

Energy Perspectives 2016

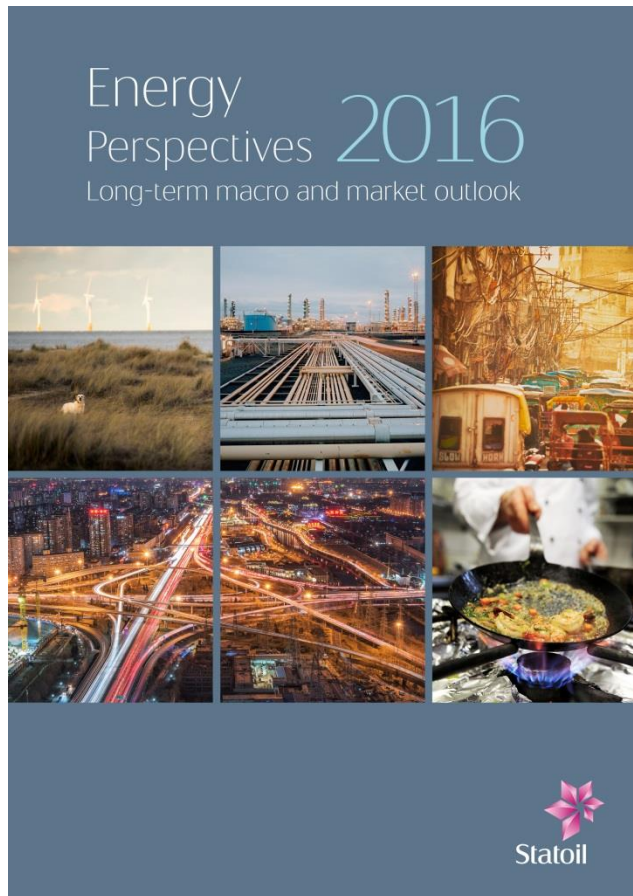
Long-term macro and market outlook

USA, June 2016

Eirik Wærness, Senior vice president and Chief economist

Energy Perspectives 2016

Macro and market outlook to 2040 – www.statoil.com/energyperspectives

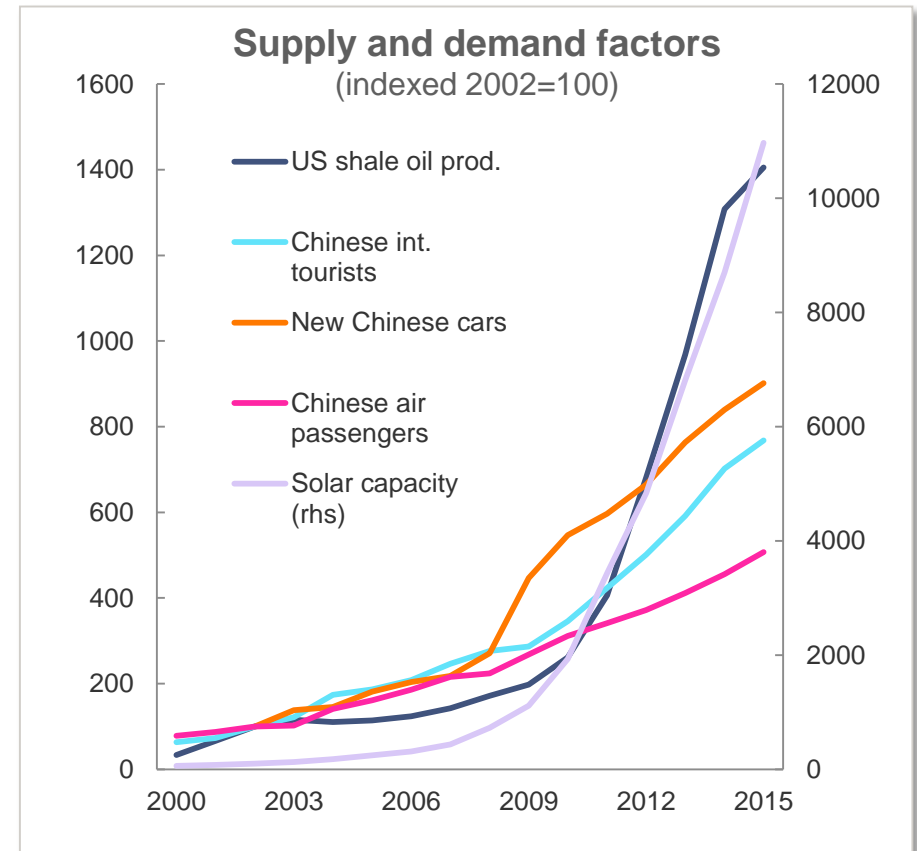


Significant uncertainty and large changes

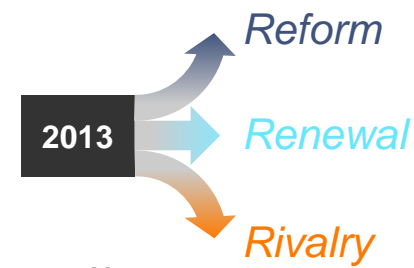
... this calls for using scenarios



Source: The Economist

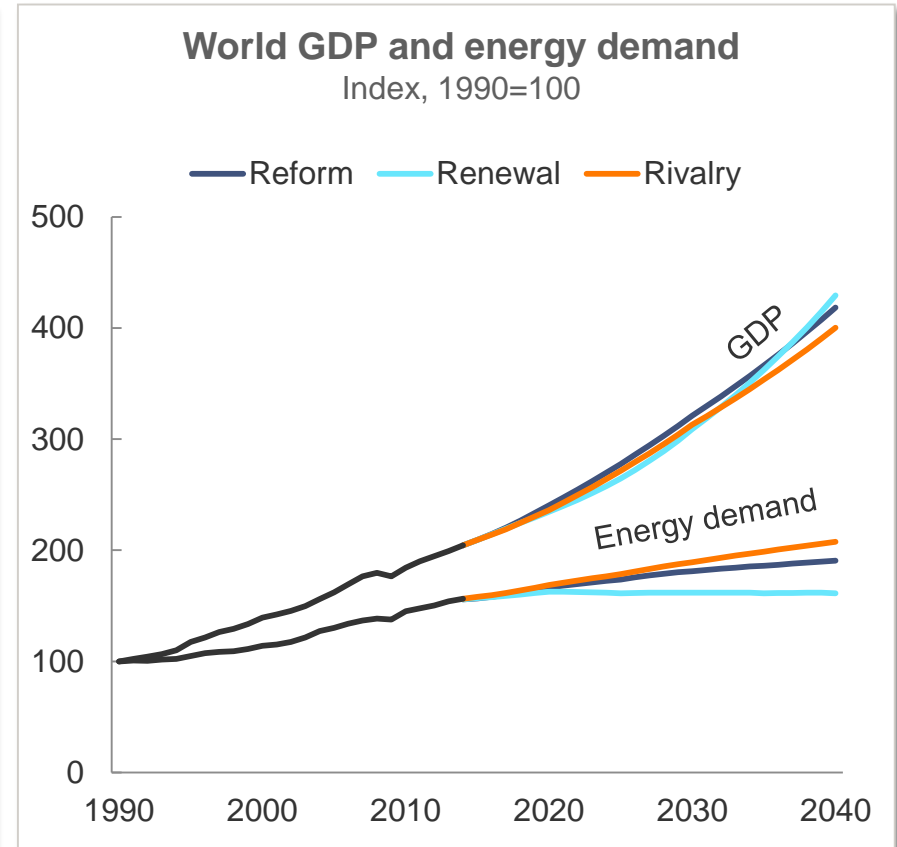
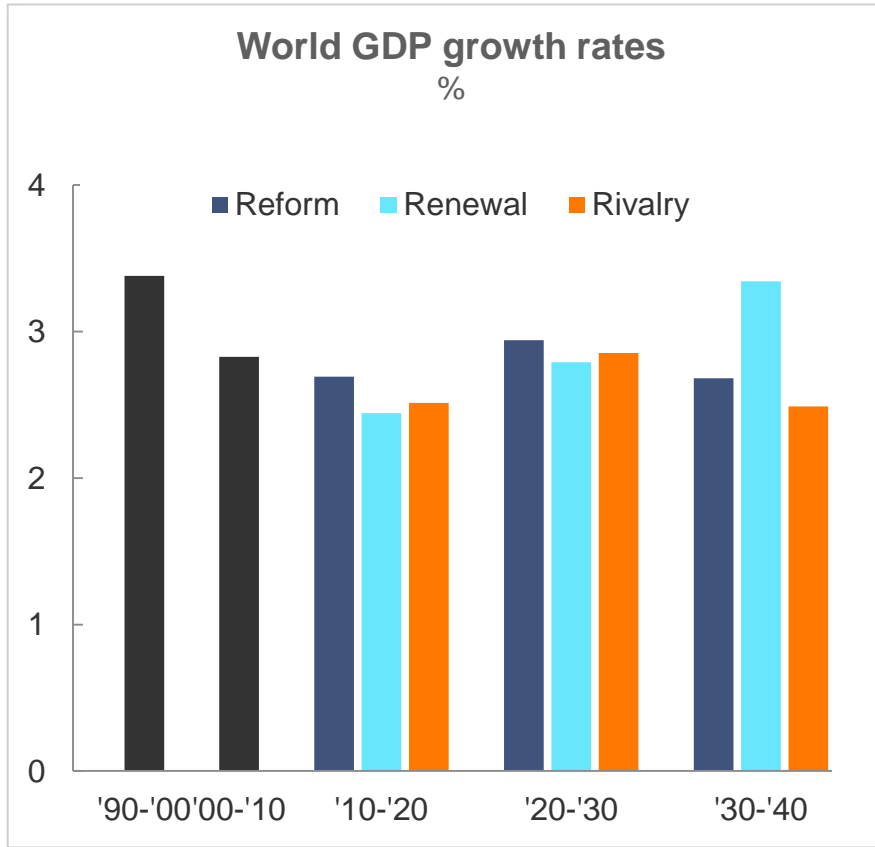


