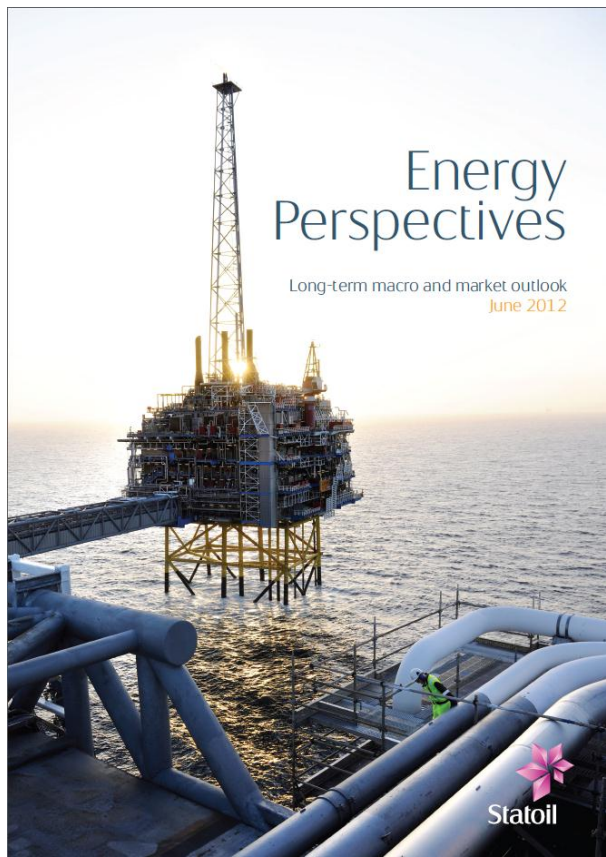


Energy Perspectives 2012
Long-run macro and market outlook

Press seminar, 21 June 2012
Klaus Mohn, Kyrre M. Knudsen, Eirik Wærness

Energy Perspectives 2012

30-year macro and market outlook

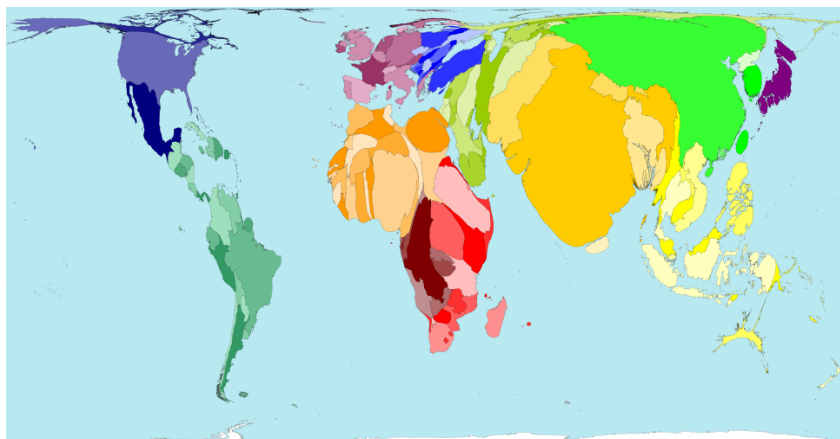


- The global economy
 - Growth close to historic average (2.8%)
 - Two speeds – non-OECD catching up
- Overall energy market outlook
 - 1.1% annual growth (oil and coal: 0.4%)
 - Moderate greening of energy mix
- Global oil and gas markets
 - Oil demand peaks around 2030
 - Gas demand increasing (1.6% per year)
- Considerable risk and uncertainty
 - Two alternative cases explored

Key drivers in global energy markets

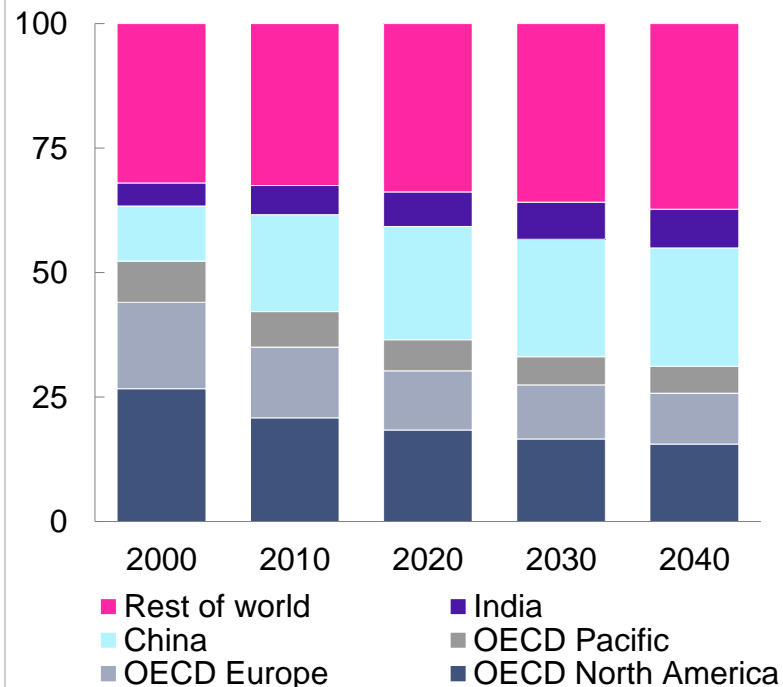
The geopolitical world order is changing rapidly – Asia taking its share

