

# Energy Perspectives 2015

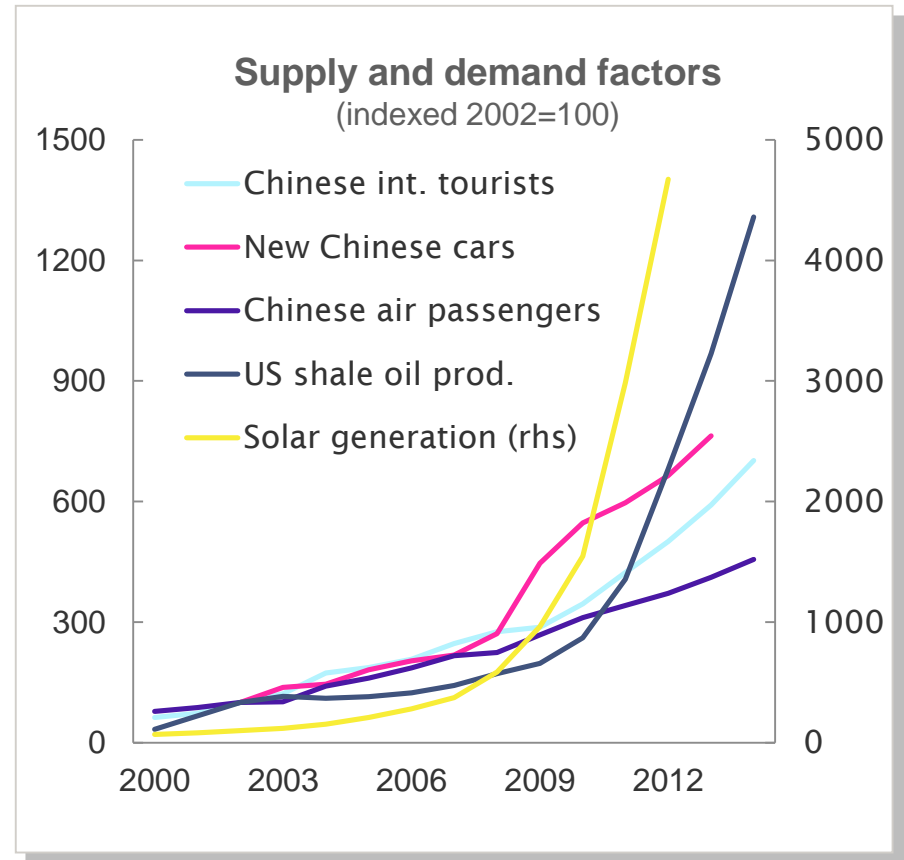
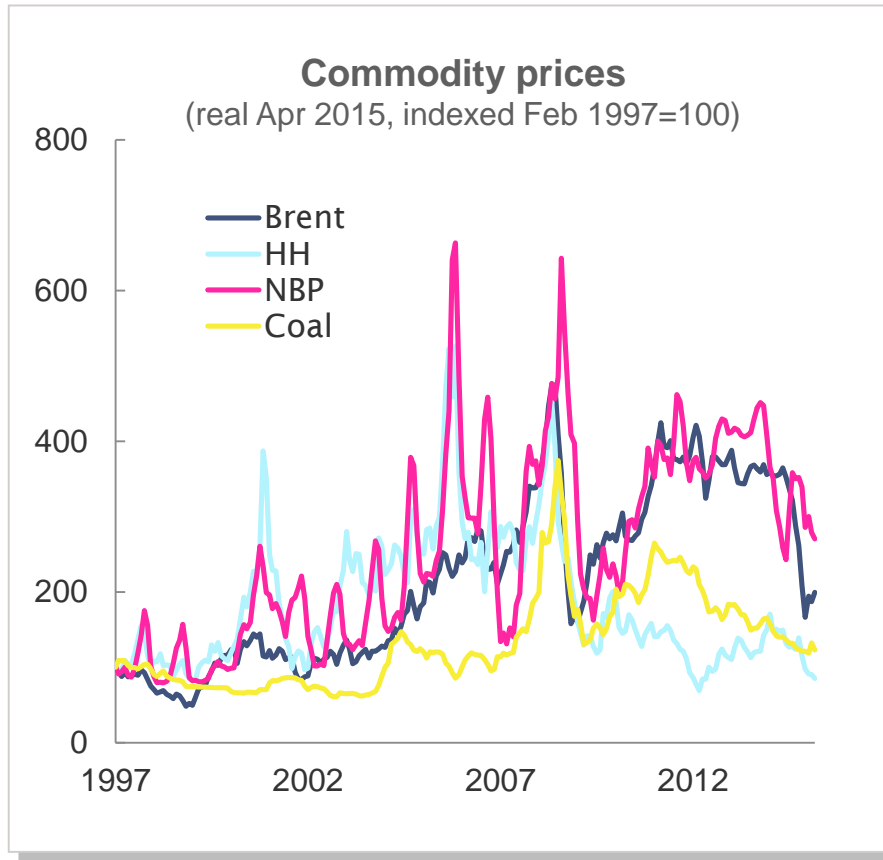
## Long-term macro and market outlook

Washington DC, June 2015  
Eirik Wærness, Chief economist



# A world of volatility and change

Hope to be vaguely right, not precisely wrong...



