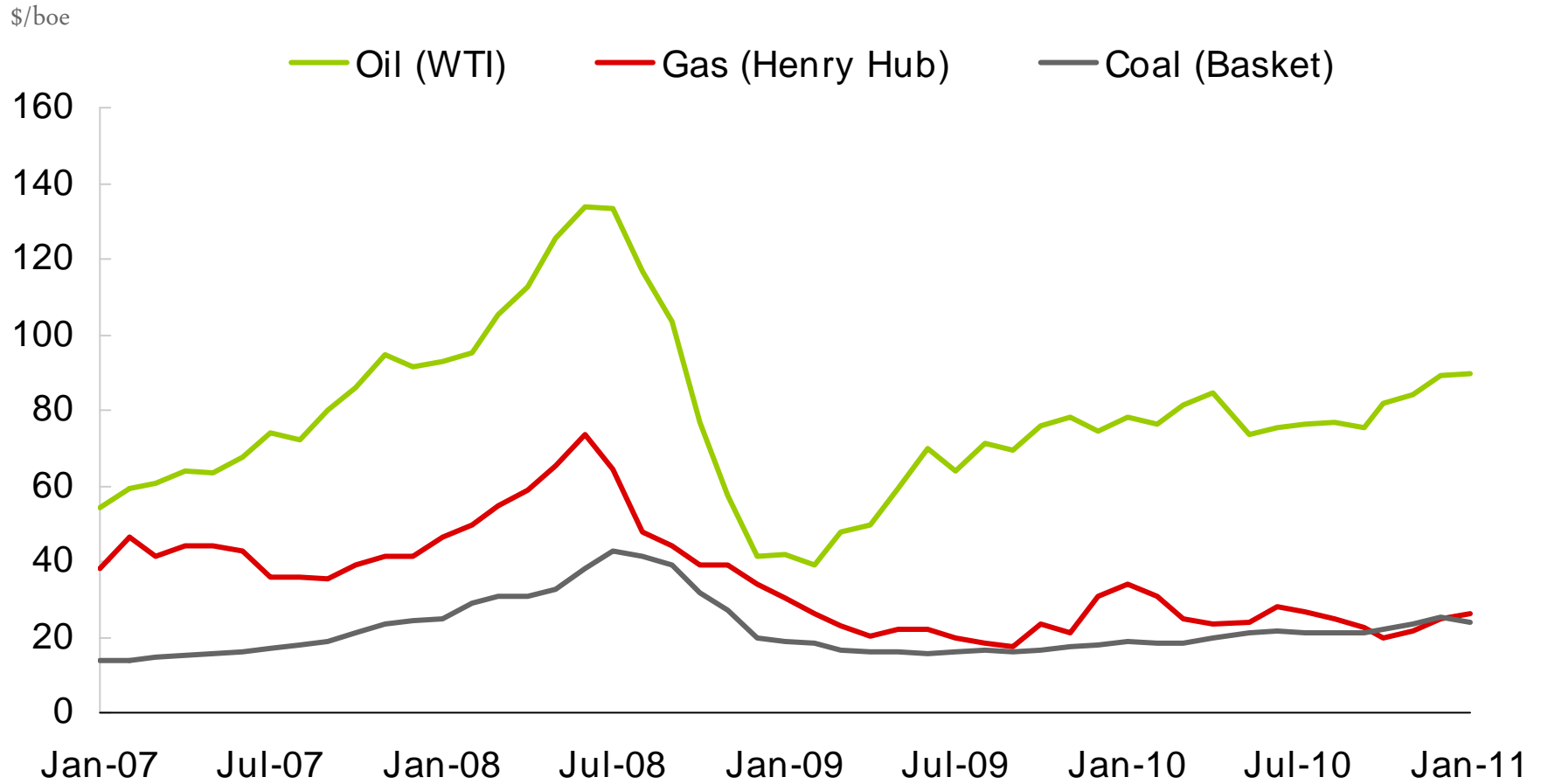
Natural Gas



Note: Canadian Oil Sands are 'remaining established reserves', less reserves 'under active development' (from 1999 only).