World population in 2050



Shifting energy demand

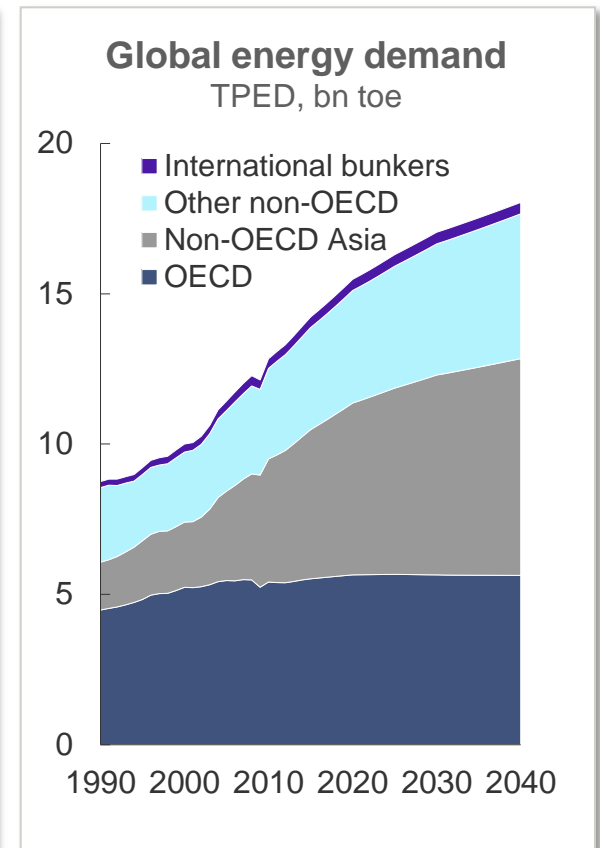
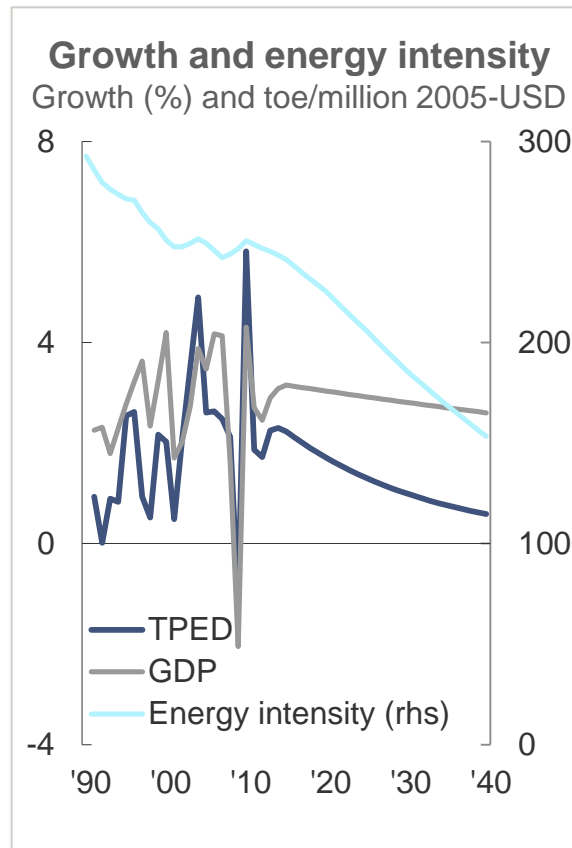
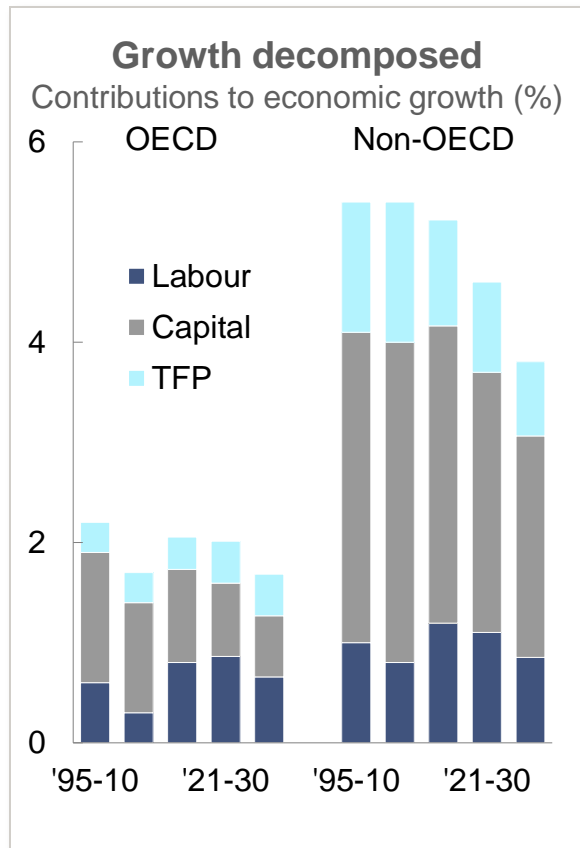
Share in global energy demand, %



Source: Map (facsimile) from Worldmapper (University of Sheffield), International Energy Agency (history), Statoil (projections).

Growth, efficiency and energy demand

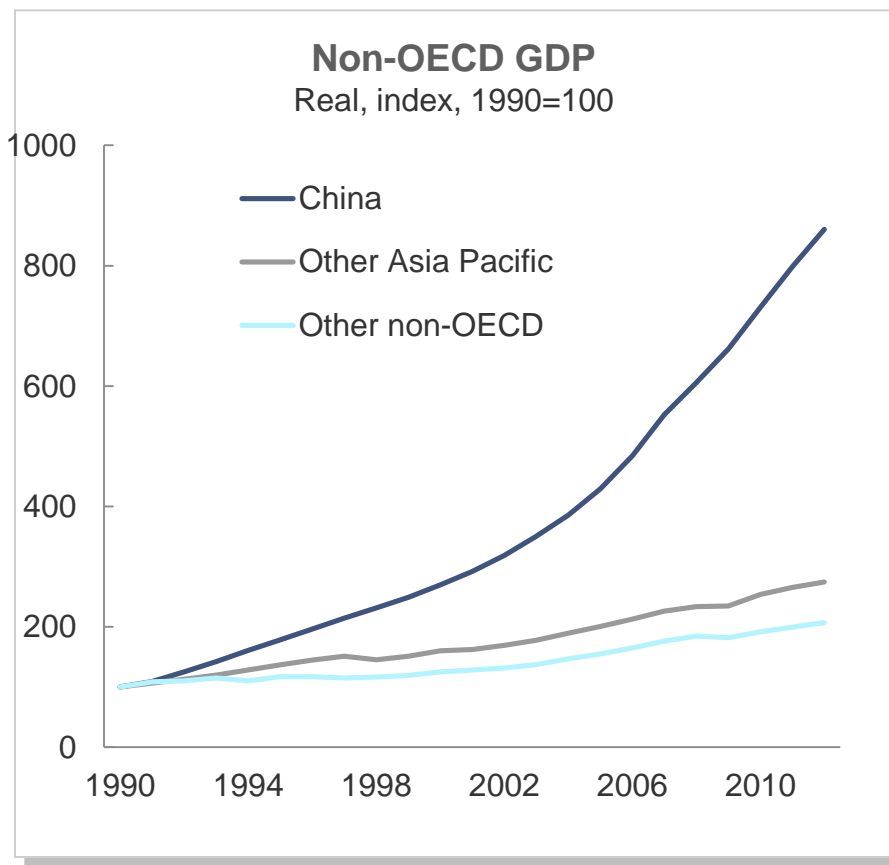
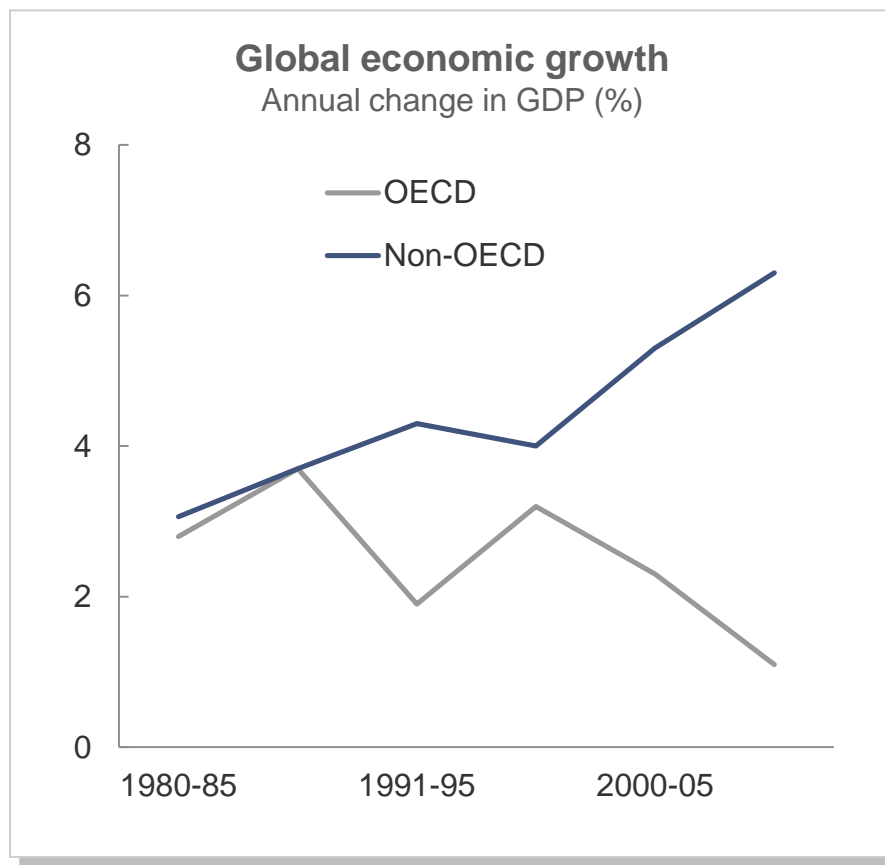
Non-OECD leading the way, 40% energy efficiency improvement