Sources: Thomson Reuters Datastream, DOE, CEIC, IEA

# Long-term forecasts are uncertain

Climate change, policy, technology, consumers and economy will decide

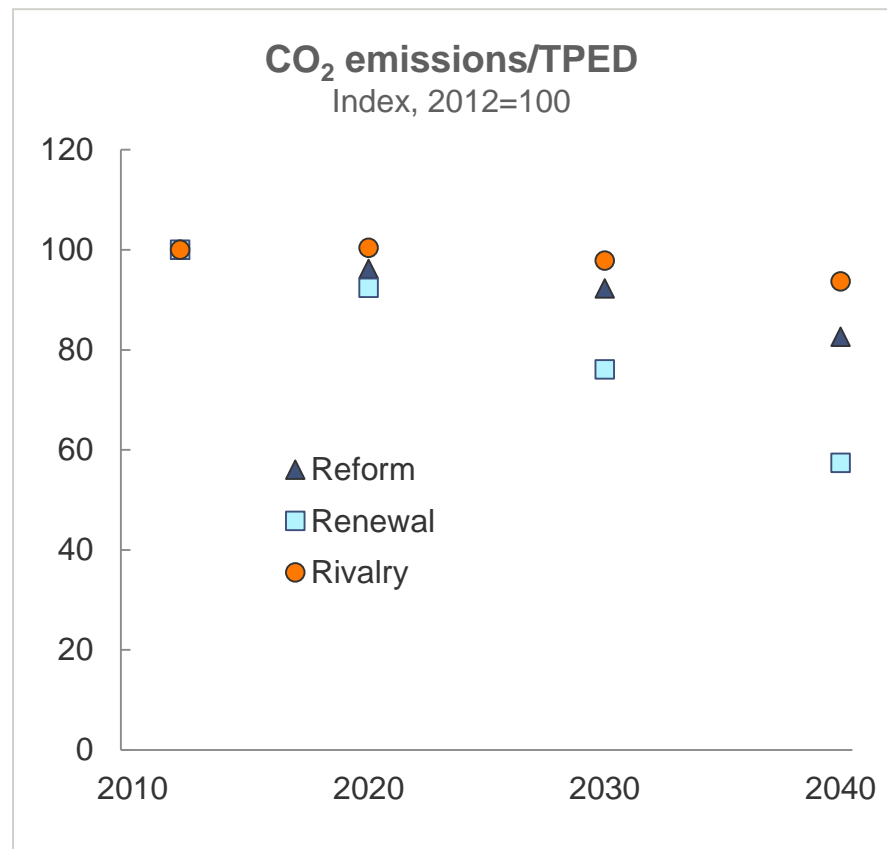
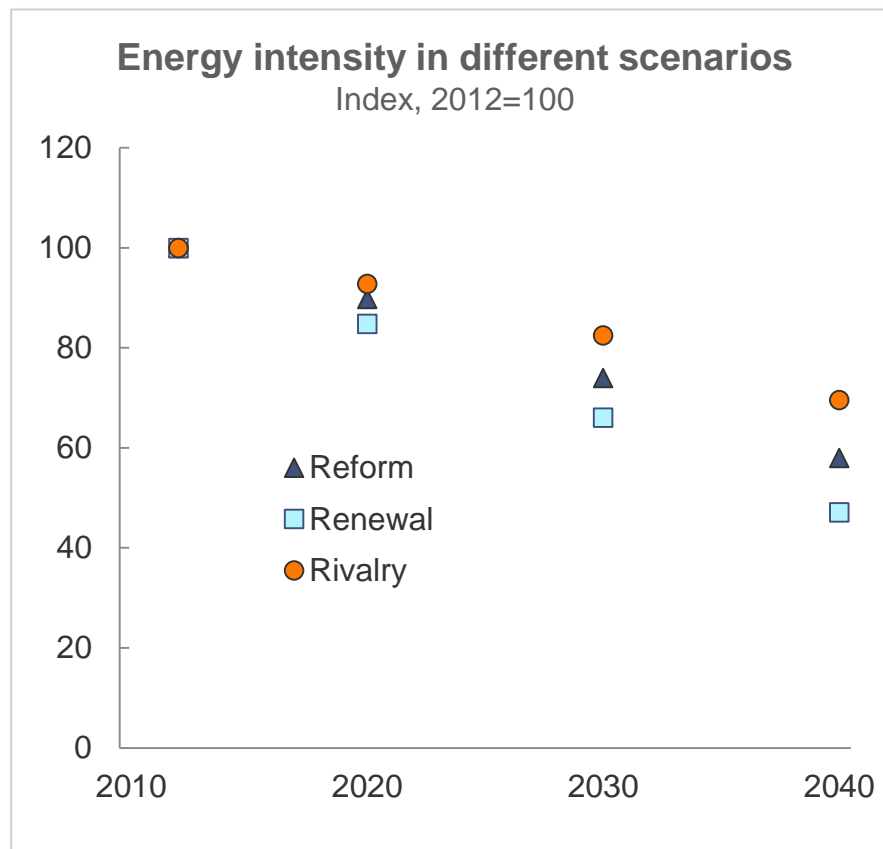


Sources: The Economist, Google, UN, Statoil, McKinsey & Company, National Geographic, twistedsifter.com

# Several futures are possible



Three scenarios – stories about the future – have been established

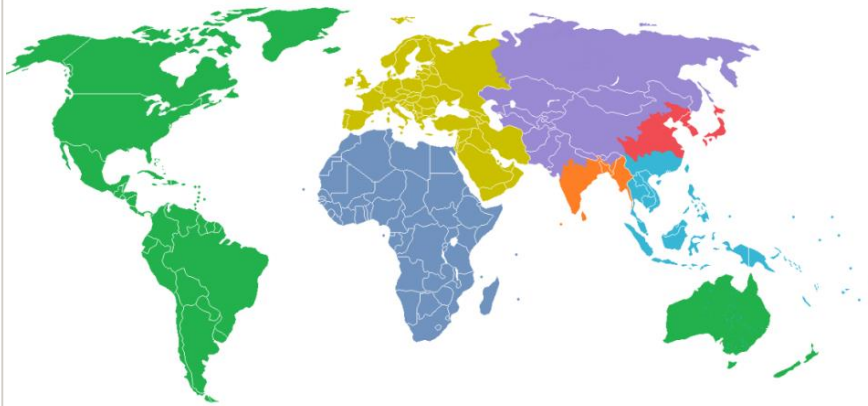


Source: IEA (history), Statoil (projections)