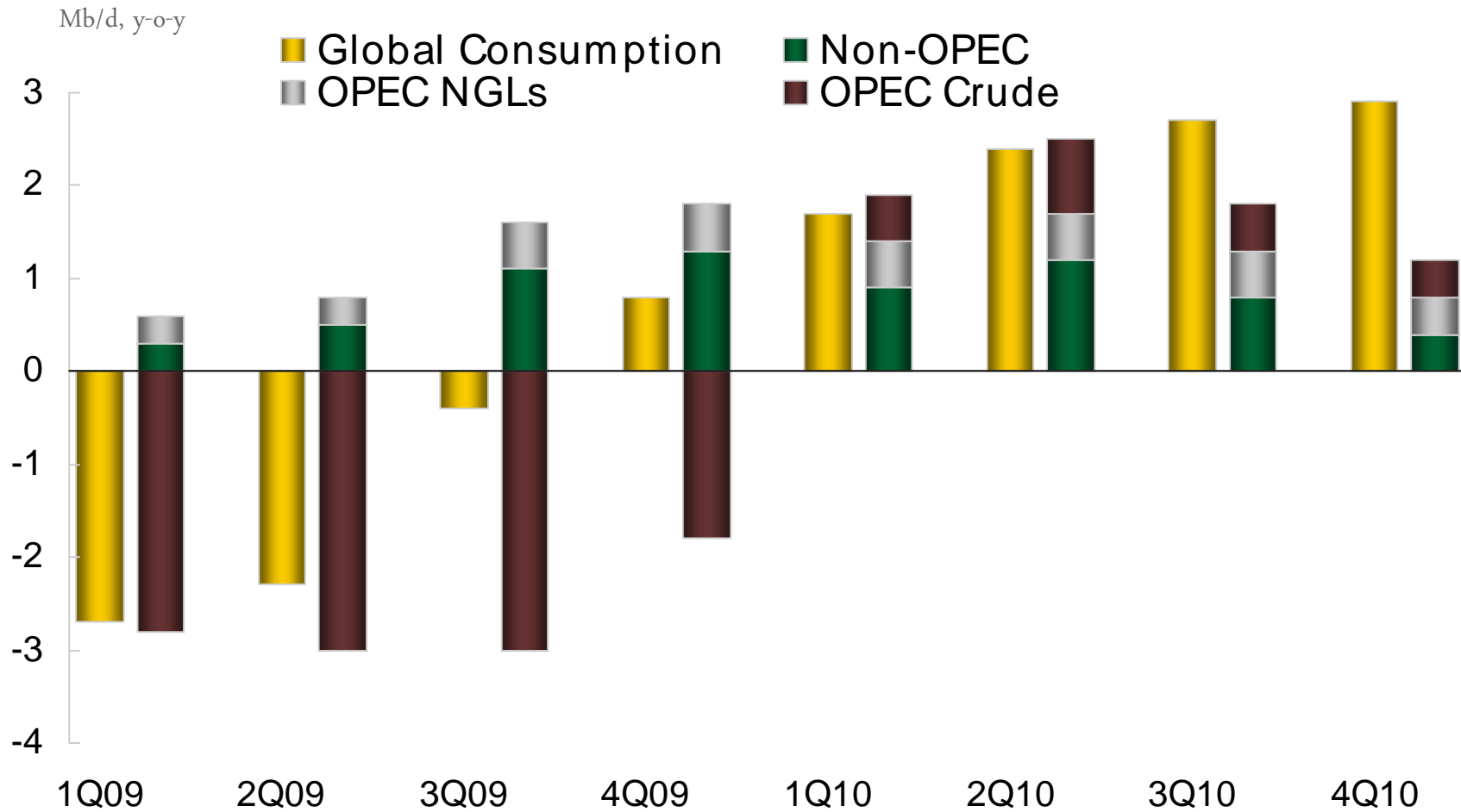
Source: BP Statistical Review of World Energy

Energy prices: Oil has been different



Source: includes data from Platts and McCloskey.

Oil demand outpacing supply

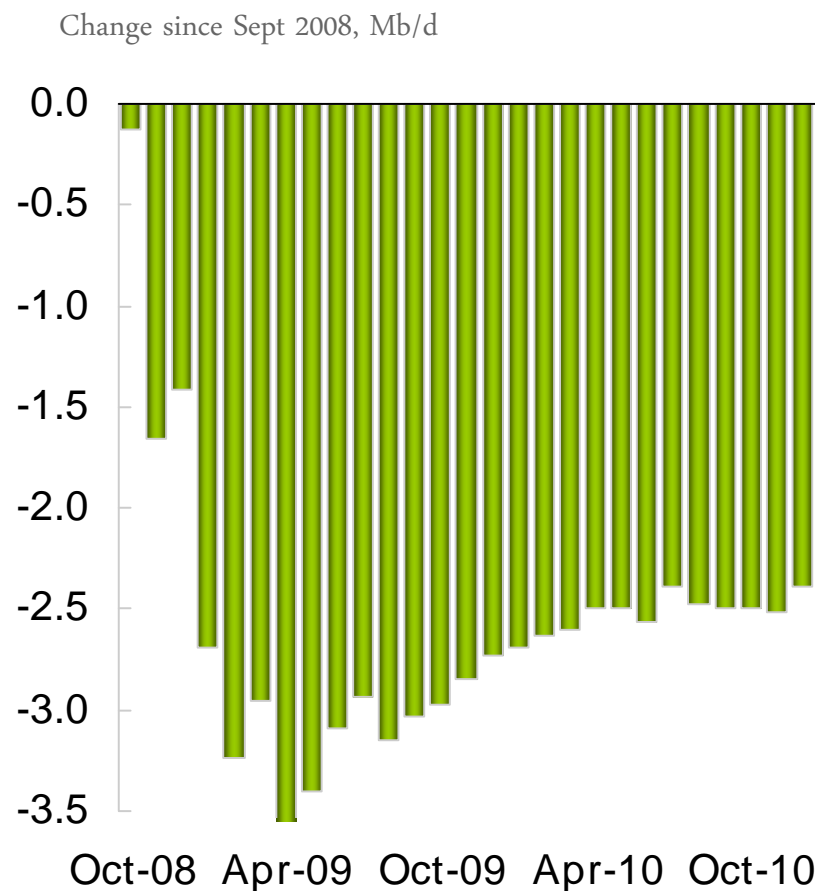
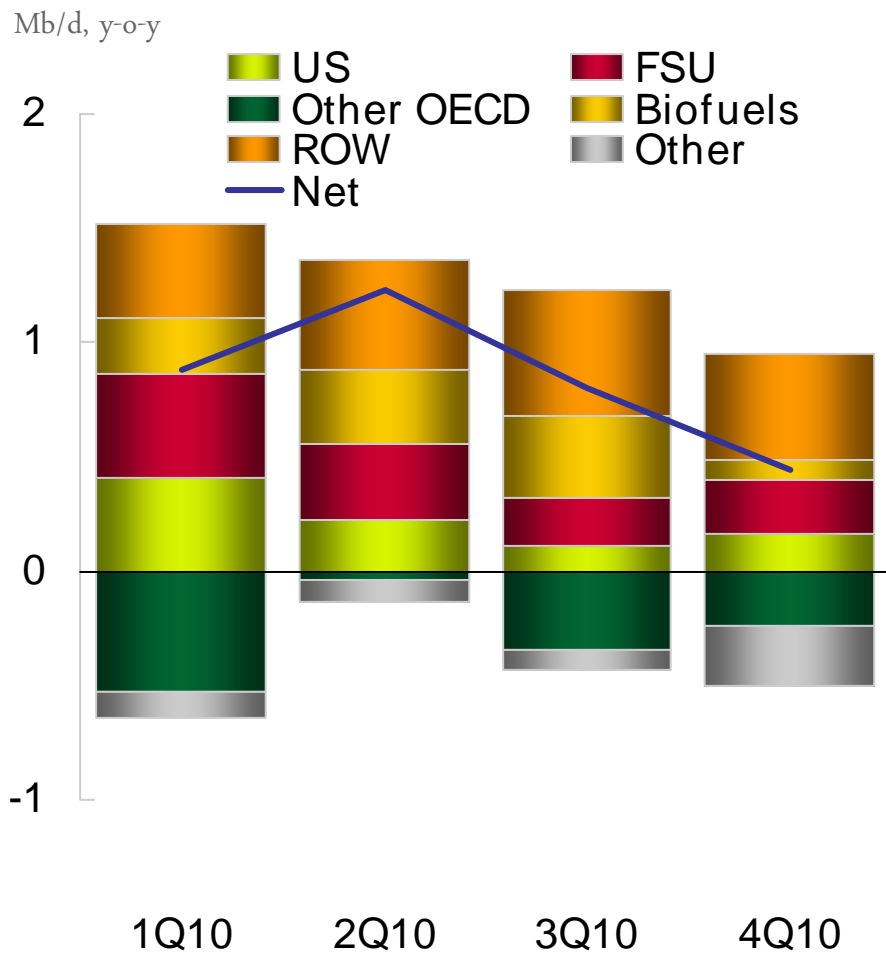