Source: DOE, CEIC, IEA, IRENA



Several futures are possible...

But the world is twice as rich, needs more energy, and is more efficient

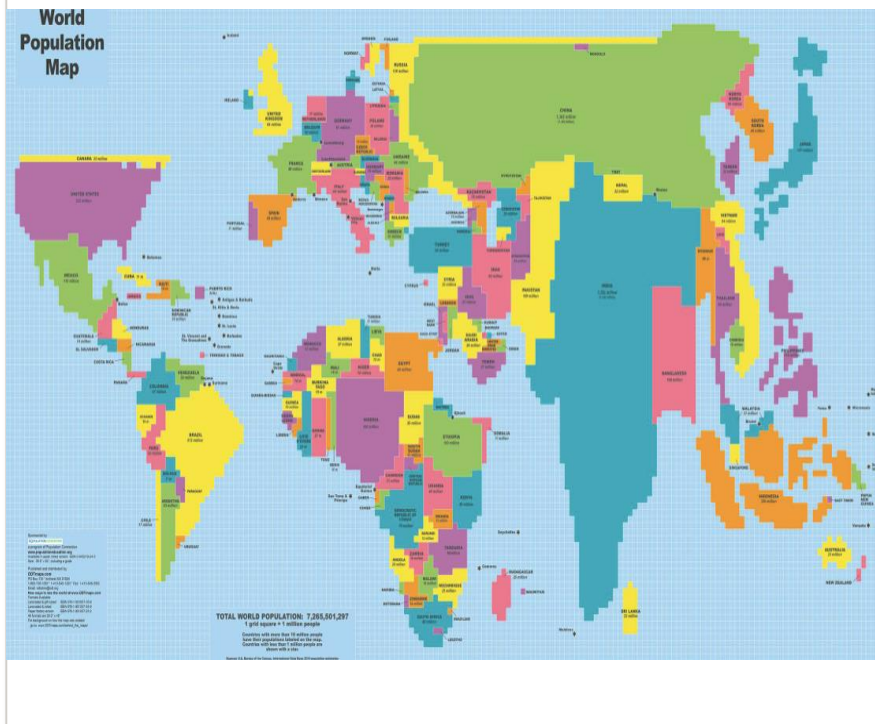


A strong trend affecting economics and energy

All growth in energy demand in emerging economies, in particular in Asia

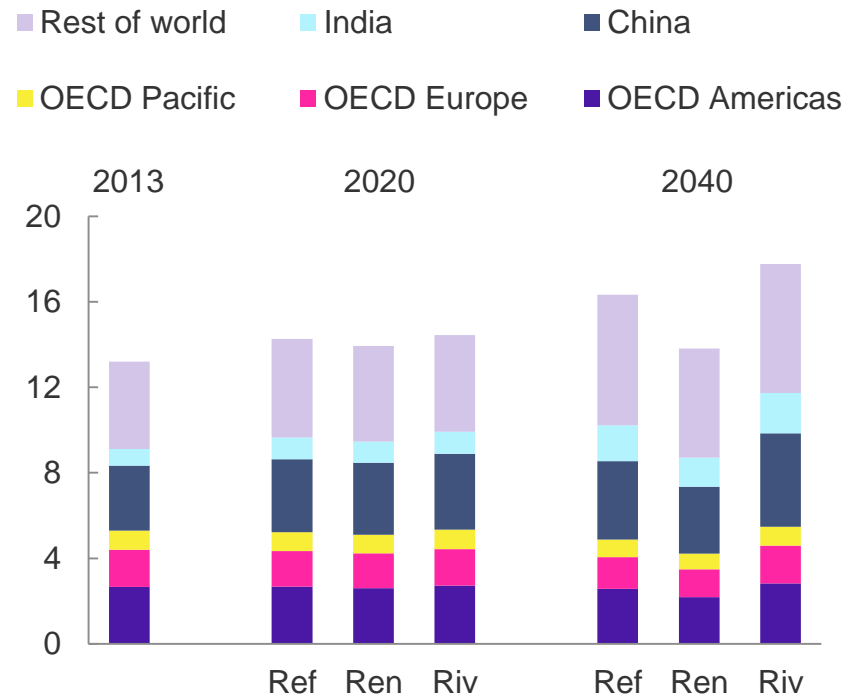