Source: The Conference Board, IHS Global Insight, IEA, Statoil

Global economy: history and status

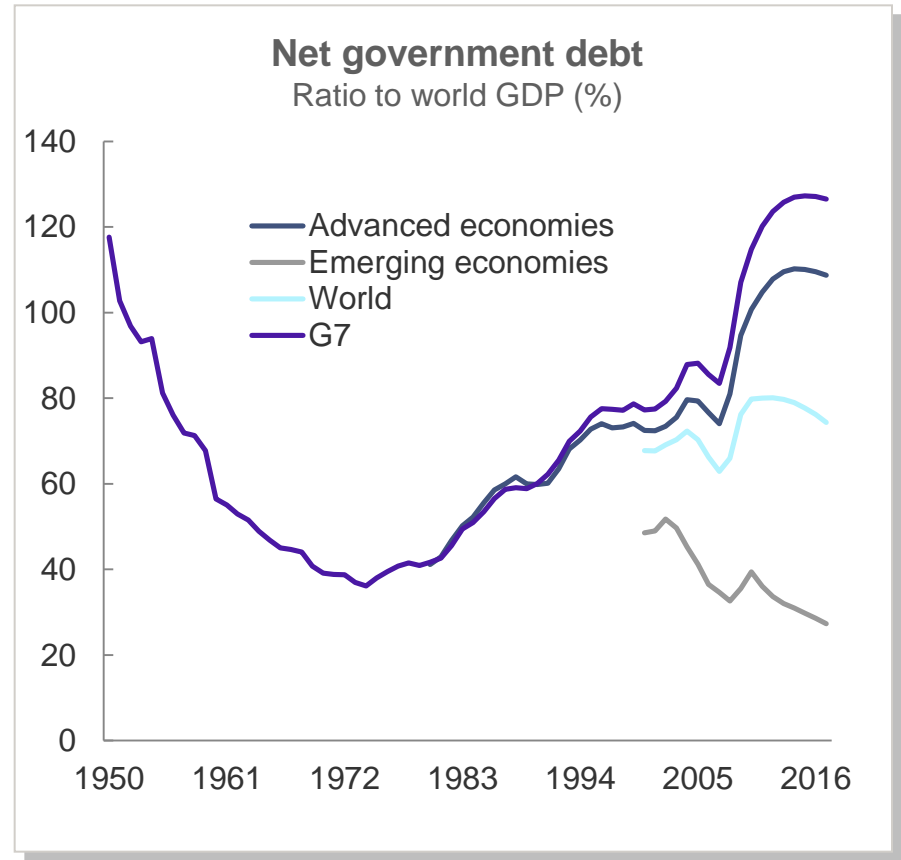
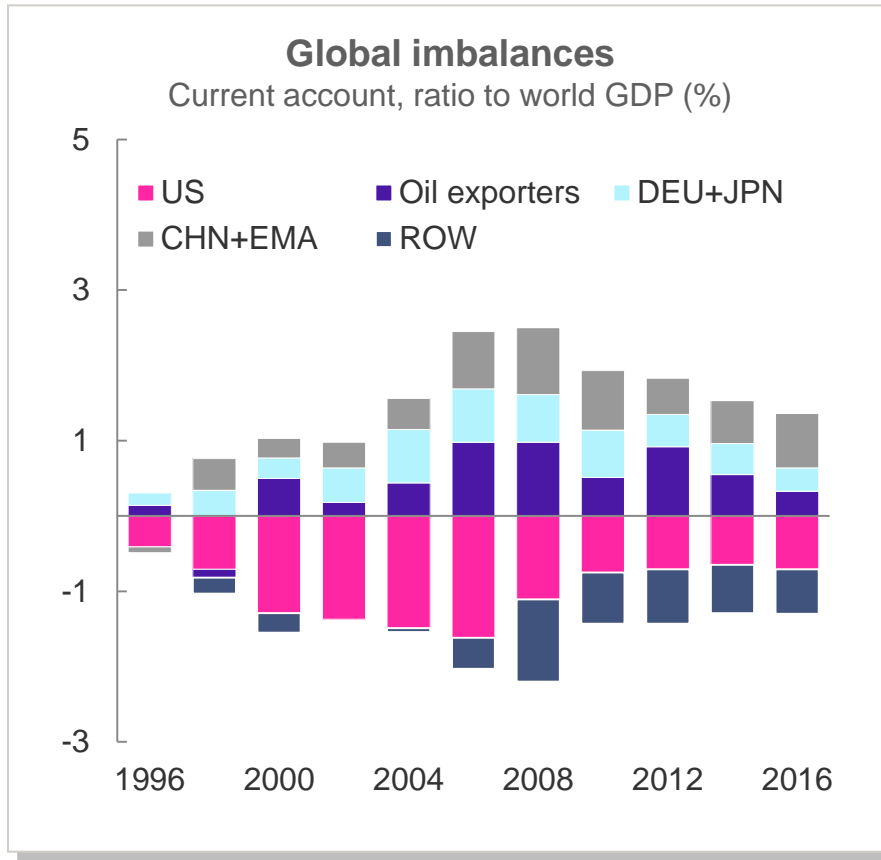
Increasingly dominated by non-OECD, protectionism on the rise