Non-OPEC growth slows; OPEC holds steady



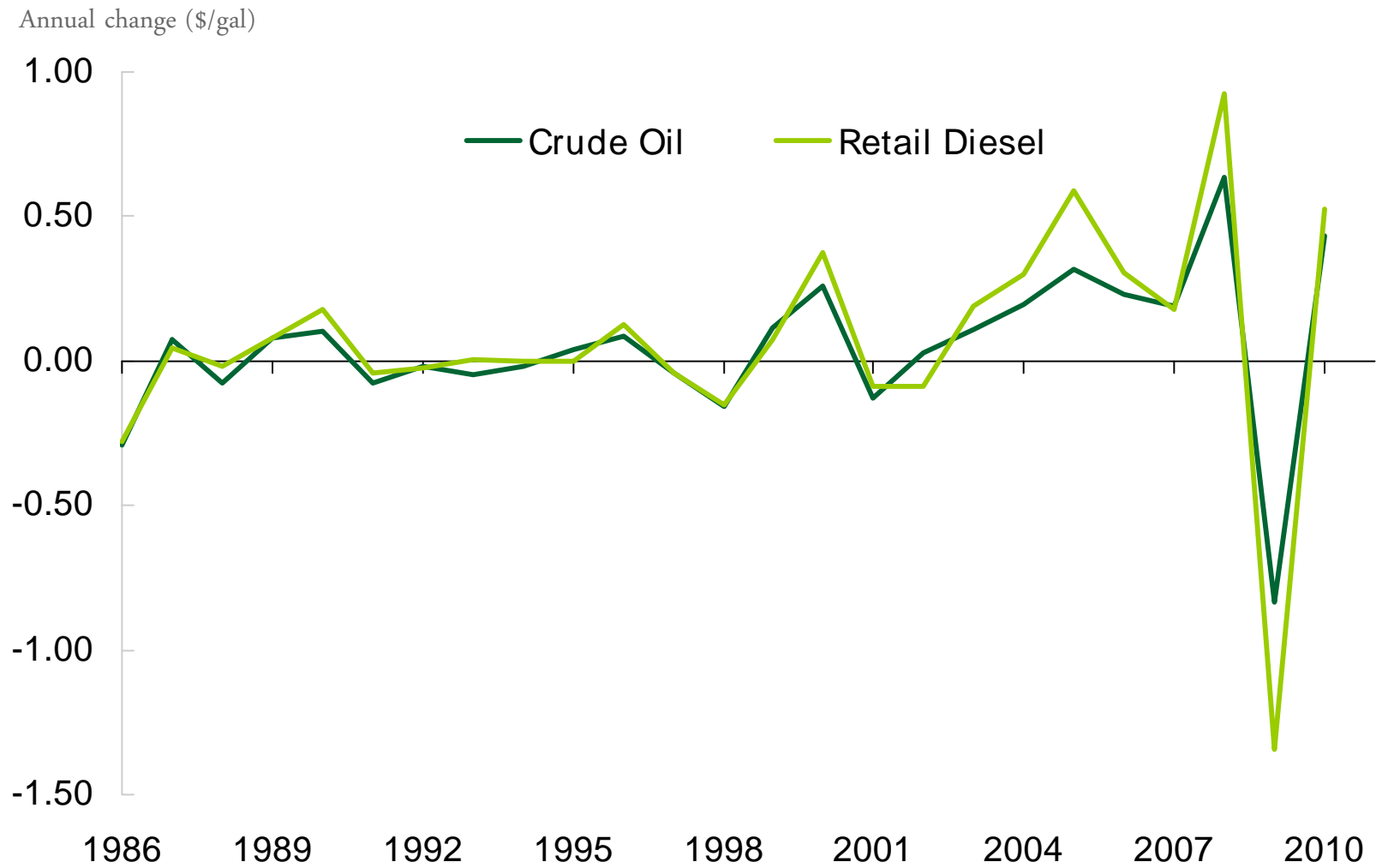
Non-OPEC changes

OPEC-11 crude production cuts