The global population centre is in Asia

Each small square represents 1 million people



World energy demand per region

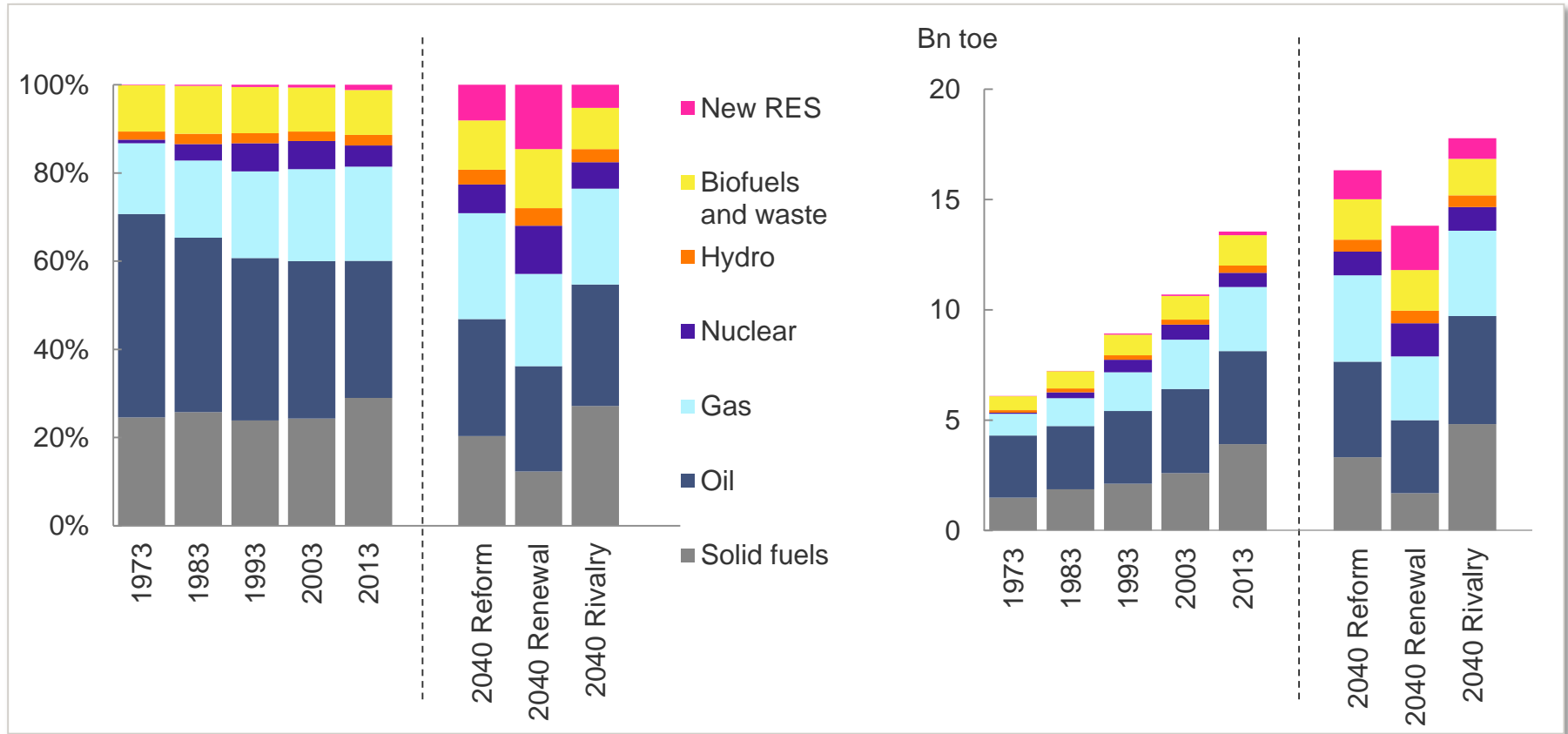
Bn toe



Source: BigThink, IEA, Statoil (projections)

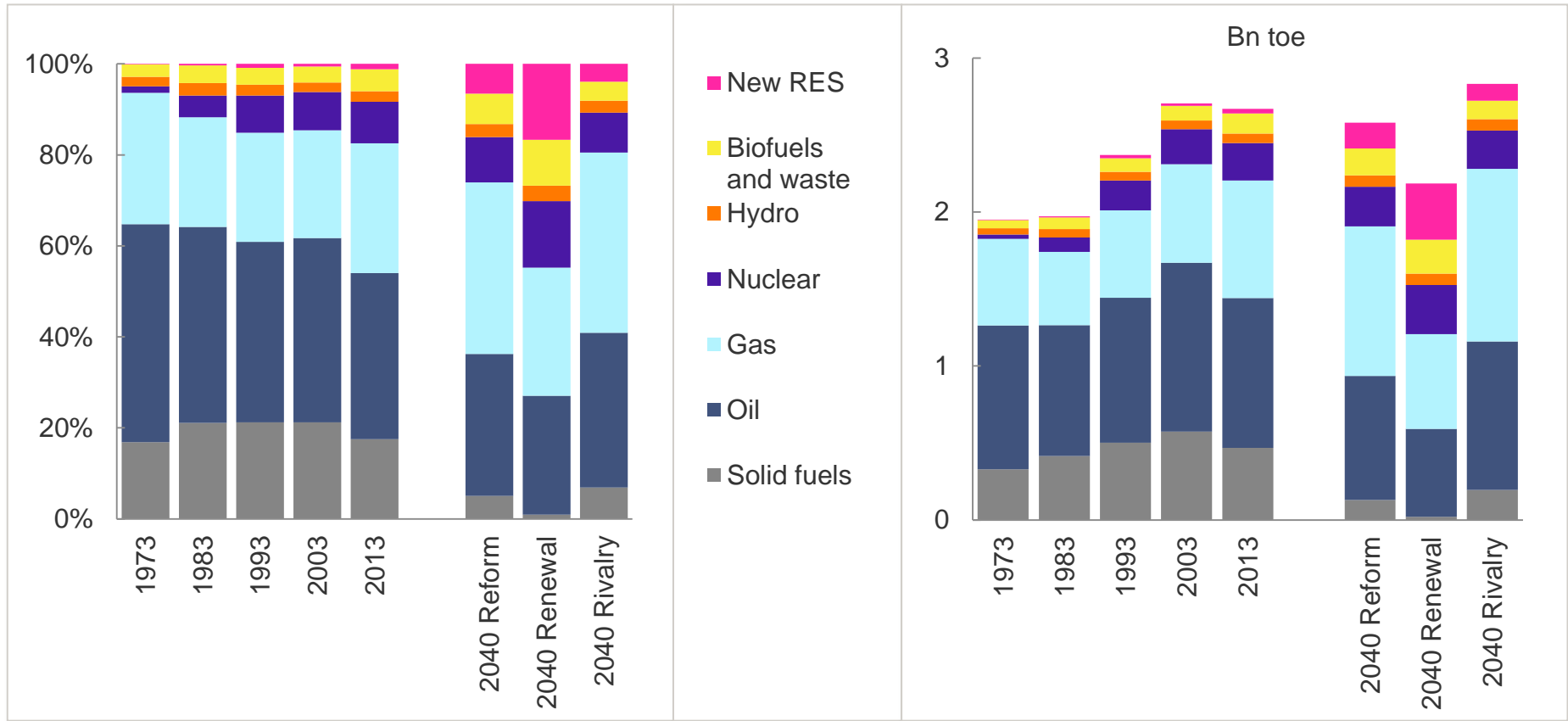
Speeding up the change in global energy mix