# A strong trend affecting economics and energy

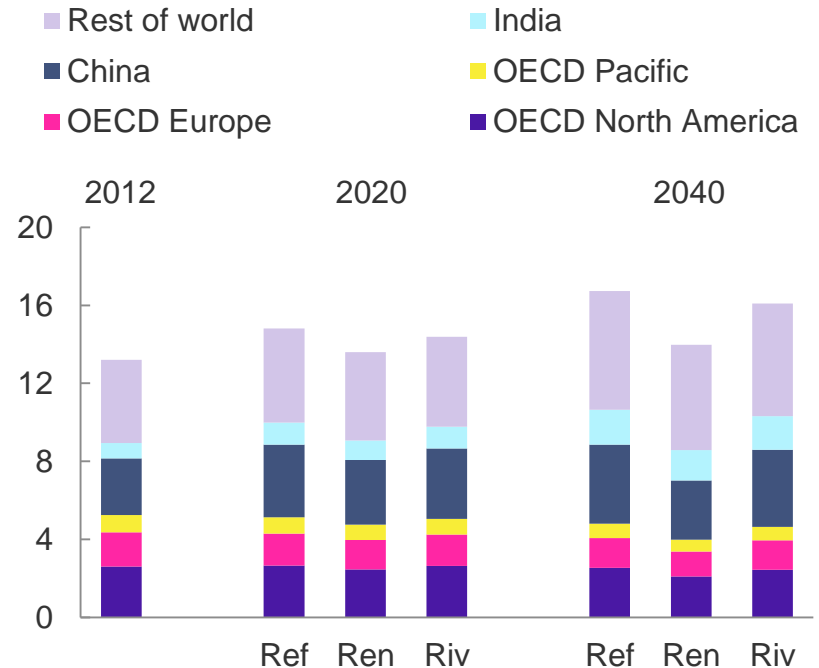
Economic gravity moves (back) to the east, and so does energy demand

The global centre is in Asia  
Each region home to 1 billion people



World energy demand per region

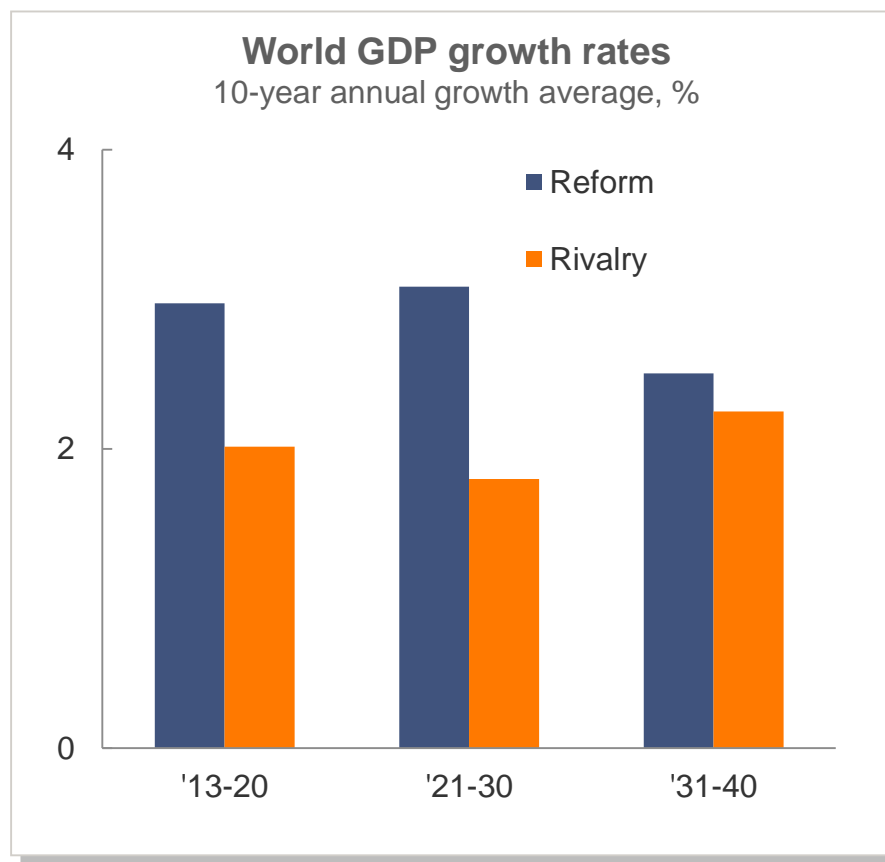
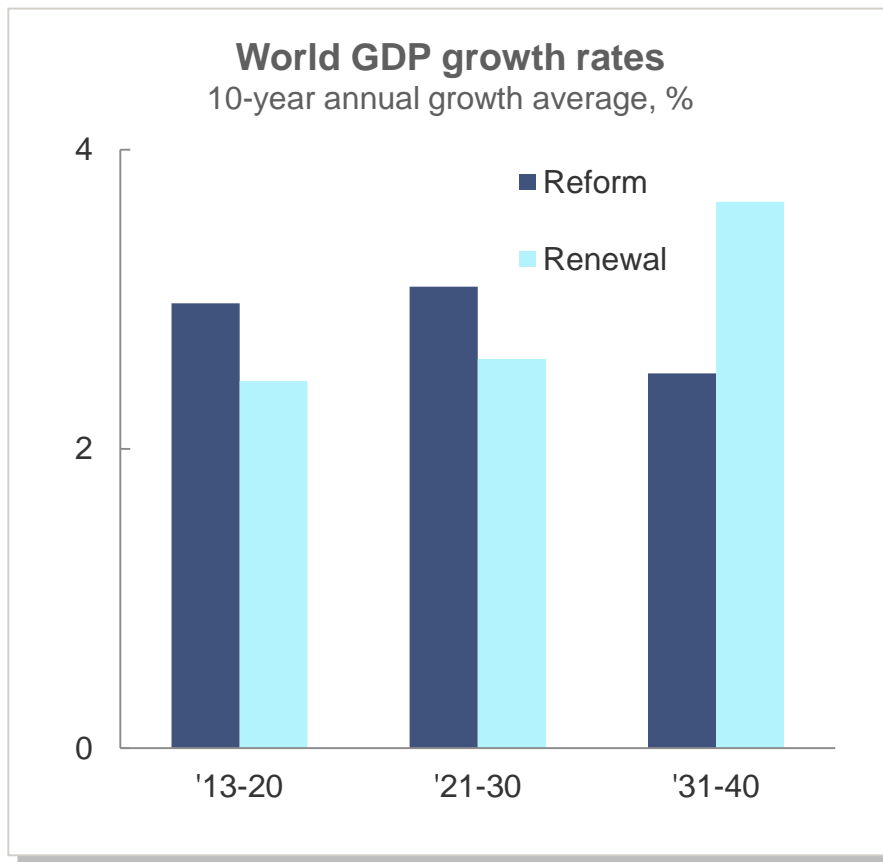
Bn toe