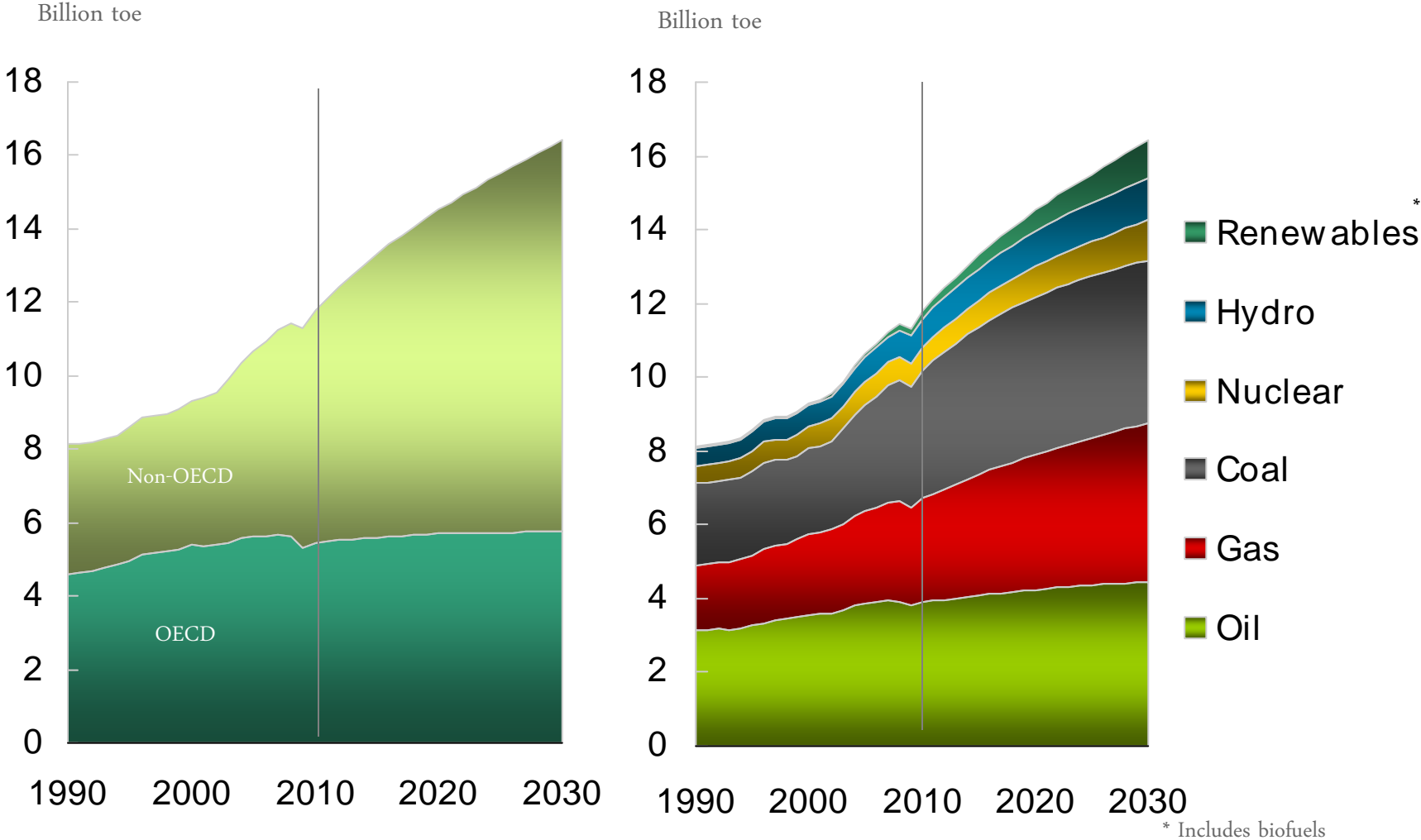




What drives prices at the pump: Crude



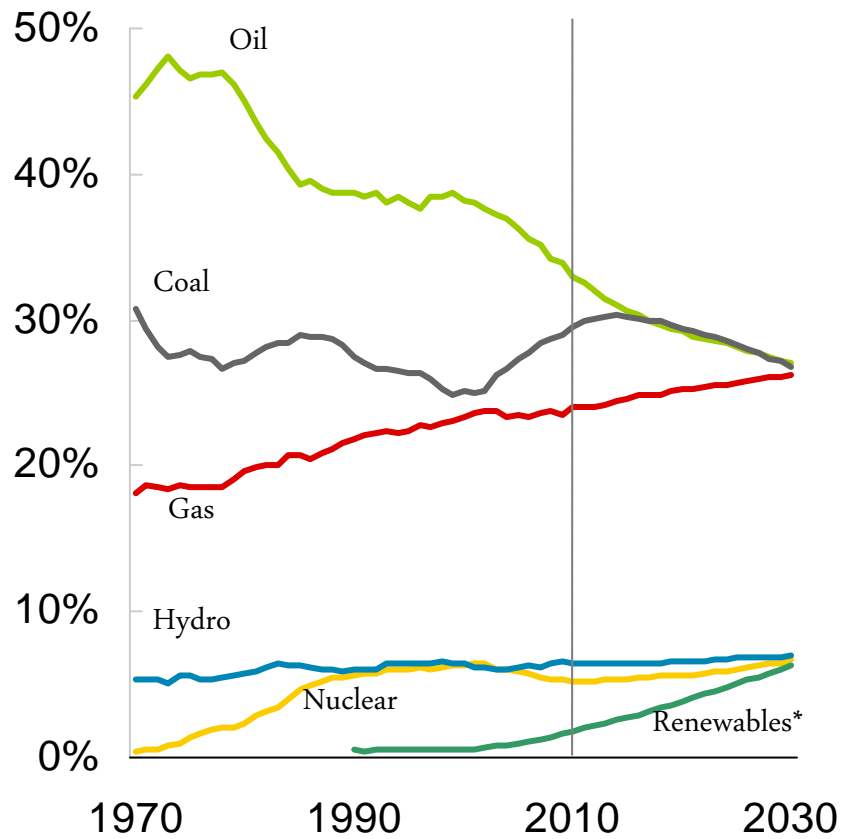
2030: Non-OECD drives consumption growth