... with Renewal displaying a paradigm shift



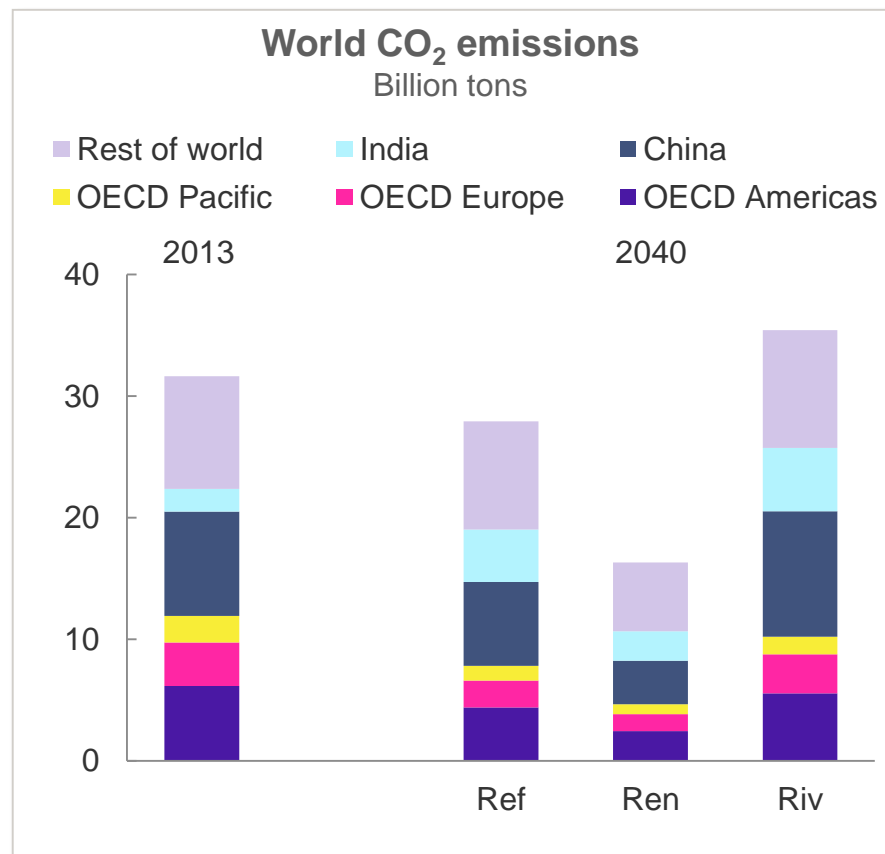
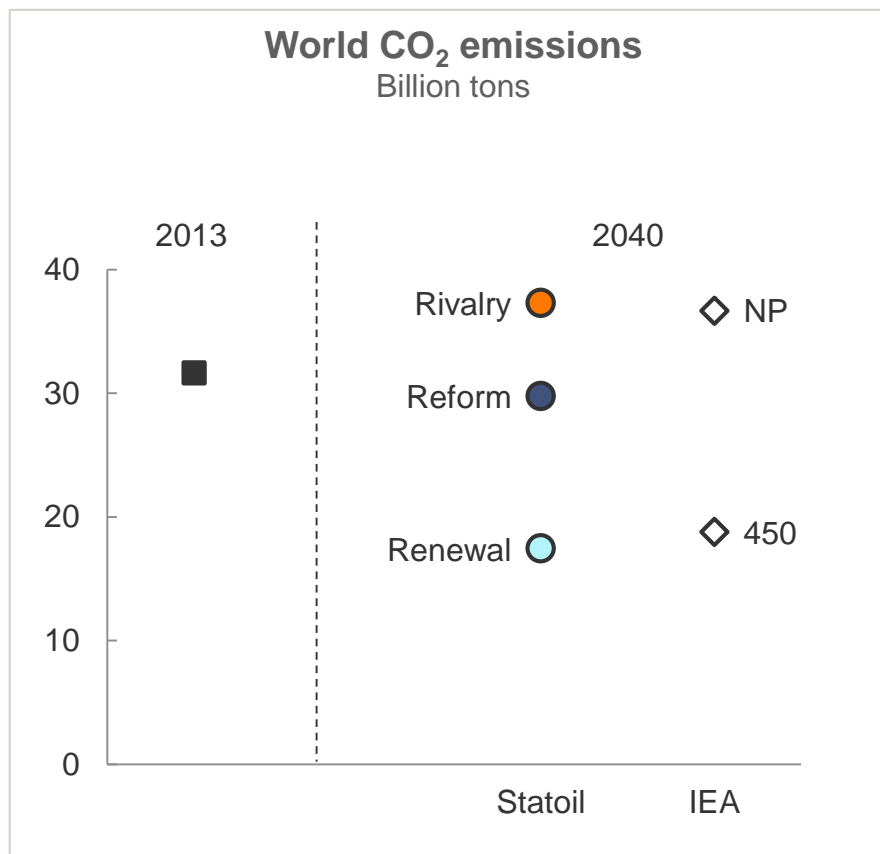
OECD Americas energy mix changes gradually

... but Renewal displays a paradigm shift



CO₂ emissions determined by demand and mix

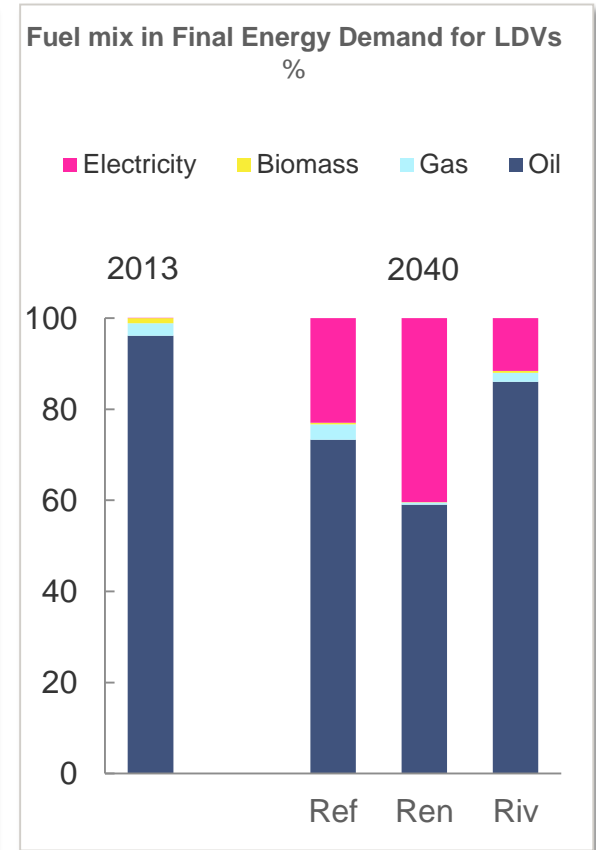
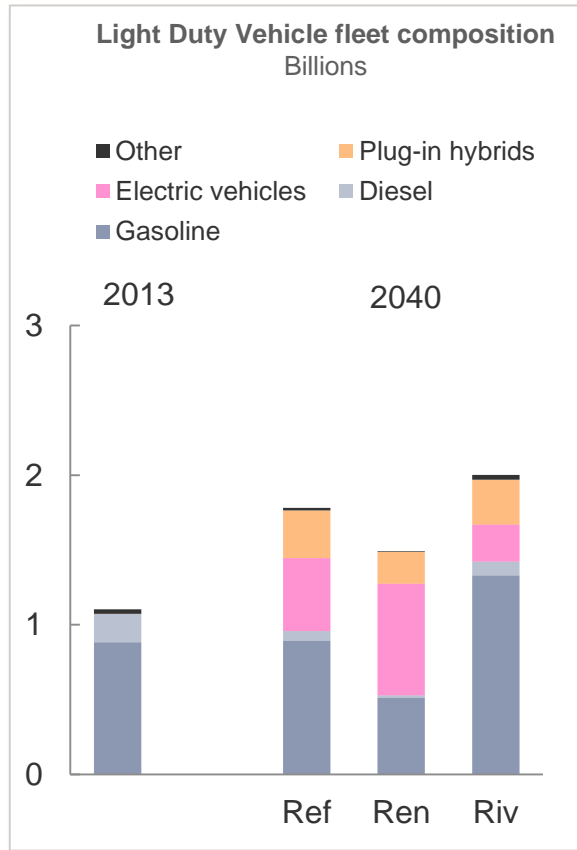
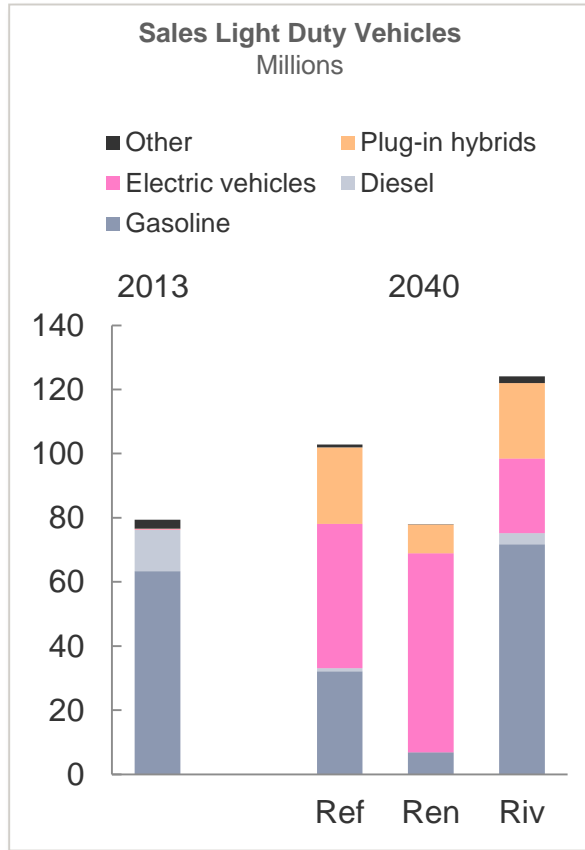
Climate policies: Driving Renewal, contributing to Reform