Source: Imgur, IEA, Statoil (projections)

# Growth is a key driver for energy demand...

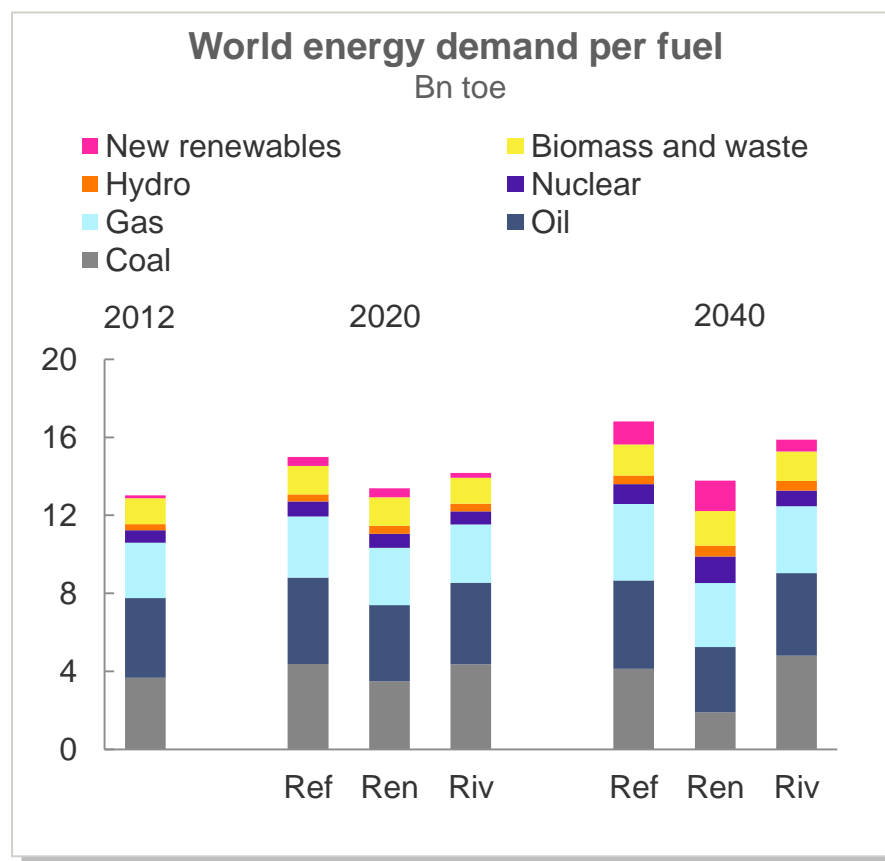
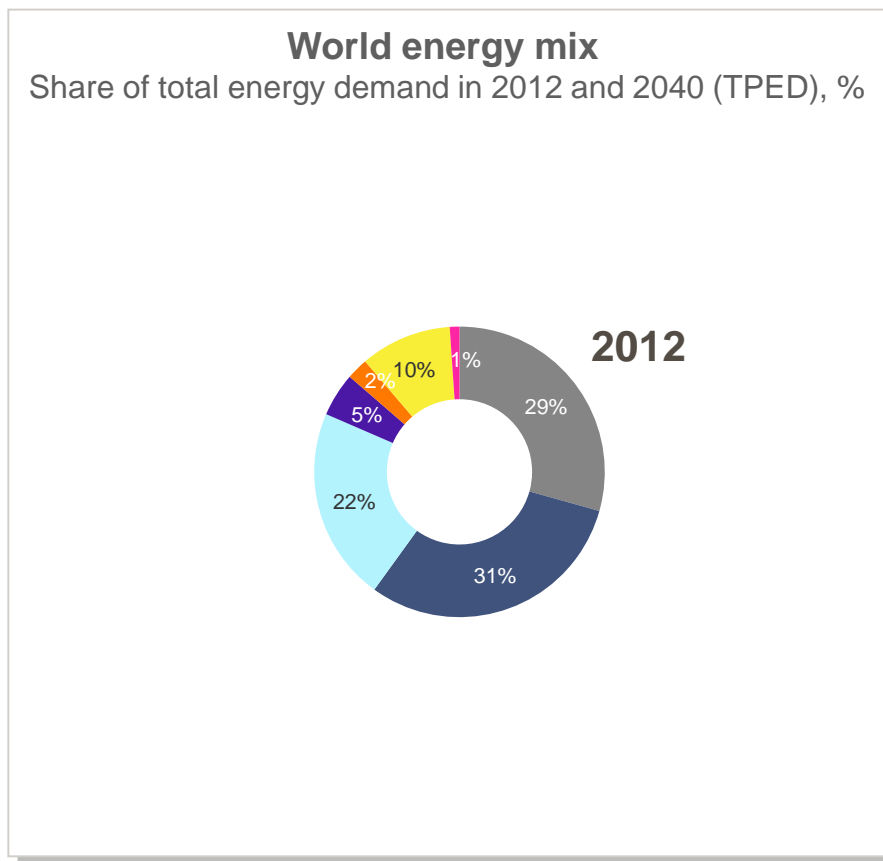
... and is different in alternative scenarios



Source: IEA (history), Statoil (projections)