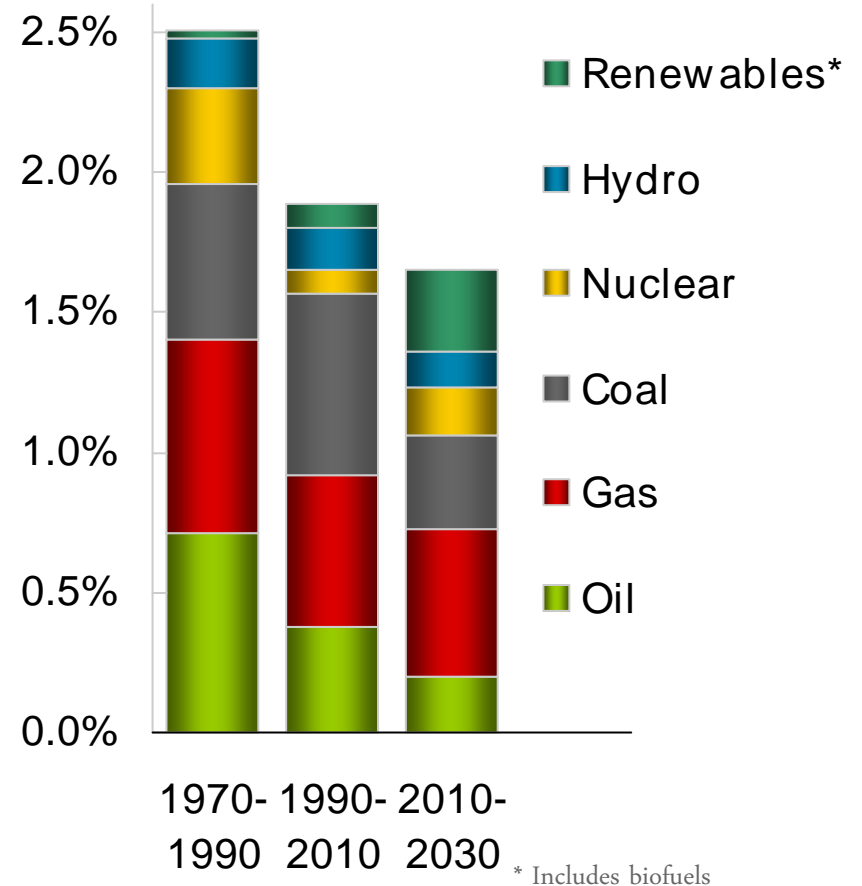
Natural gas, renewables gain share



Shares of world primary energy



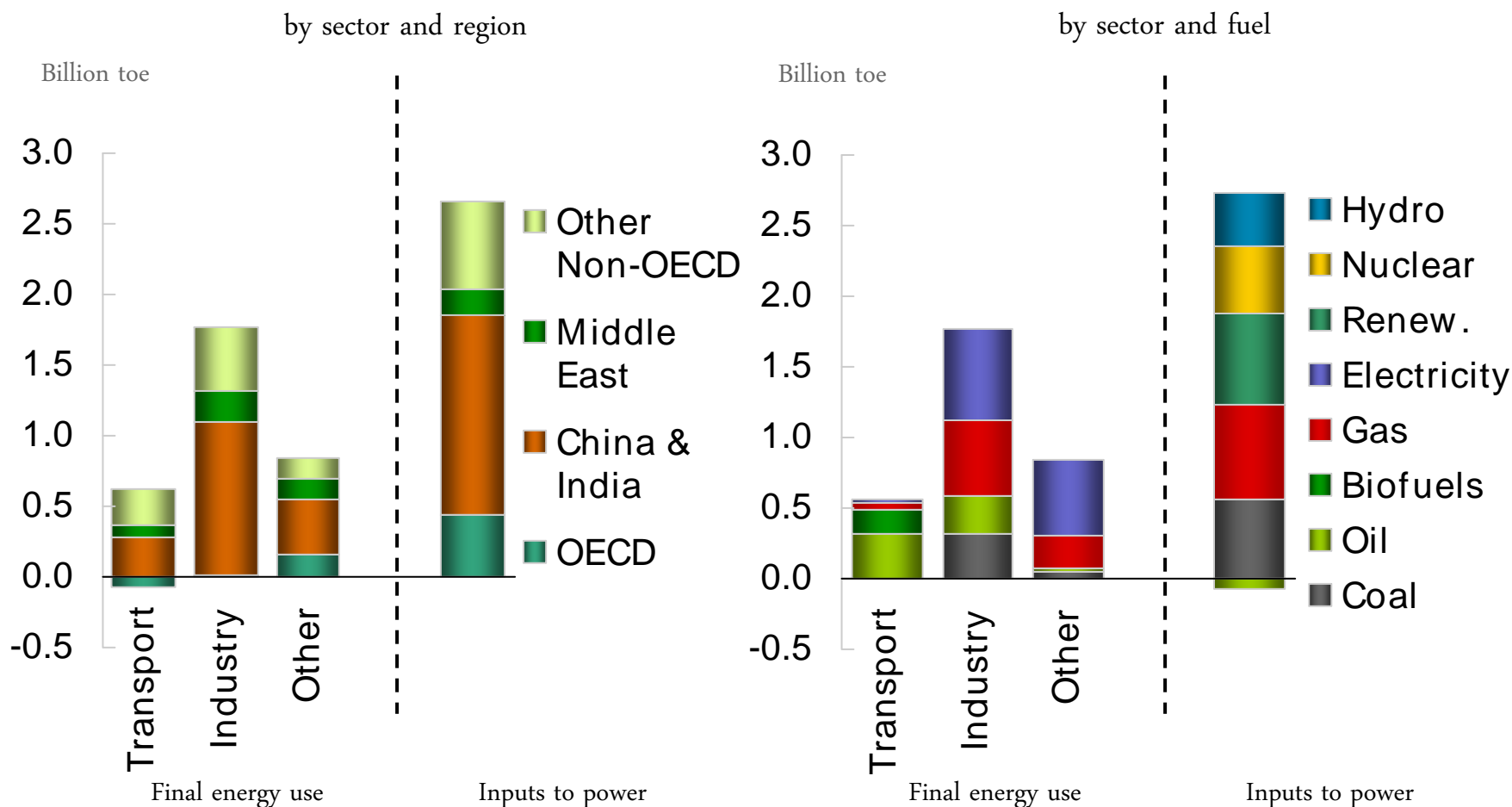