Source: IEA (history), Statoil (projections)

Technology shift for light duty vehicles

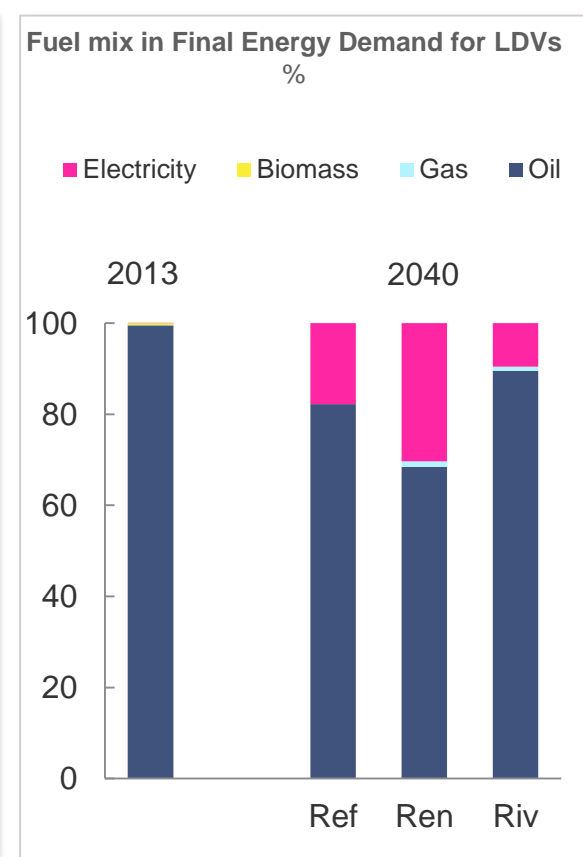
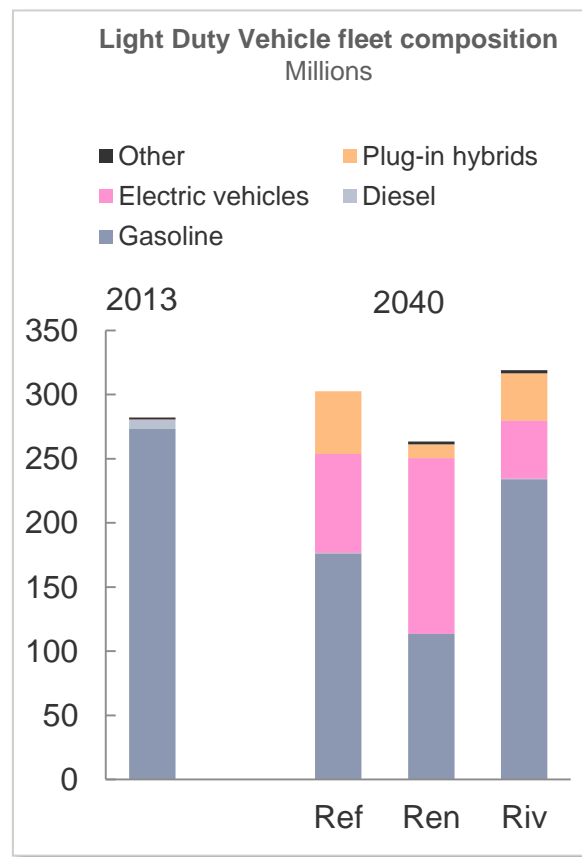
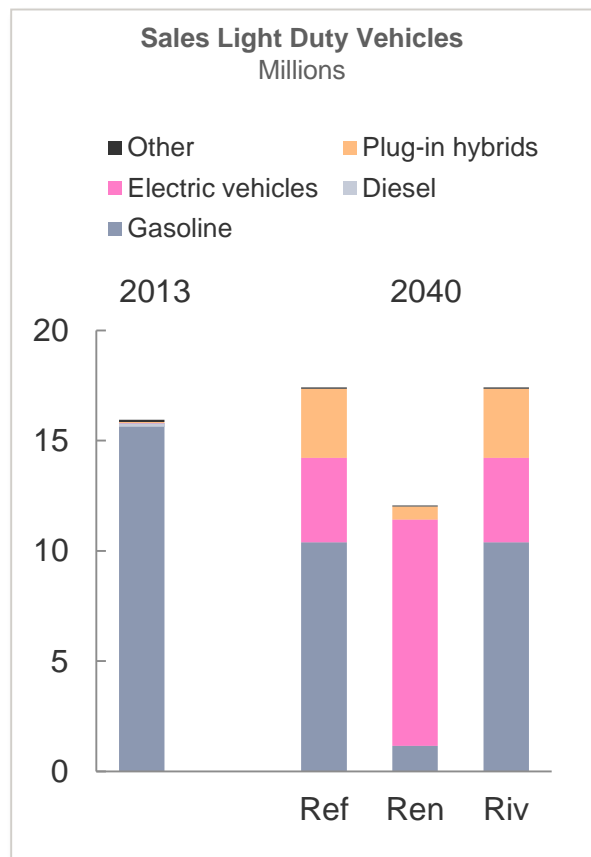
... in all scenarios, and a revolution in Renewal



Source: IEA (history), Statoil (projections)