Source: IHS Global Insight, Statoil

Medium-term economic outlook: risky recovery

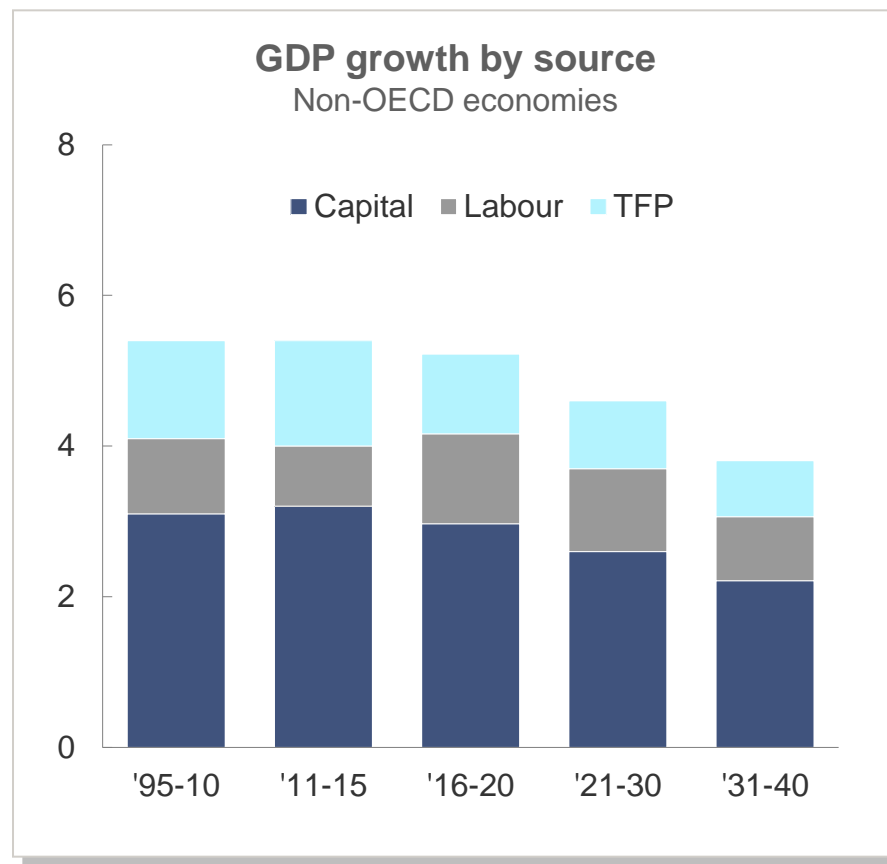
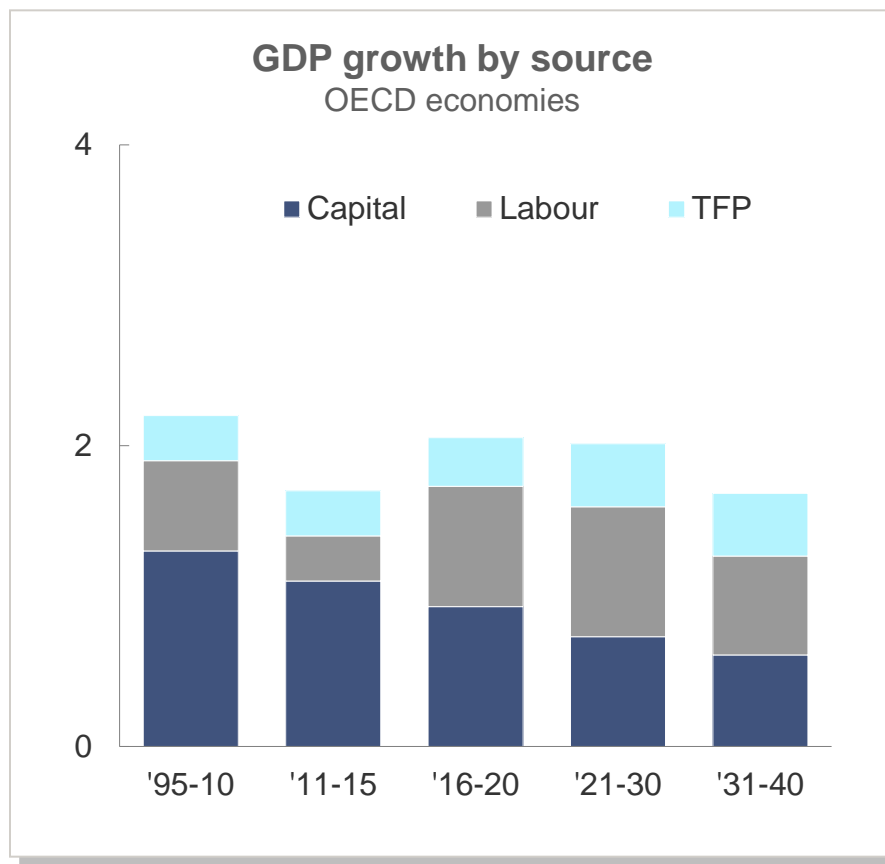
Gradual improvement towards 2015, but risks still remain in OECD



Source: International Monetary Fund

Long-term outlook: It's all about productivity

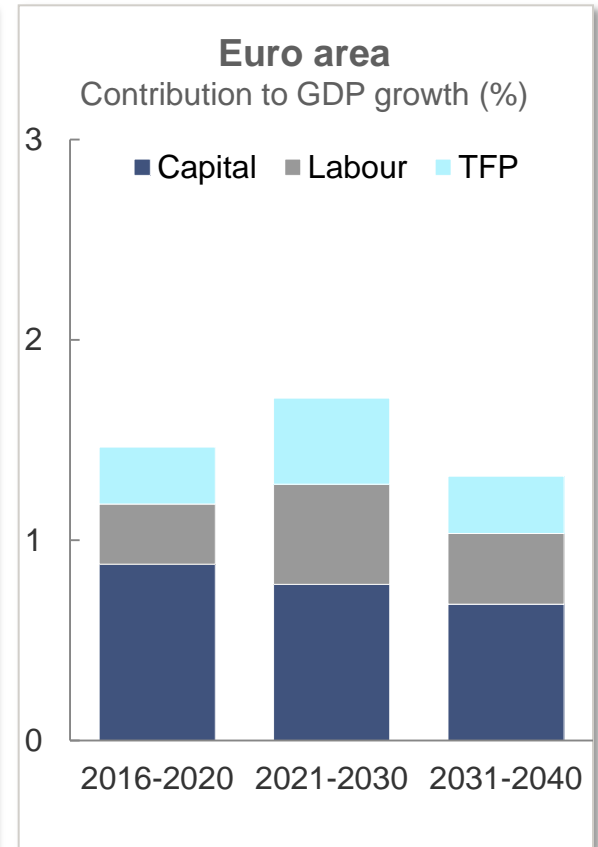
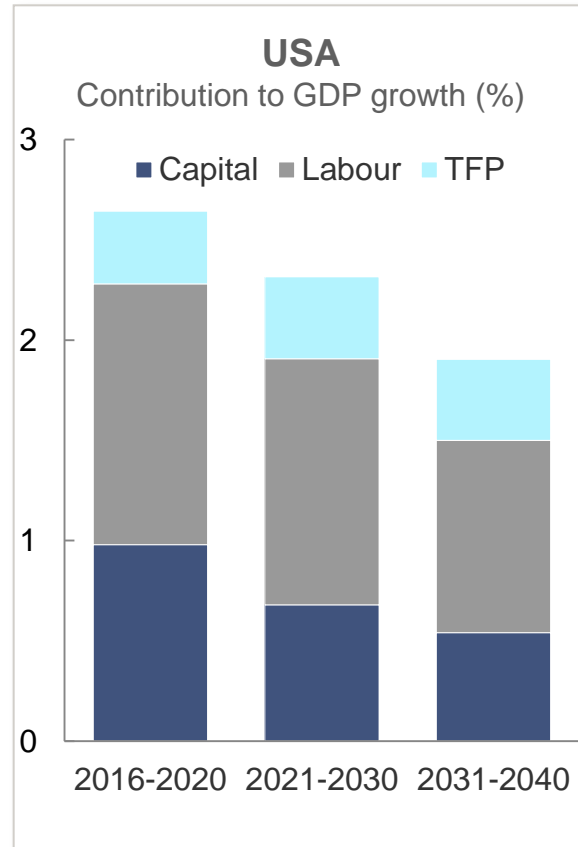
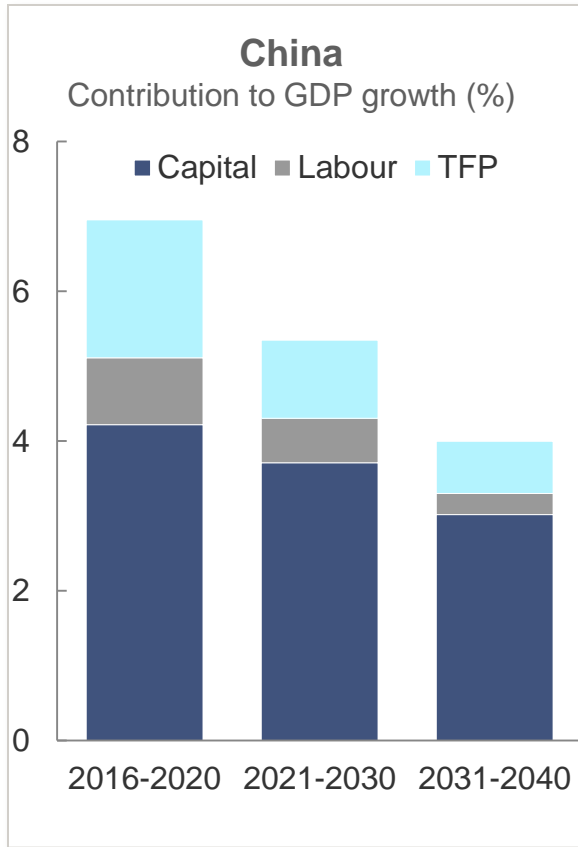
Capital, labour and productivity