Contributions to growth



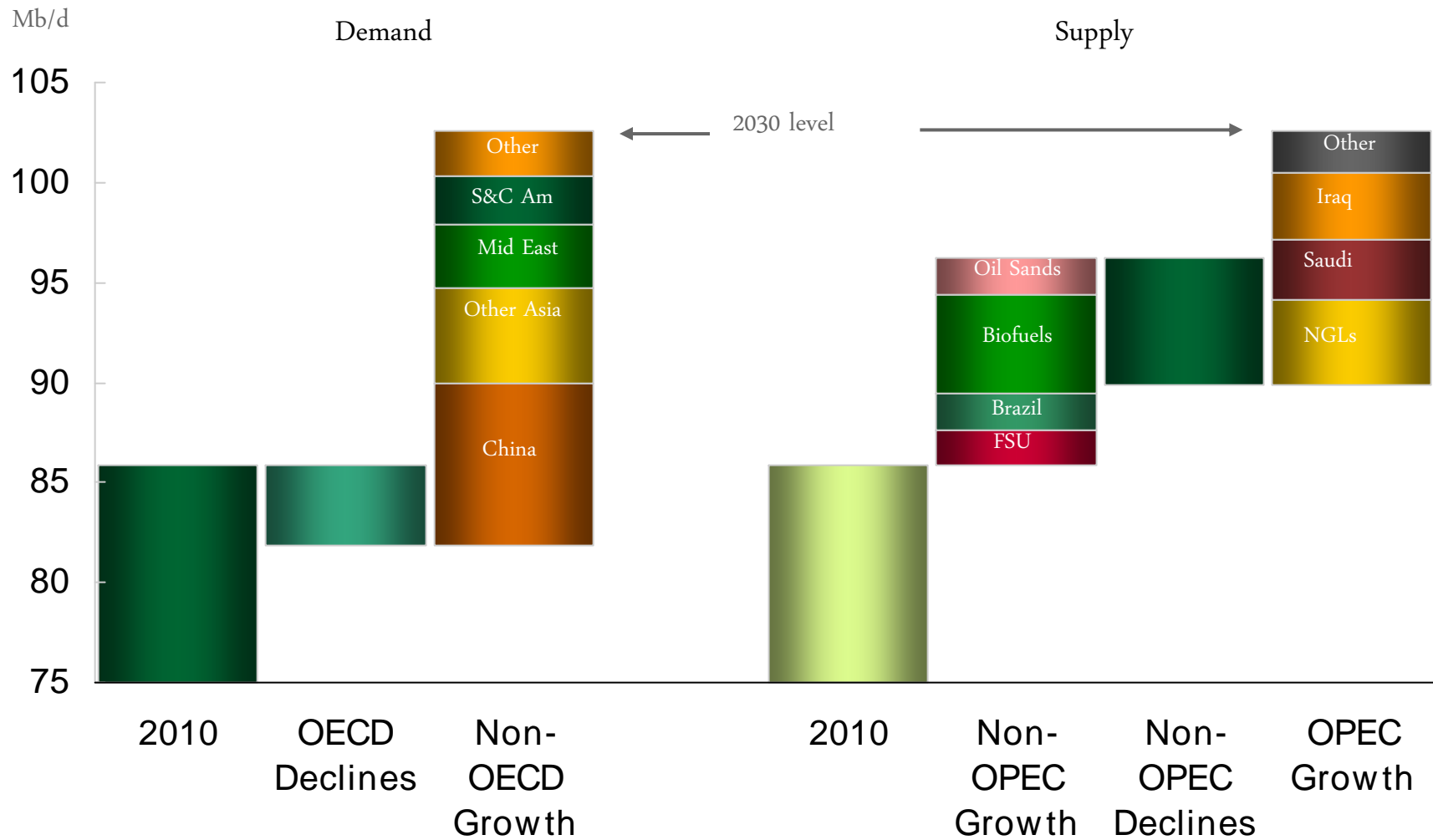
Non-OECD power, industry drive growth



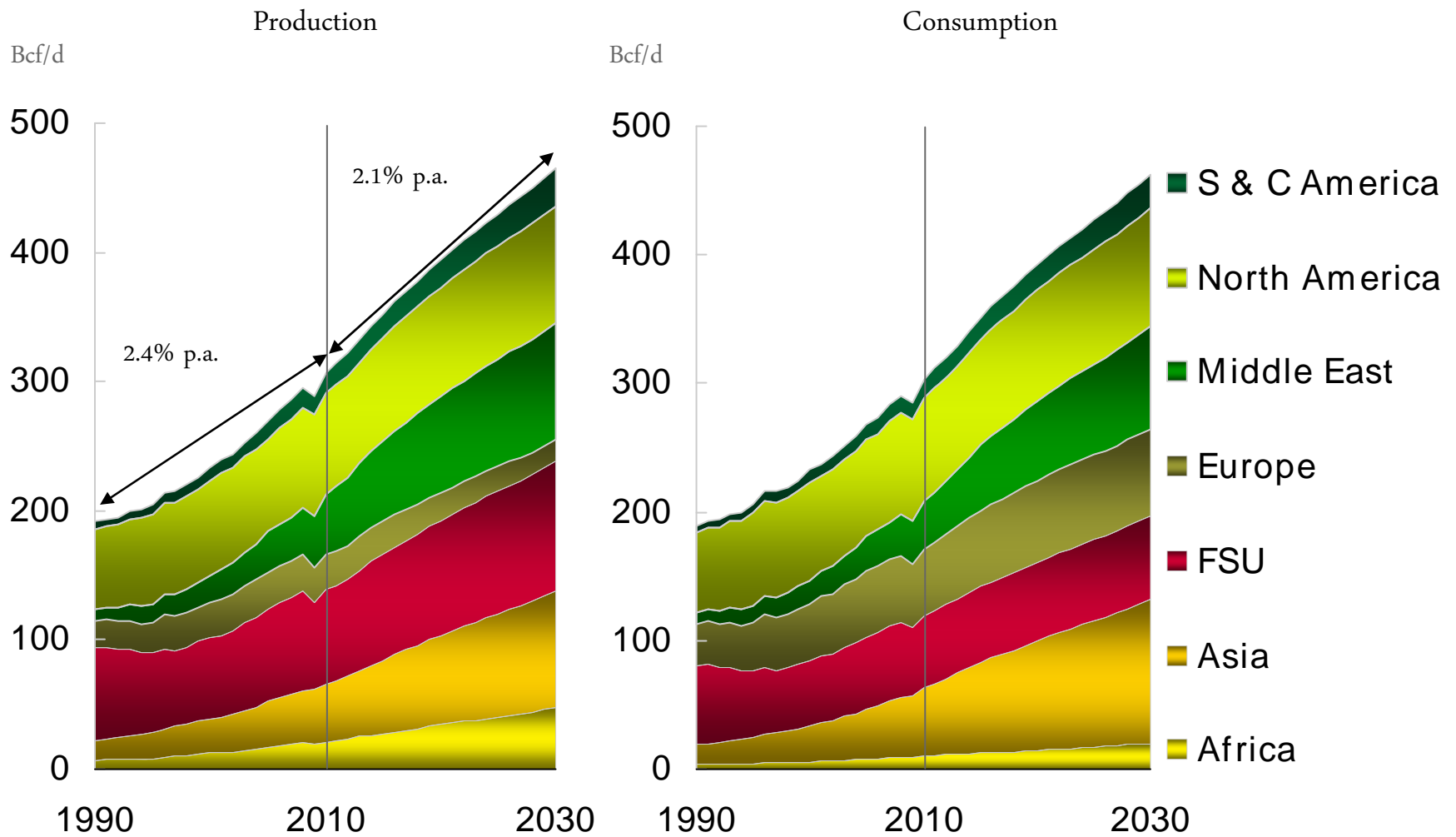