LDV changes in OECD Americas

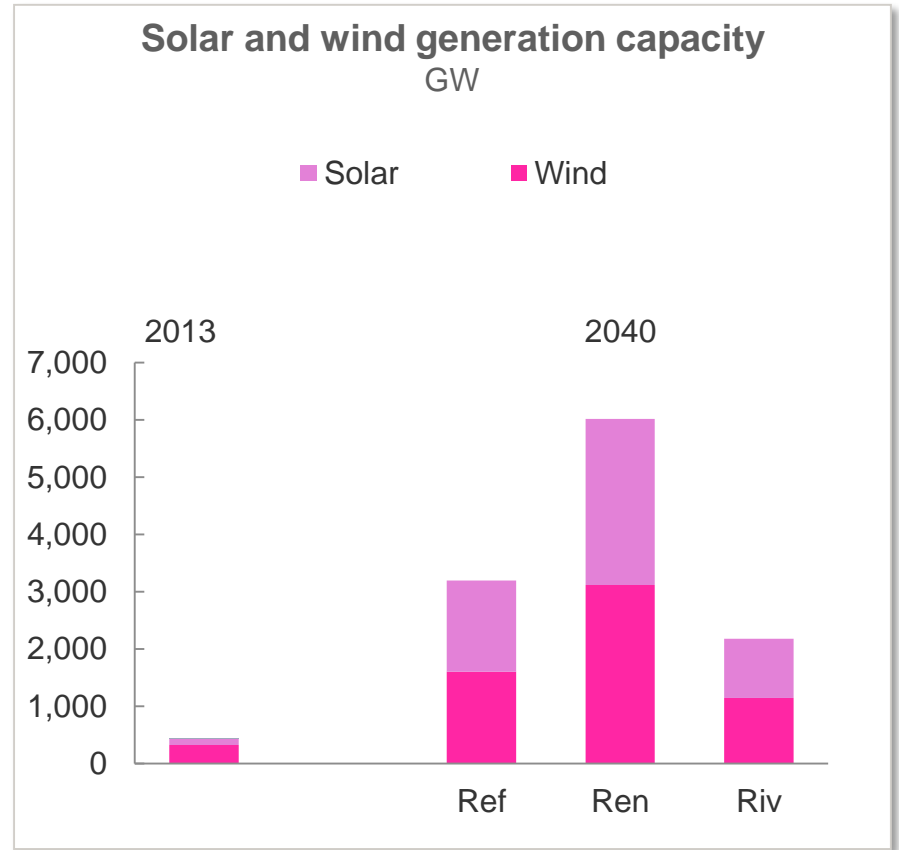
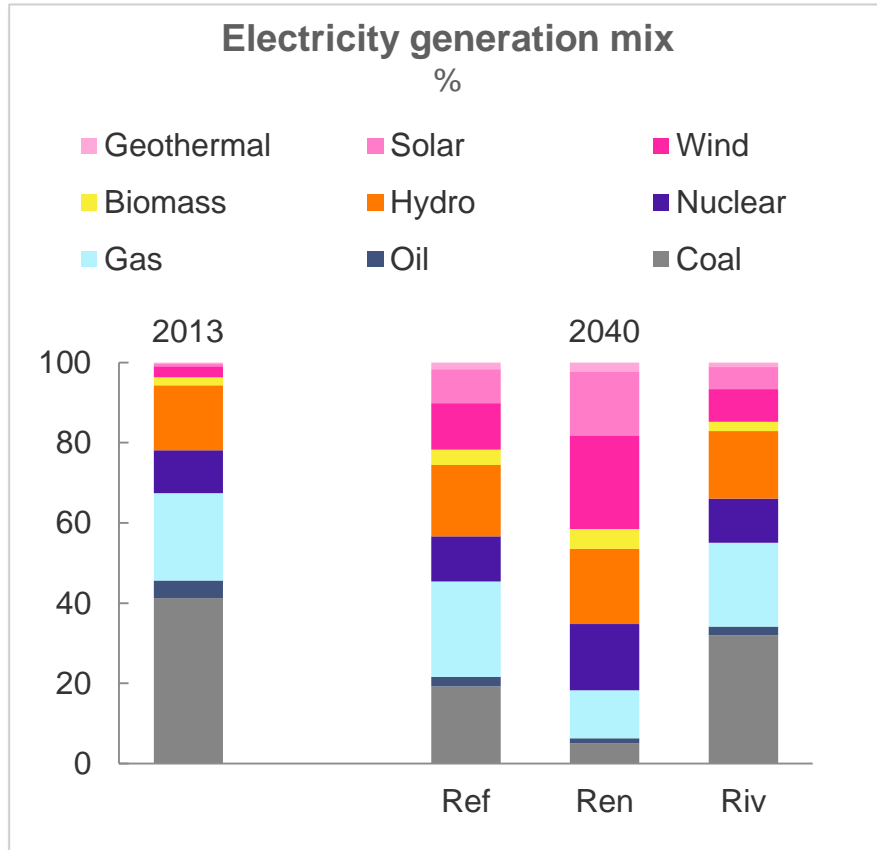
... and revolution in Renewal



Source: IEA (history), Statoil (projections)

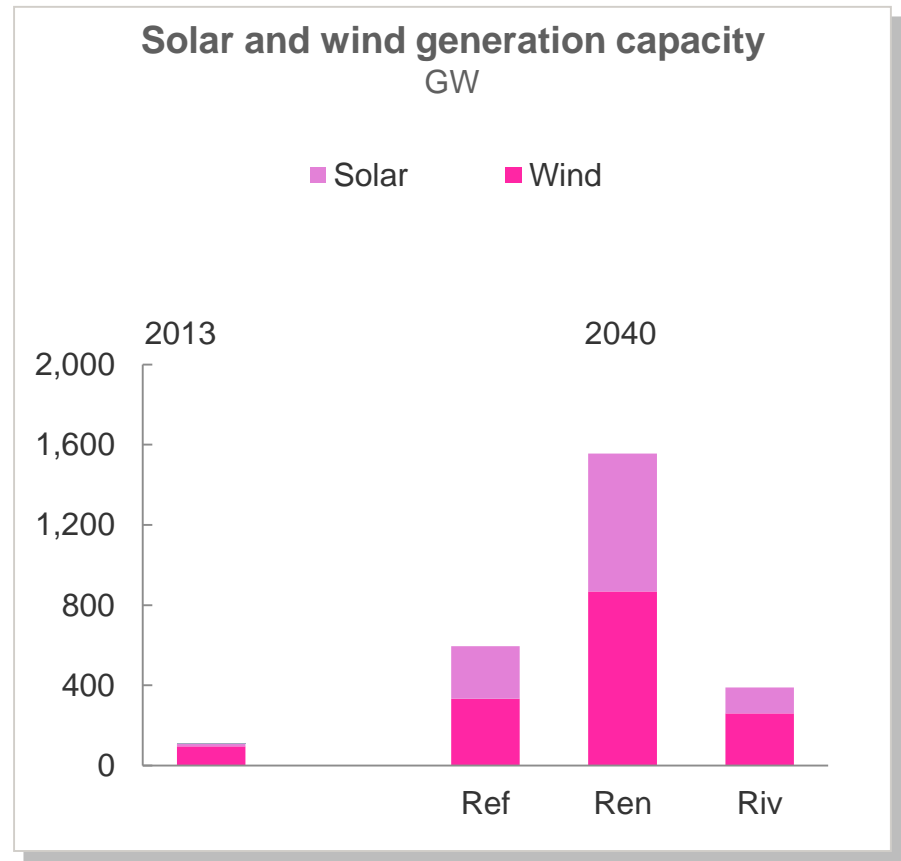
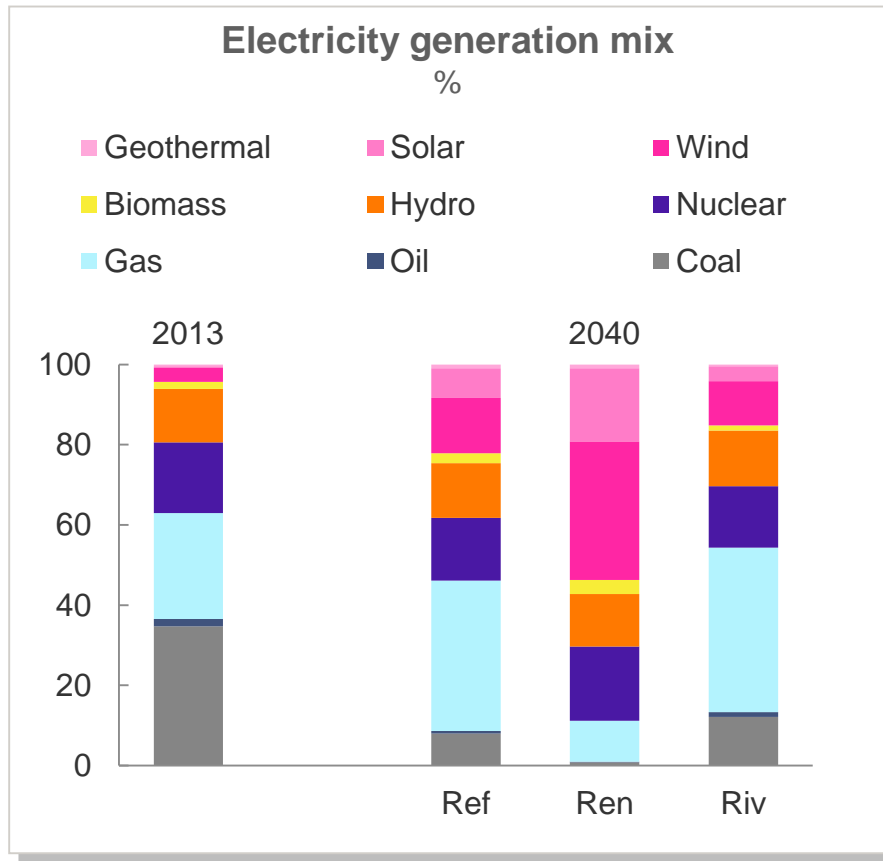
Fuel mix change in electricity