Source: The Conference Board, IHS Global Insight, Statoil

Three key economies & contribution to growth

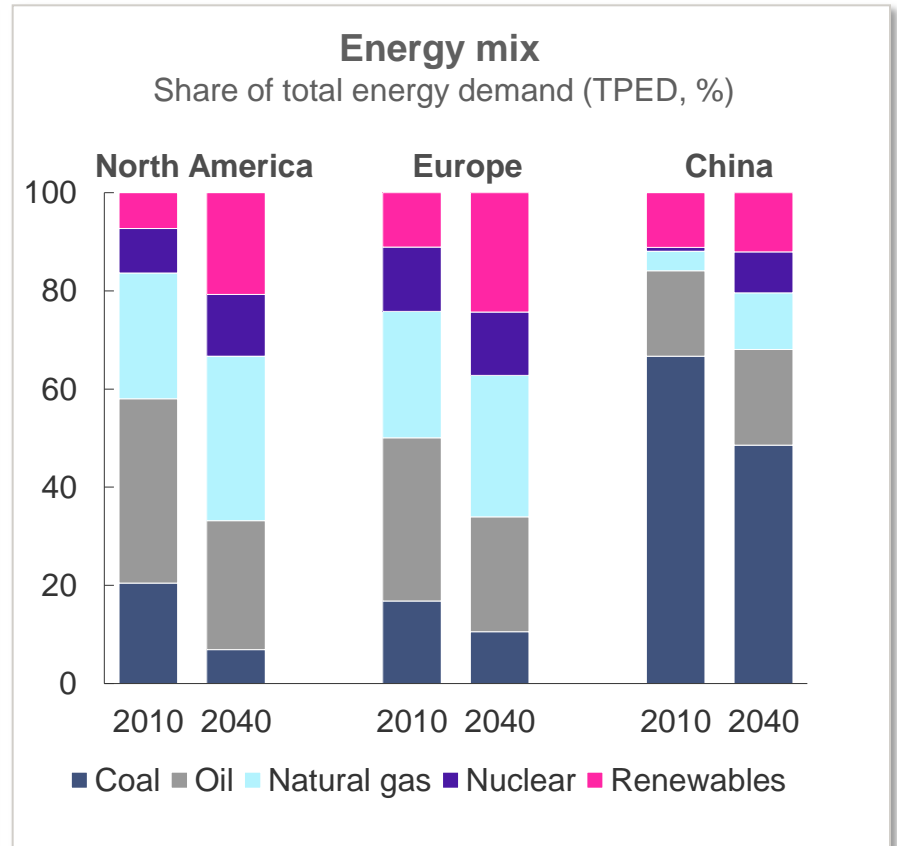
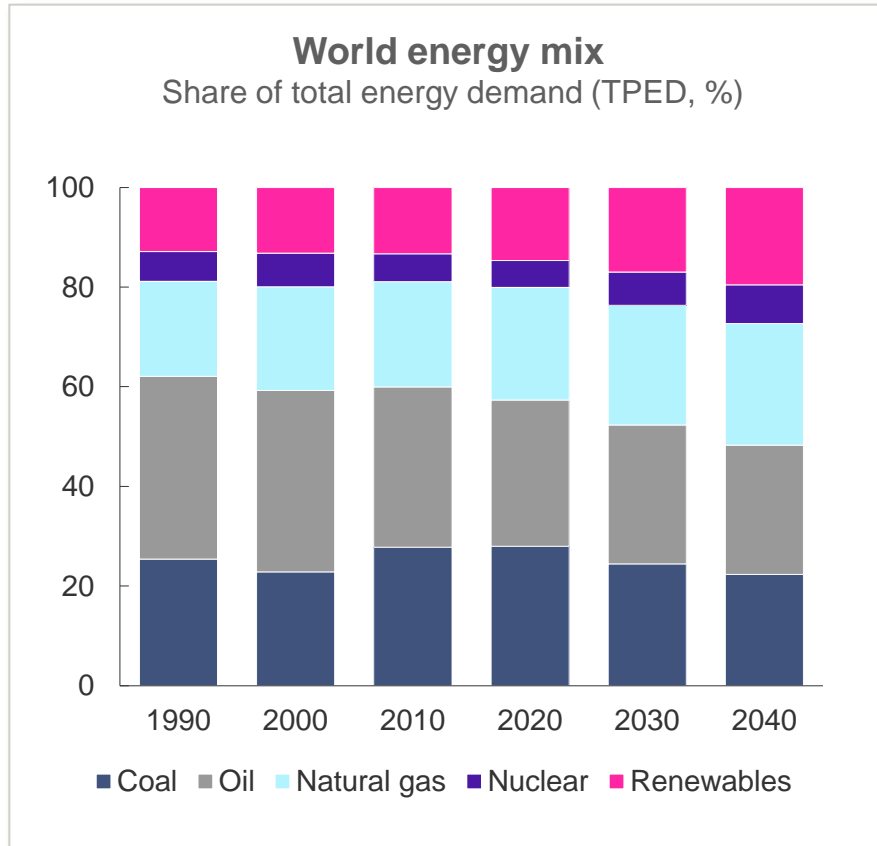
China foreseen as growth engine, US has more labour than Euro area