# Energy demand and energy mix differ

... depending on growth, efficiency, technology and policies

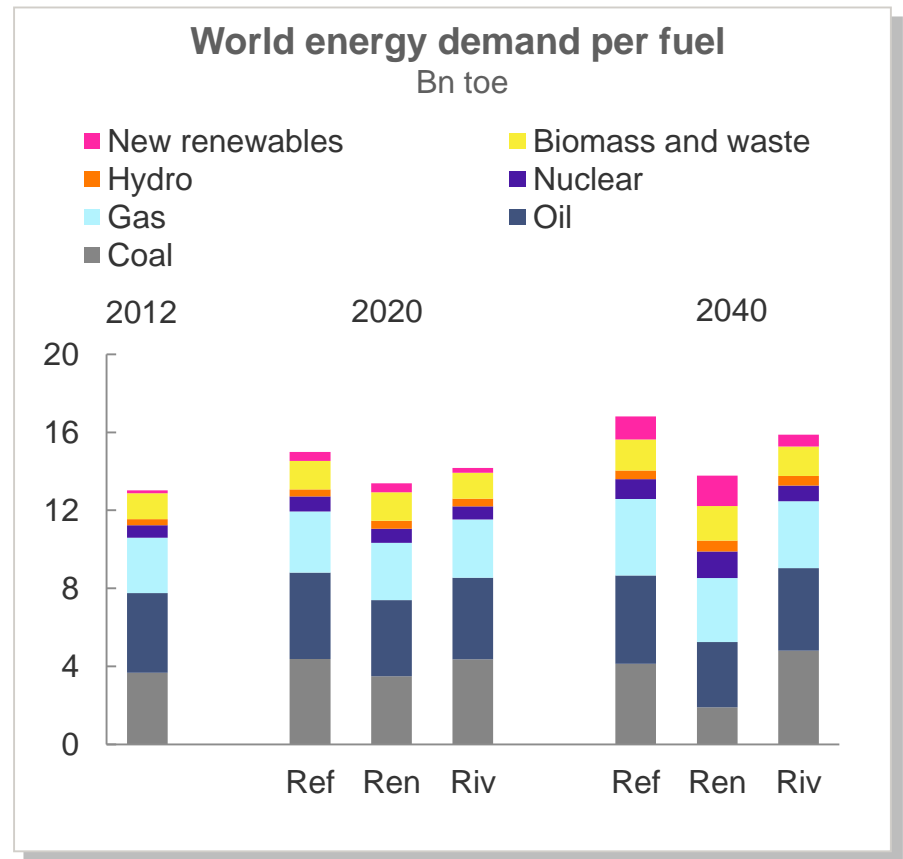
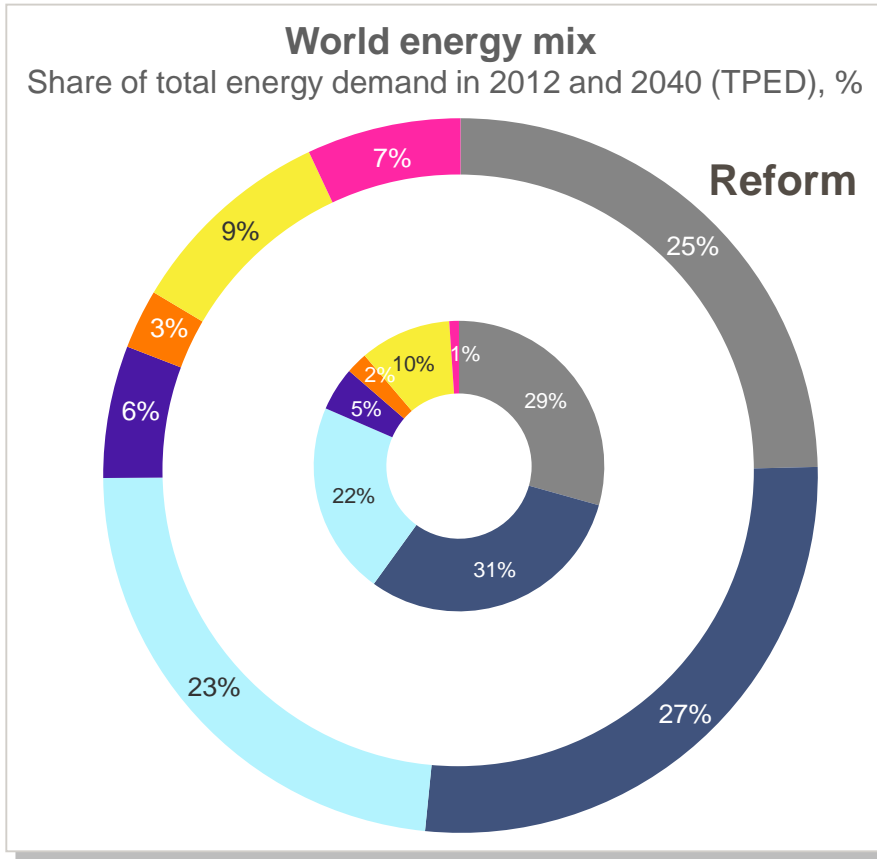


Source: IEA (history), Statoil (projections)