Large investments in new renewables required, especially in Renewal



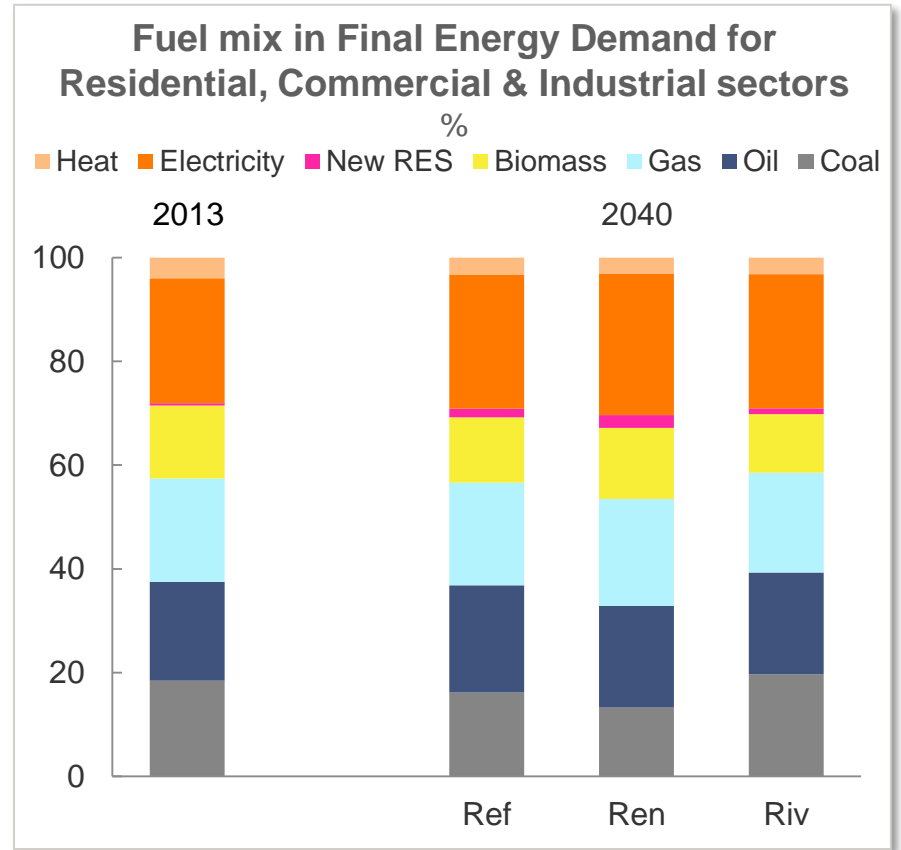
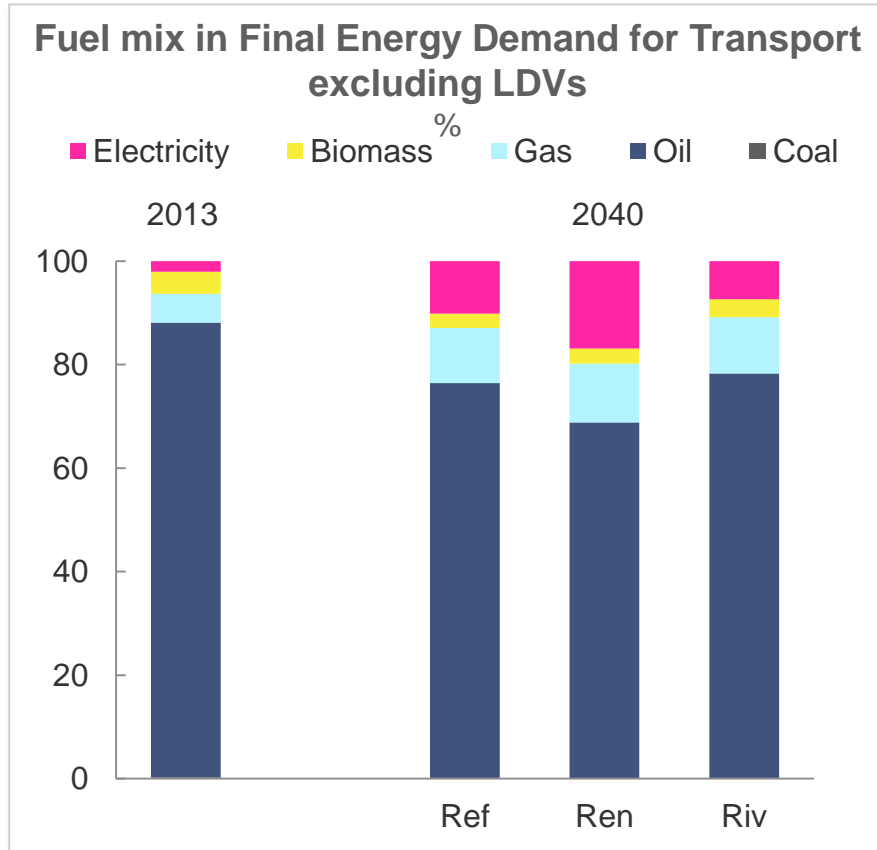
De-carbonization of power in OECD Americas

...will require large investments in new renewables



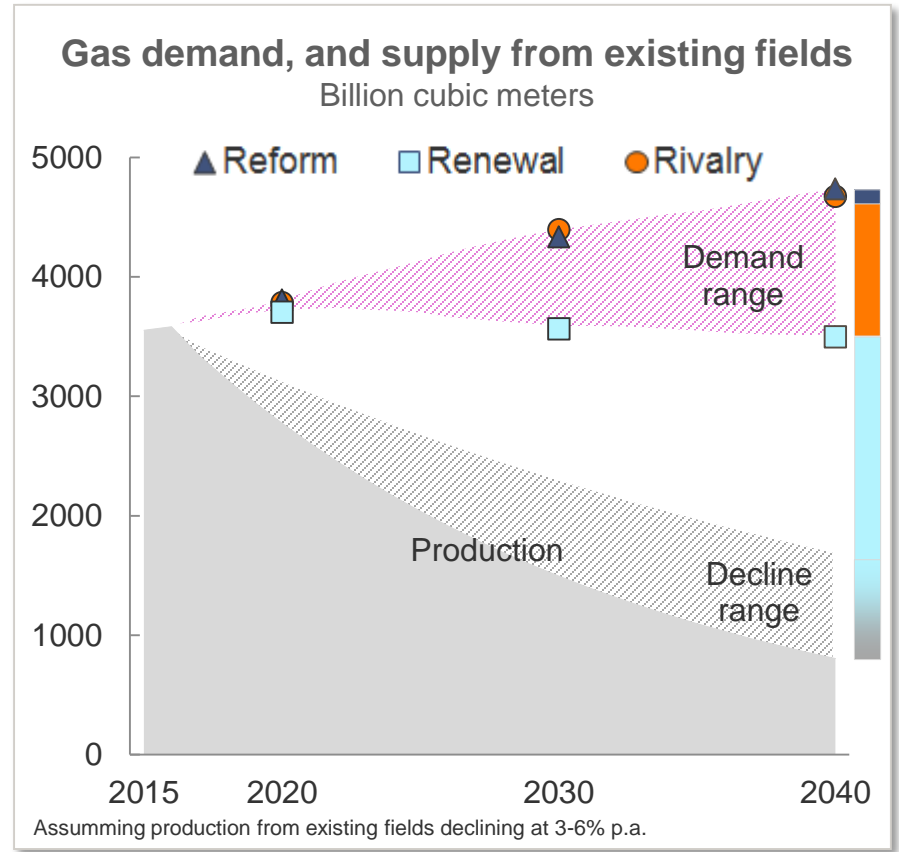
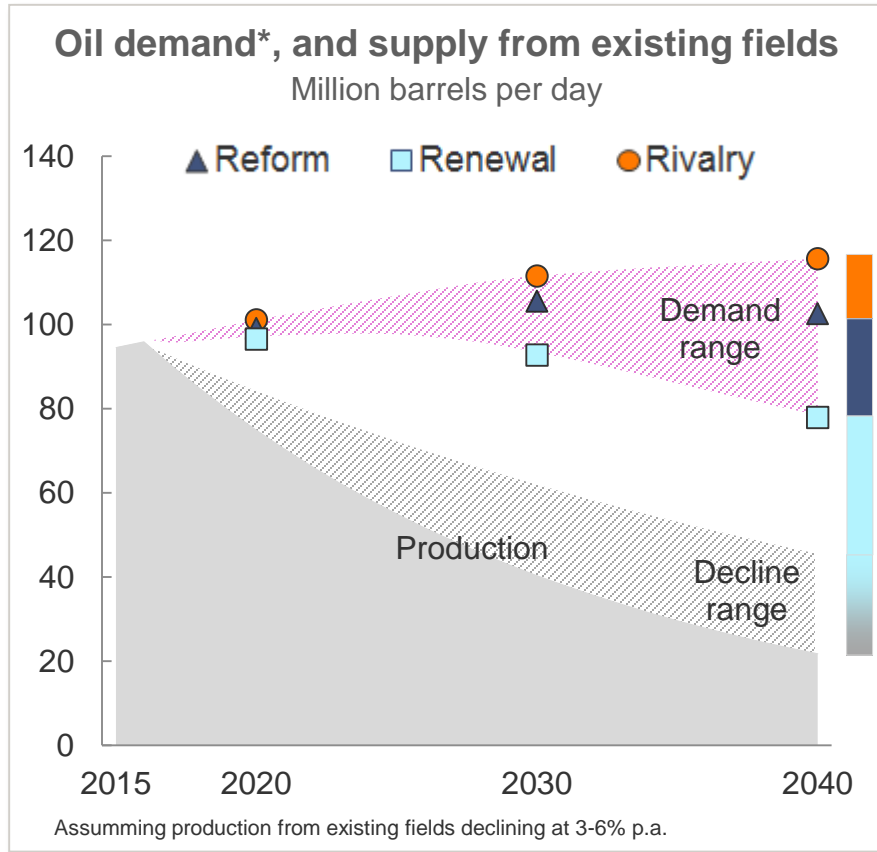
Oil and gas dominate in other sectors