Source: Statoil

Gradual greening of energy mix

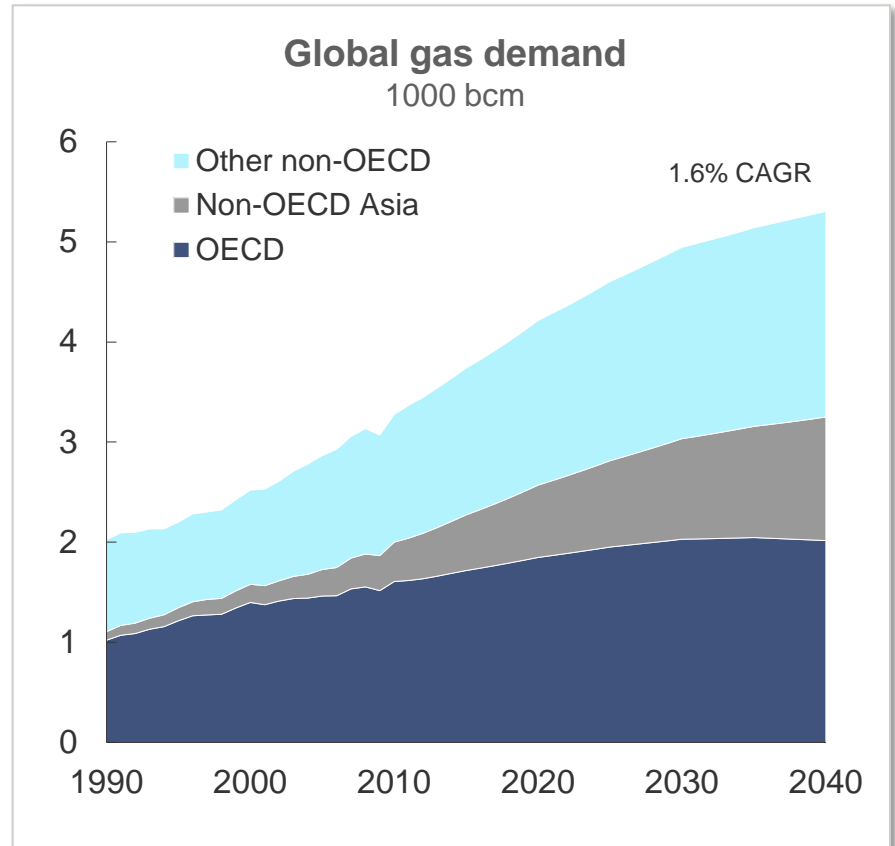
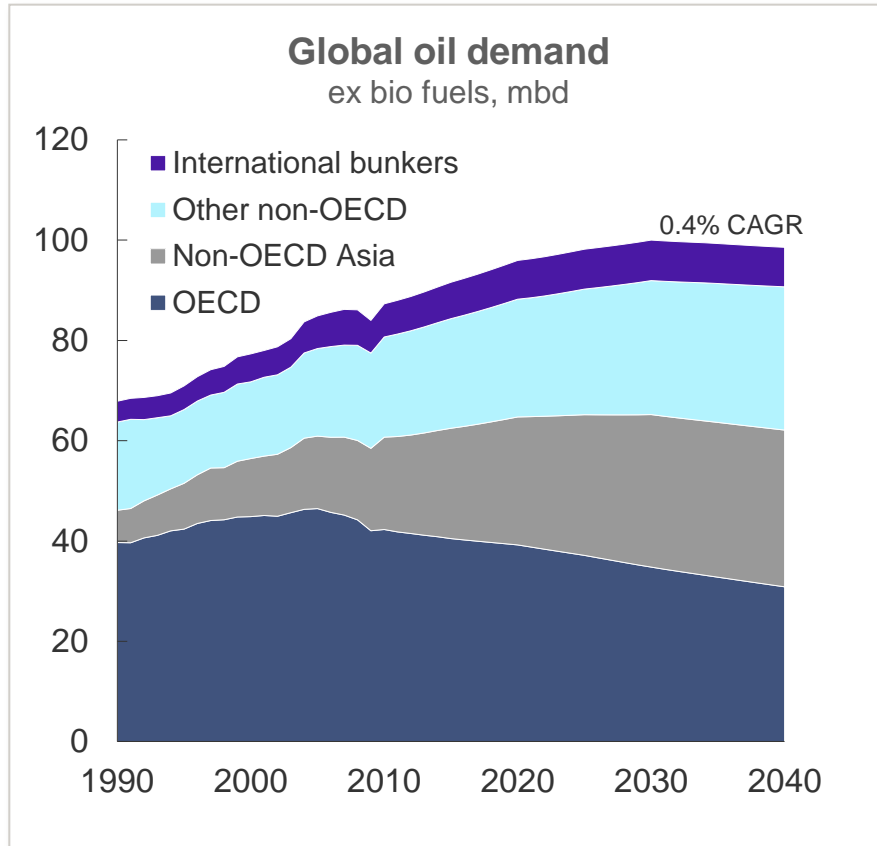
... but fossil fuels constitute 72% of total energy demand in 2040



Source: International Energy Agency (history), Statoil (projections)

Fossil fuels are here to stay

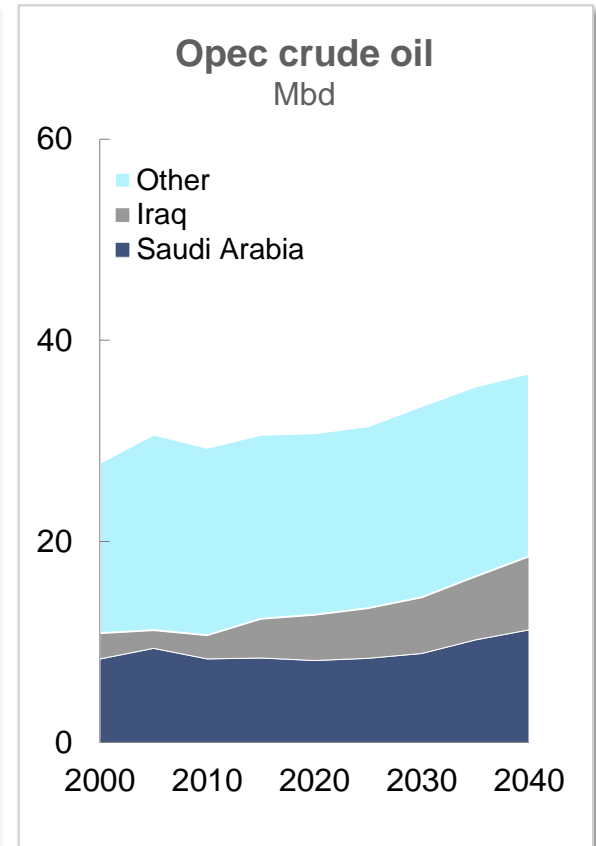
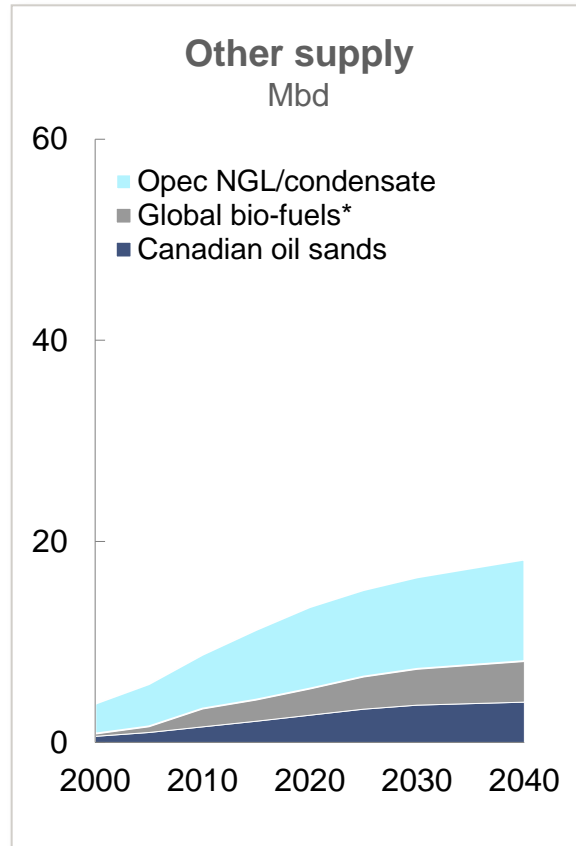
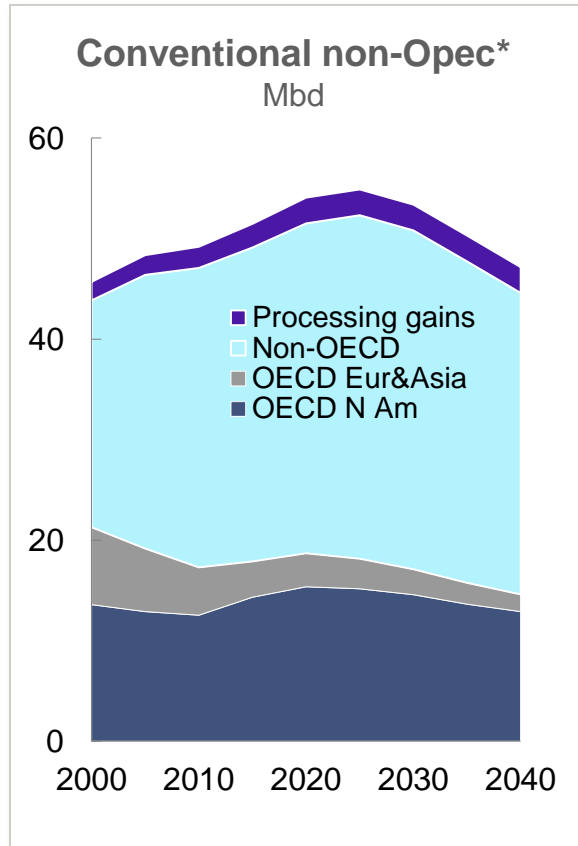
Emerging economies drive demand growth – oil demand peaks ~ 2030