# Energy demand and energy mix differ

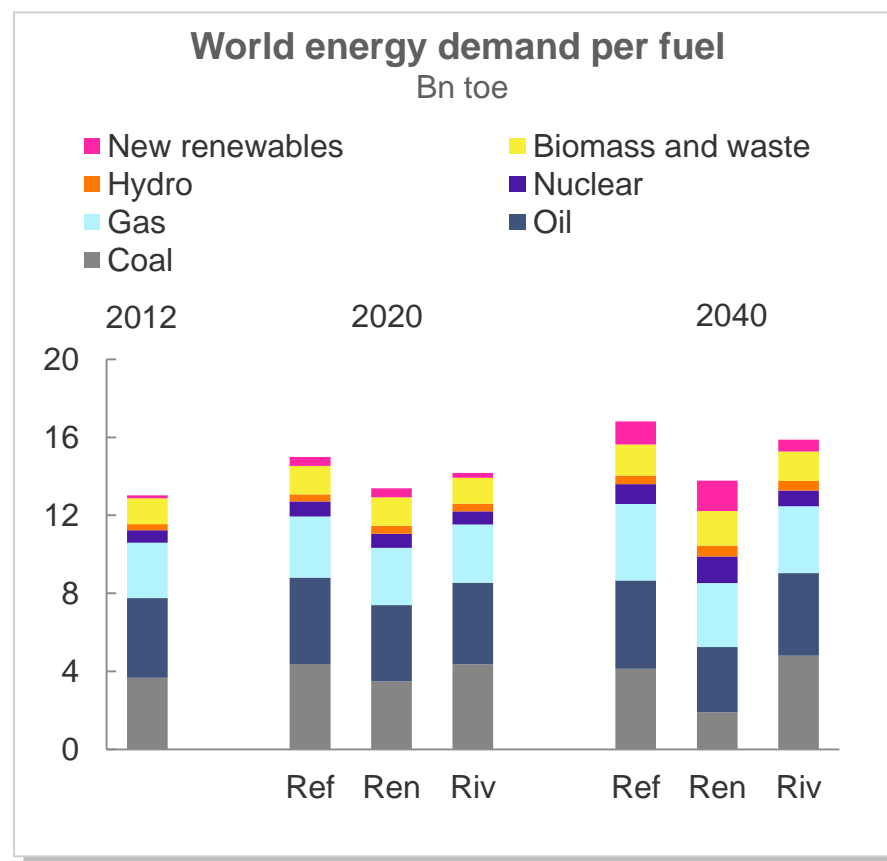
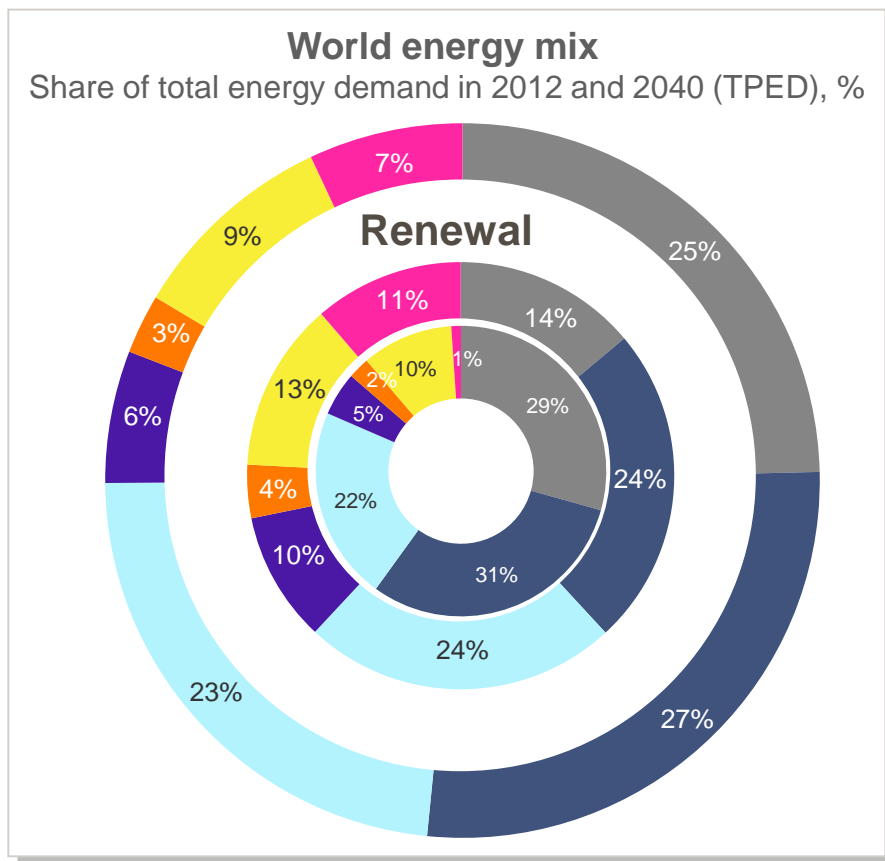
... depending on growth, efficiency, technology and policies



Source: IEA (history), Statoil (projections)

# Energy demand and energy mix differ

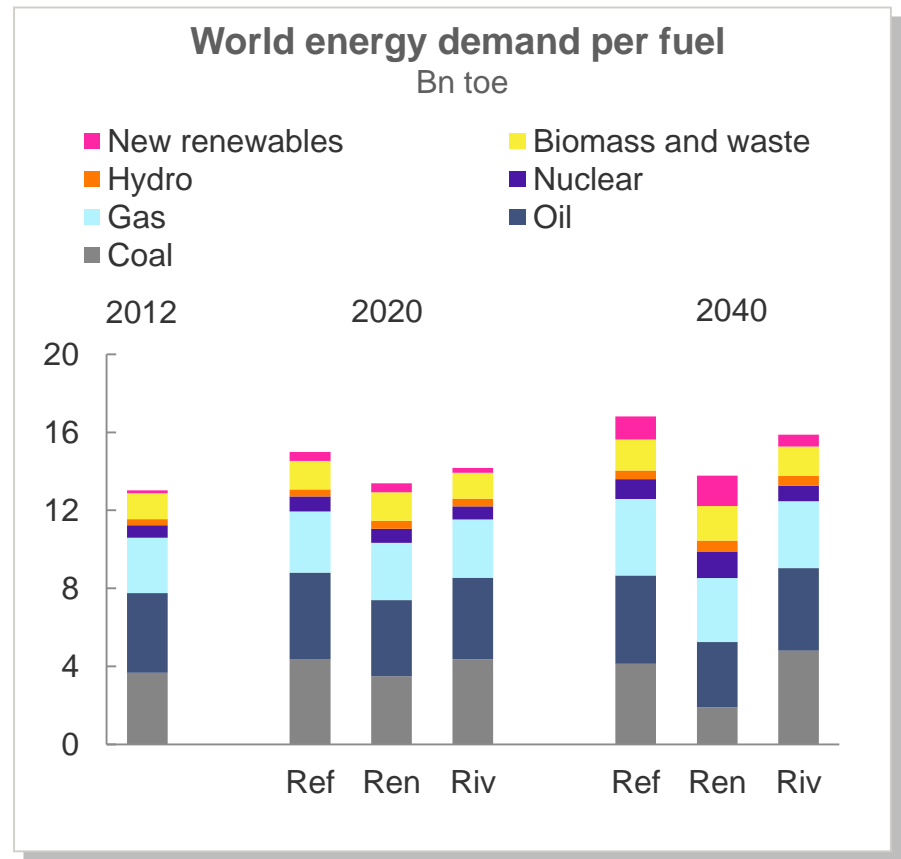
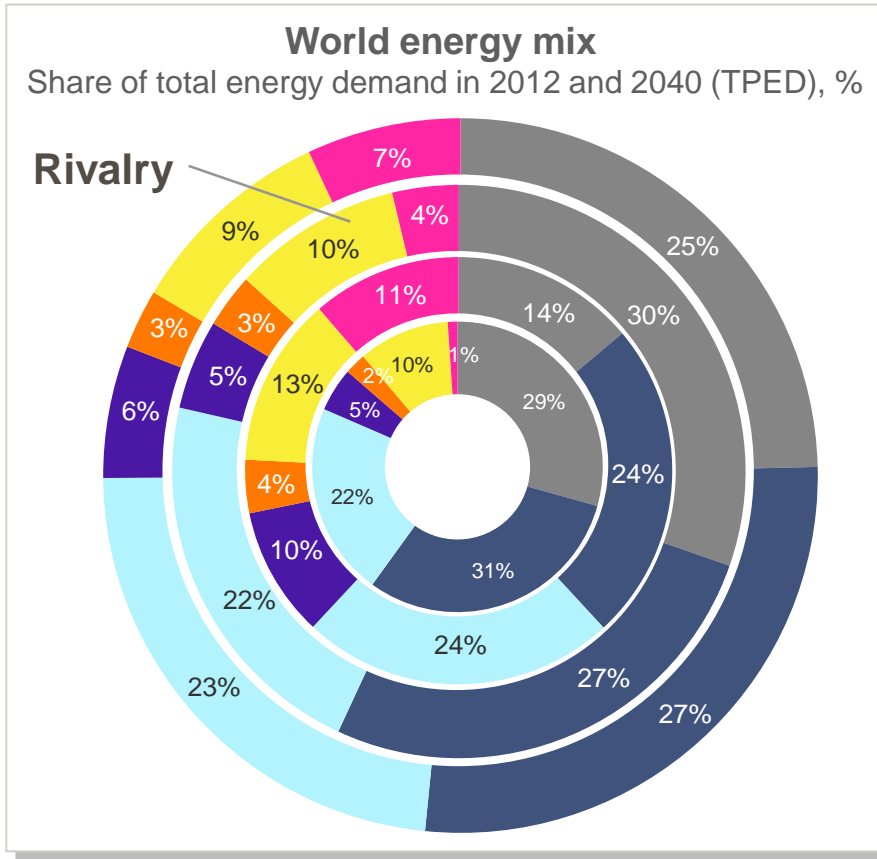
... depending on growth, efficiency, technology and policies