Growth of world energy consumption 2010-30



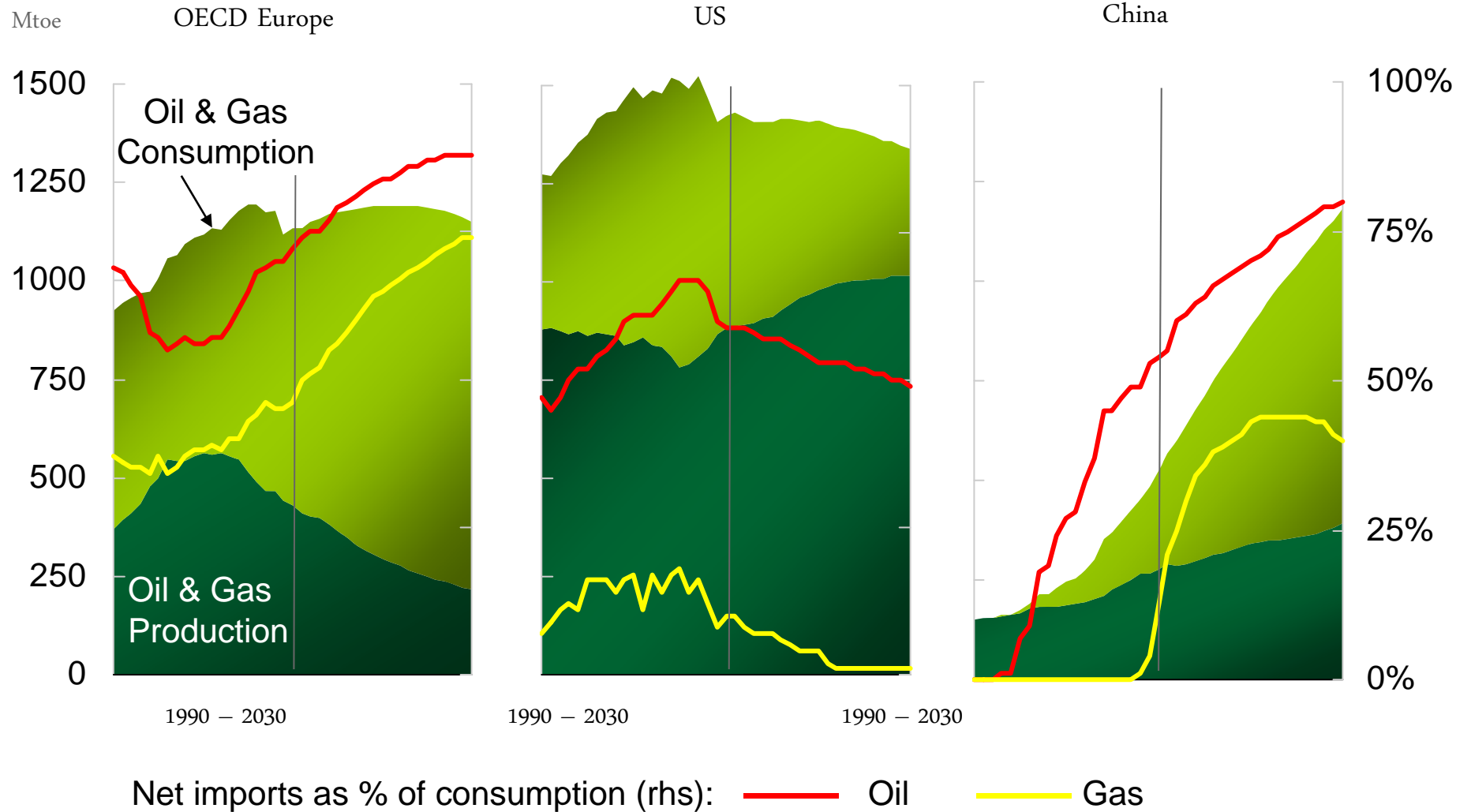
Liquids: Demand from non-OECD; supply from OPEC and biofuels