Source: International Energy Agency (history), Statoil (projections)

Global oil supply from different sources

Opec crude regaining importance, eventually



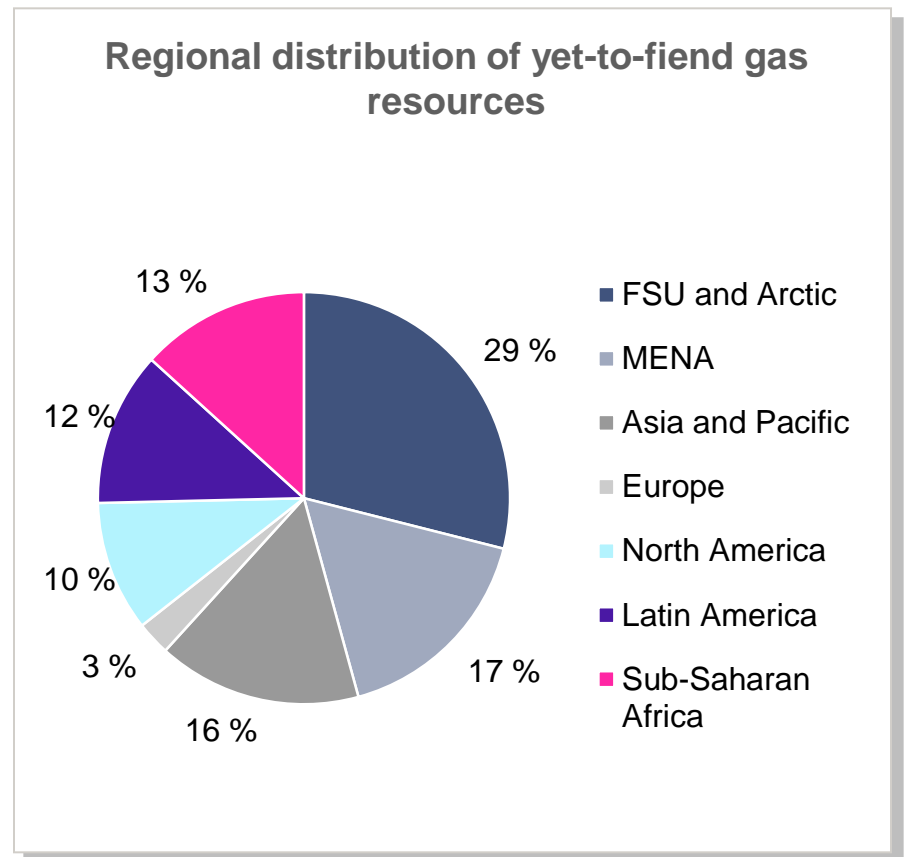
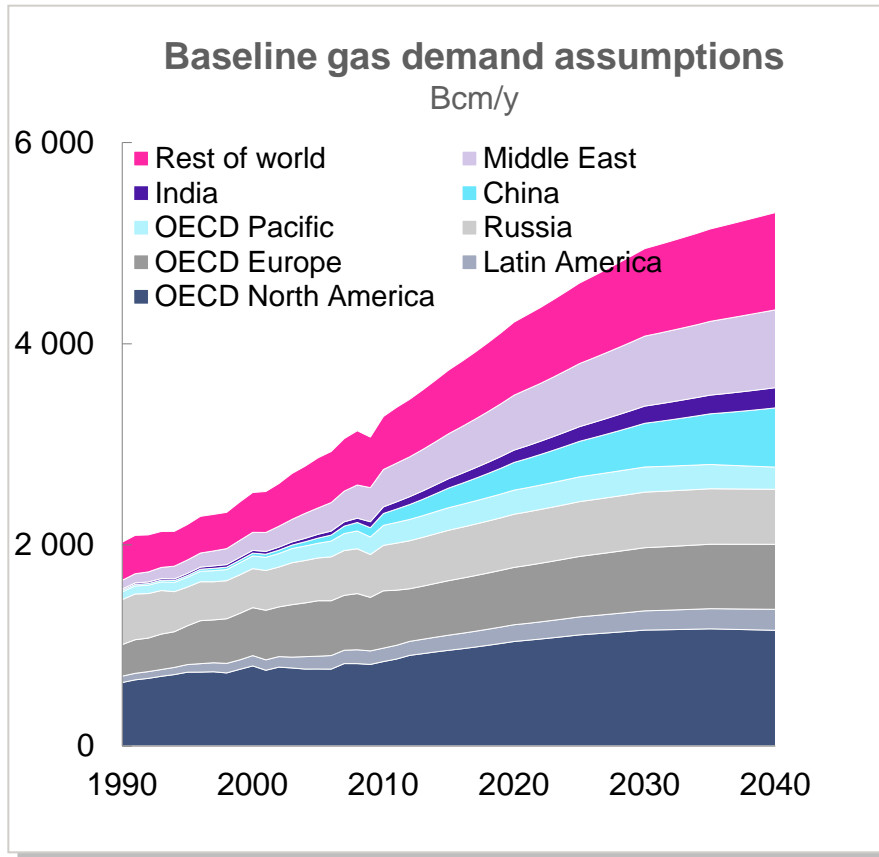
*Including US tight oil and NGL

*Not energy content adjusted

Source: IEA, Statoil

The global gas market – long term

Growing demand in many regions, linking supply and demand a challenge?