Source: IEA (history), Statoil (projections)

# Energy demand and energy mix differ

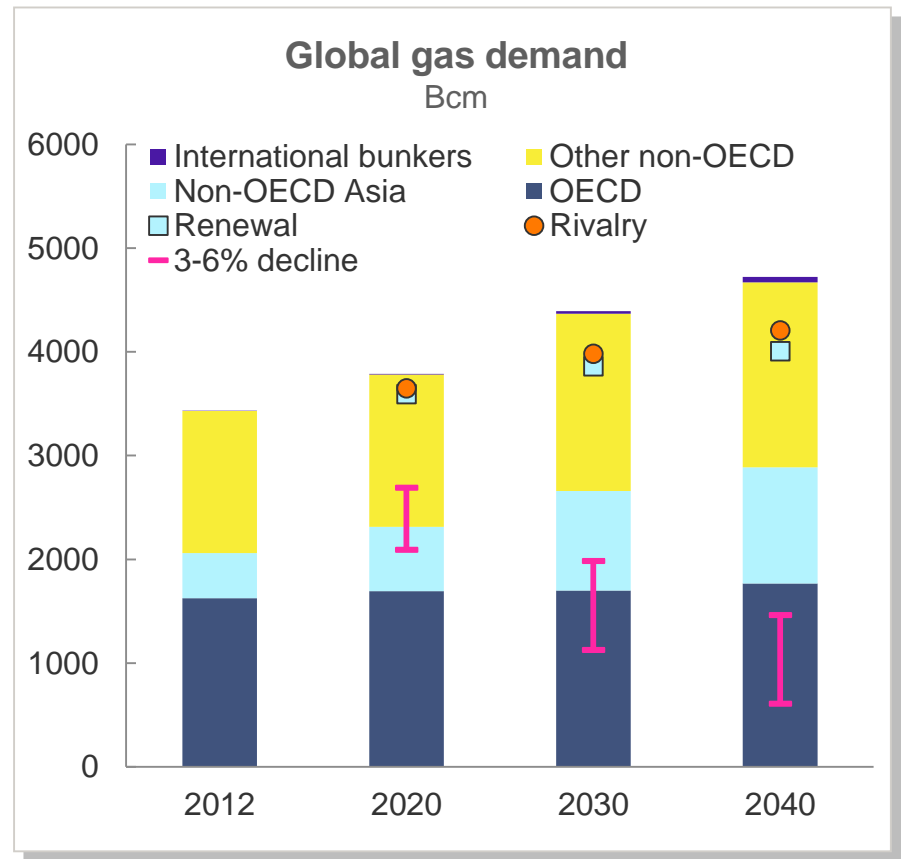
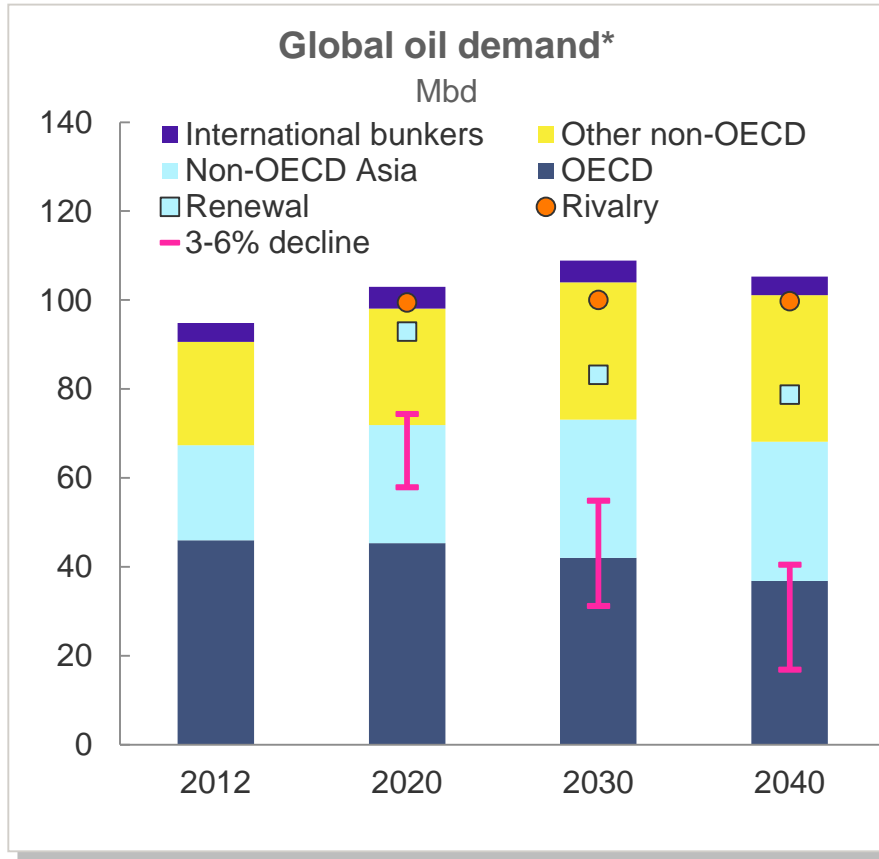
... depending on growth, efficiency, technology and policies