Natural gas the fastest-growing fossil fuel



Mixed implications for import dependence

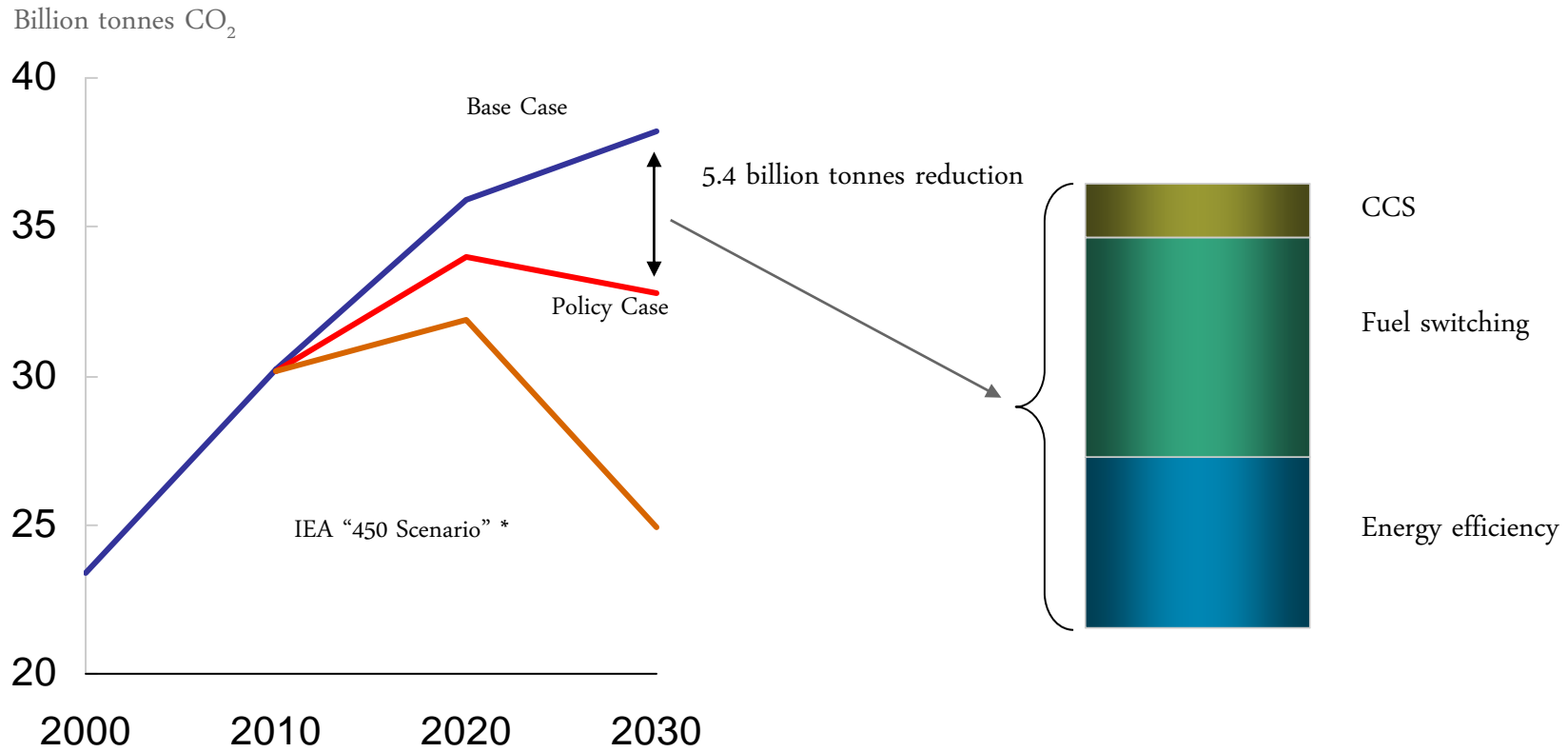


Alternative: Stronger policy action on climate change



CO₂ emissions from energy use

Sources of carbon abatement versus Base Case, 2030



* a back-cast which illustrates what is required to stabilise greenhouse gas concentrations at 450 ppm from IEA, *World Energy Outlook 2010*

Conclusions



- Where we've been:
 - Energy mix dominated by fossil fuels
- Where we are (short-term):
 - Oil supported by OPEC cuts
- Where we're going (longer-term):
 - Energy dominated by rapidly-growing emerging economies
 - Weak oil consumption growth; role of OPEC & biofuels likely to grow
 - Natural gas the fastest-growing fossil fuel; share of renewables likely to rise as well
 - Policy important to the base case; more aggressive policy could begin to reduce CO2