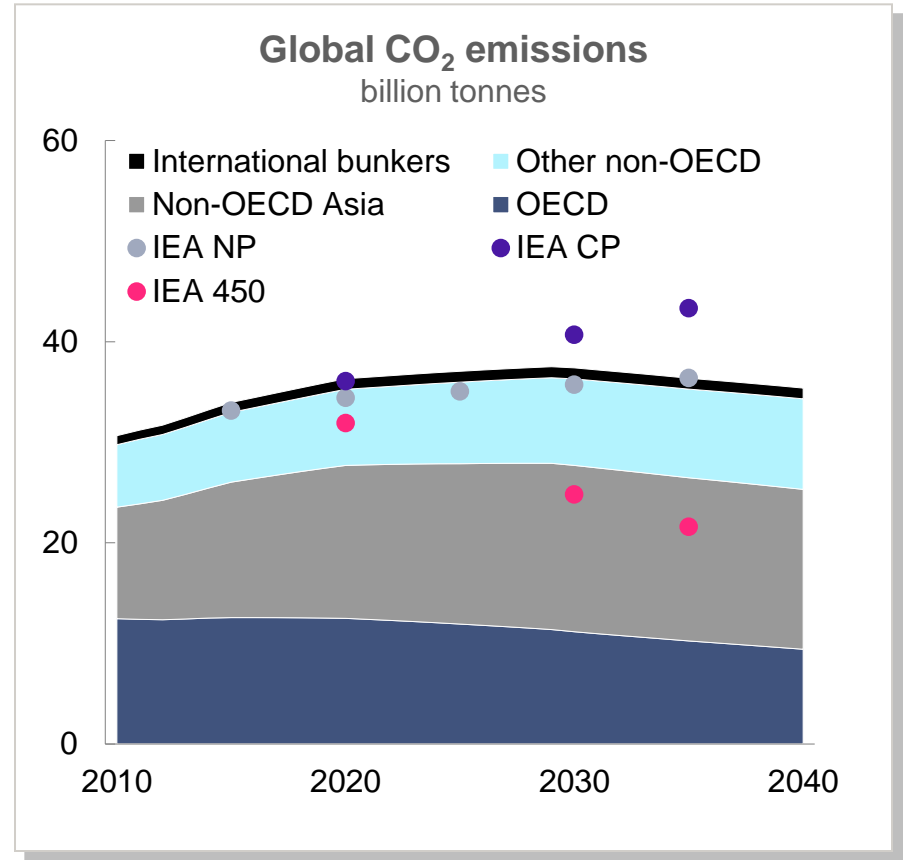


Source: IEA, US geological survey, Statoil

CO₂ emissions level out around 2030

Lower growth, fuel efficiency, electrification, CCS

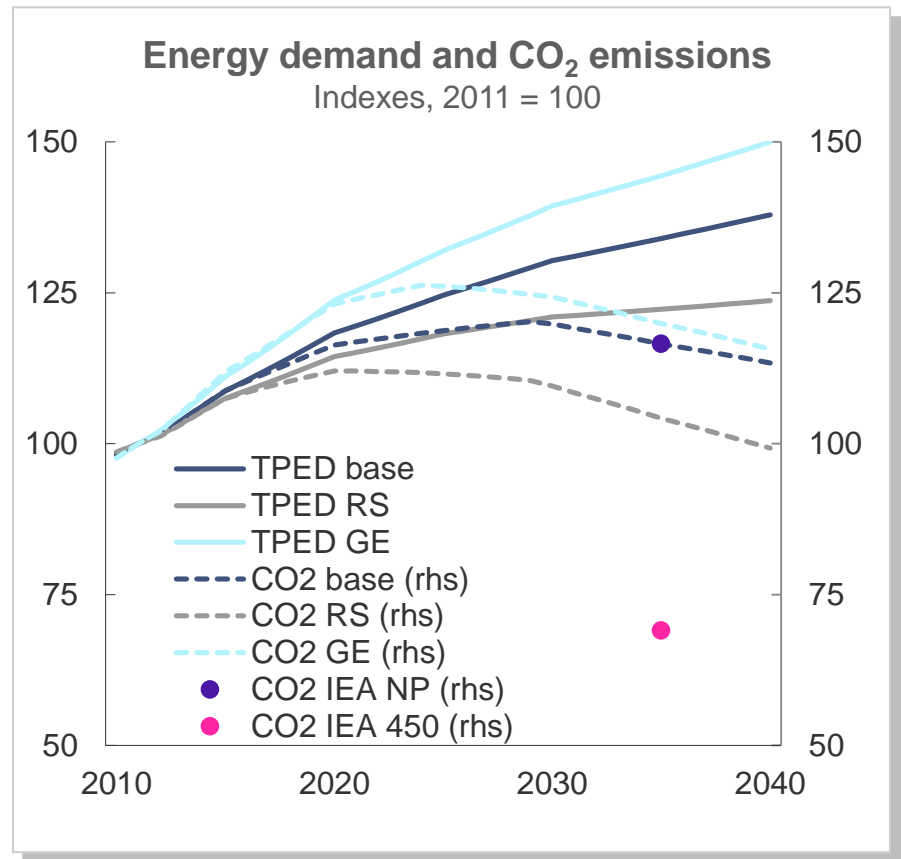
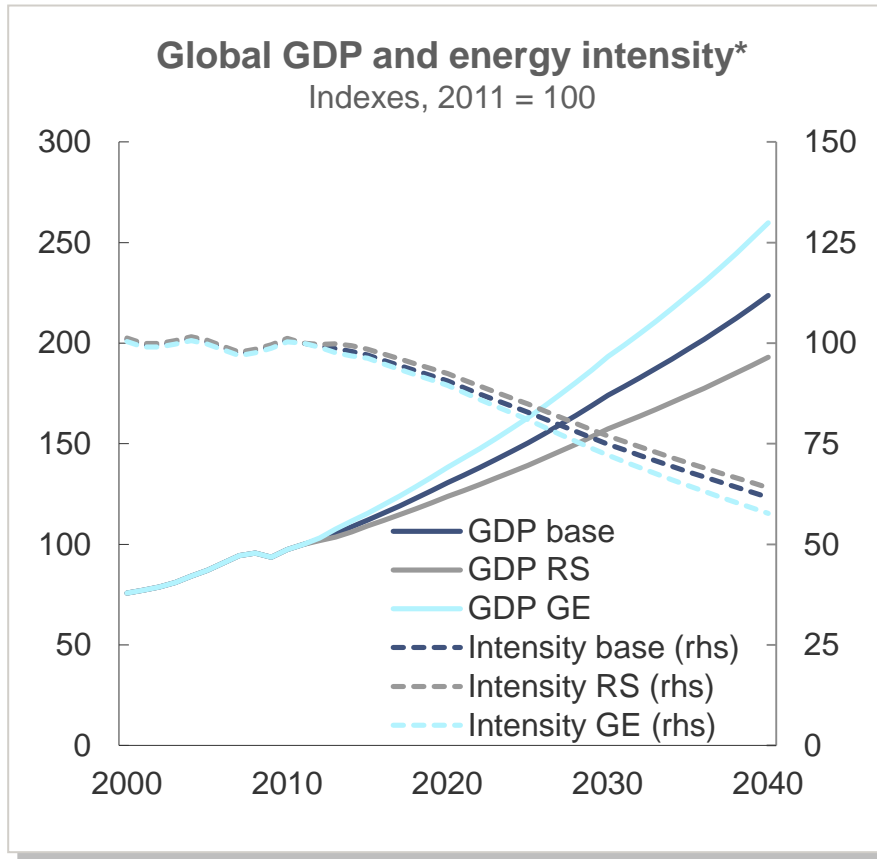
- Strong increase in emissions in 2010
 - Strong growth in all fossil fuels
- OECD emissions may have peaked
- Further development determined by
 - Growth and fuel efficiency
 - Energy and climate policies
 - Greening of energy mix, including fuel mix in transport sector
 - CCS impact gains strength from 2030



Source: IEA (history), Statoil (projections)


What if the world develops differently?

Differences in GDP, energy demand, efficiency and emissions



*Energy use per GDP

Source: IHS Global Insight/IES (history), Statoil (projections)



Thank you!