... contributing to maintaining demand for fossil fuels



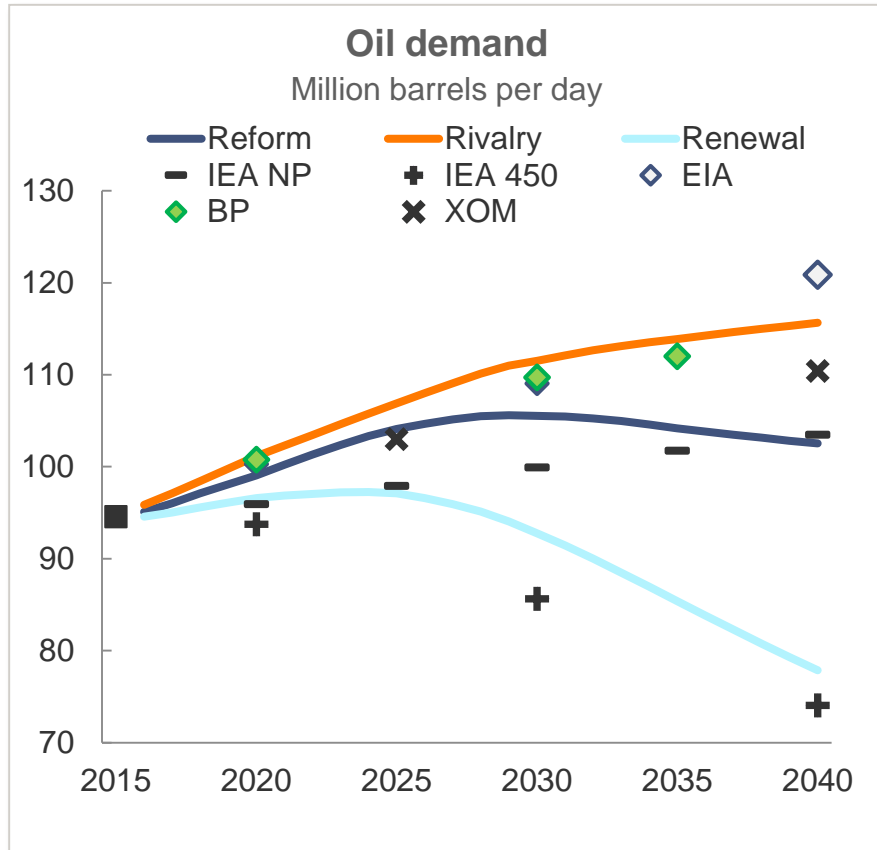
Oil and gas are here to stay...

... for decades

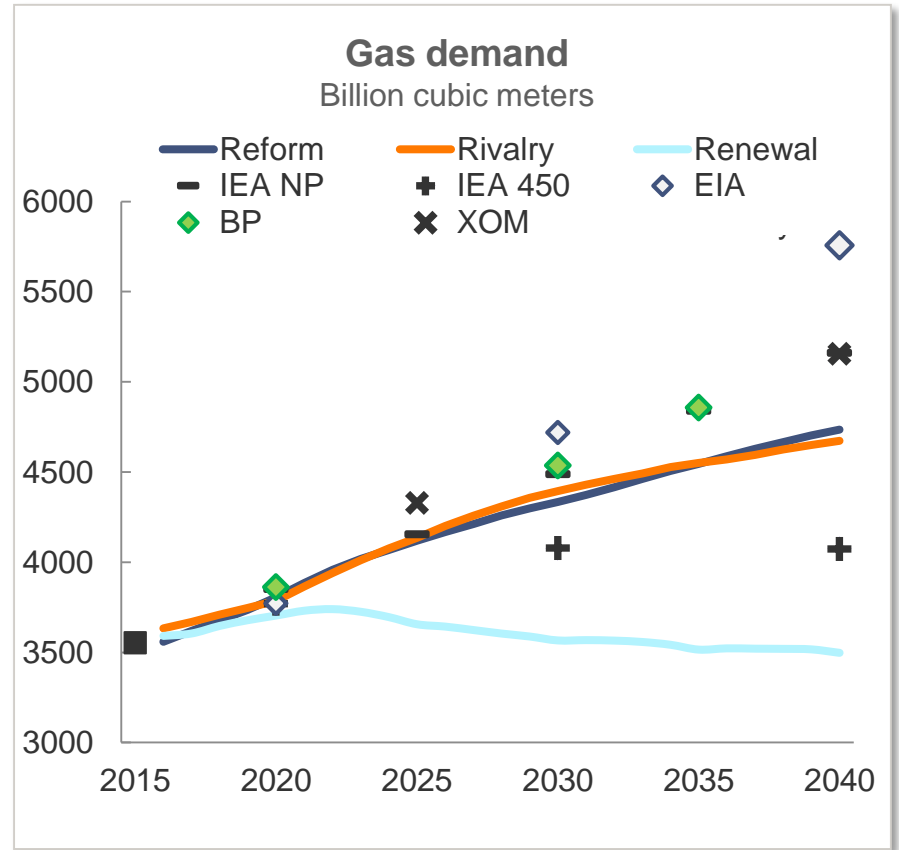


Source: IEA (WEO 2015), Statoil (projections)

Wide span in forecasts



Source: Statoil, IEA (WEO 2015), EIA, BP, ExxonMobil



Source: Statoil, IEA (WEO 2015), EIA, BP, ExxonMobil

There's never been a better
time for **good ideas**

Thank you!

www.statoil.com/energyperspectives