Source: IEA (history), Statoil (projections)

# Oil and gas are here to stay

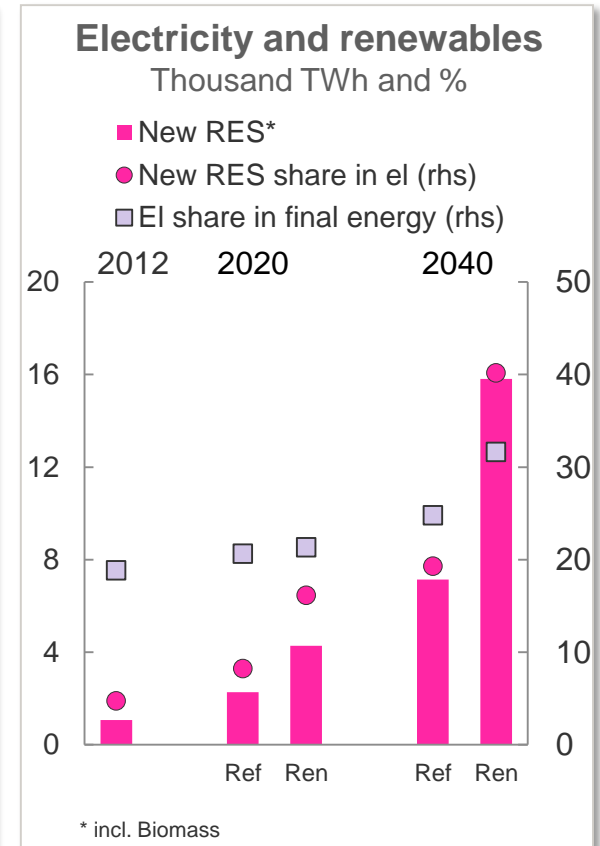
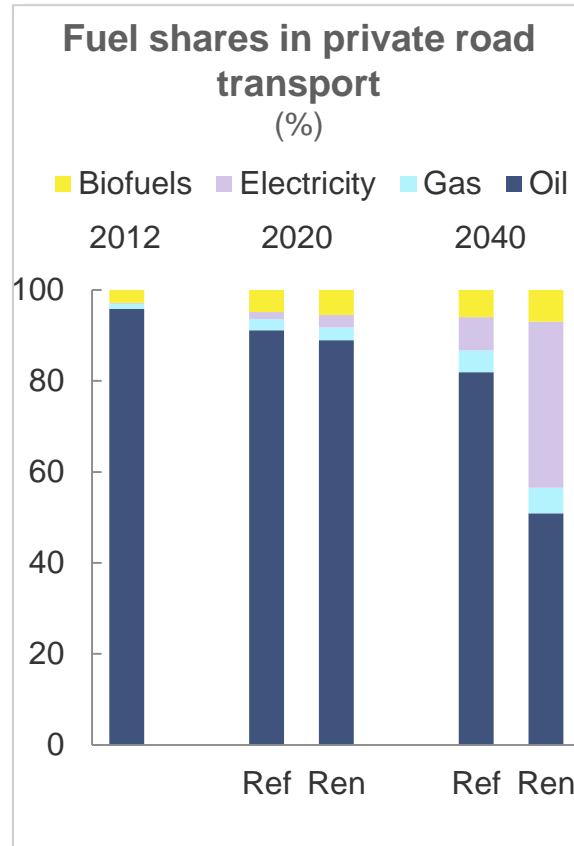
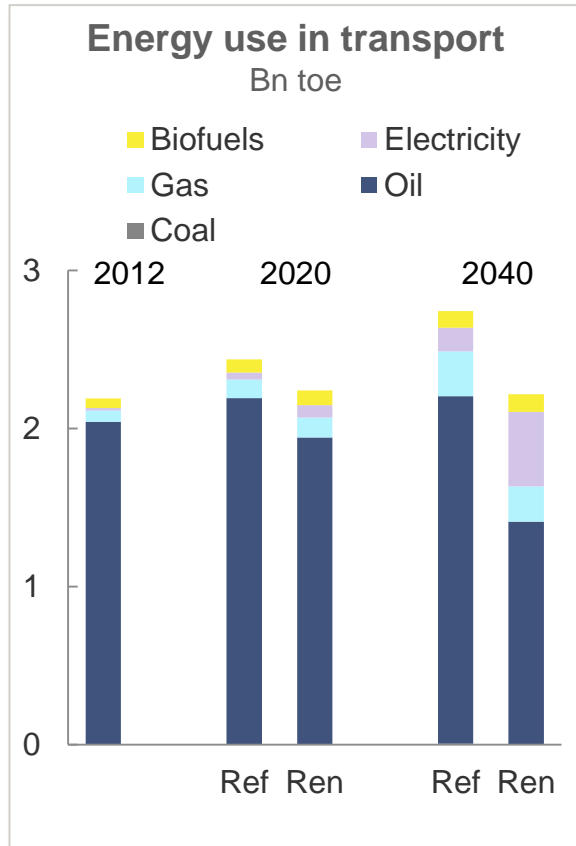
Considerable need for new investments, irrespective of scenario



\* Excl. Bio-fuels  
Source: IEA (history), Statoil (projections)

# Renewal requires large changes

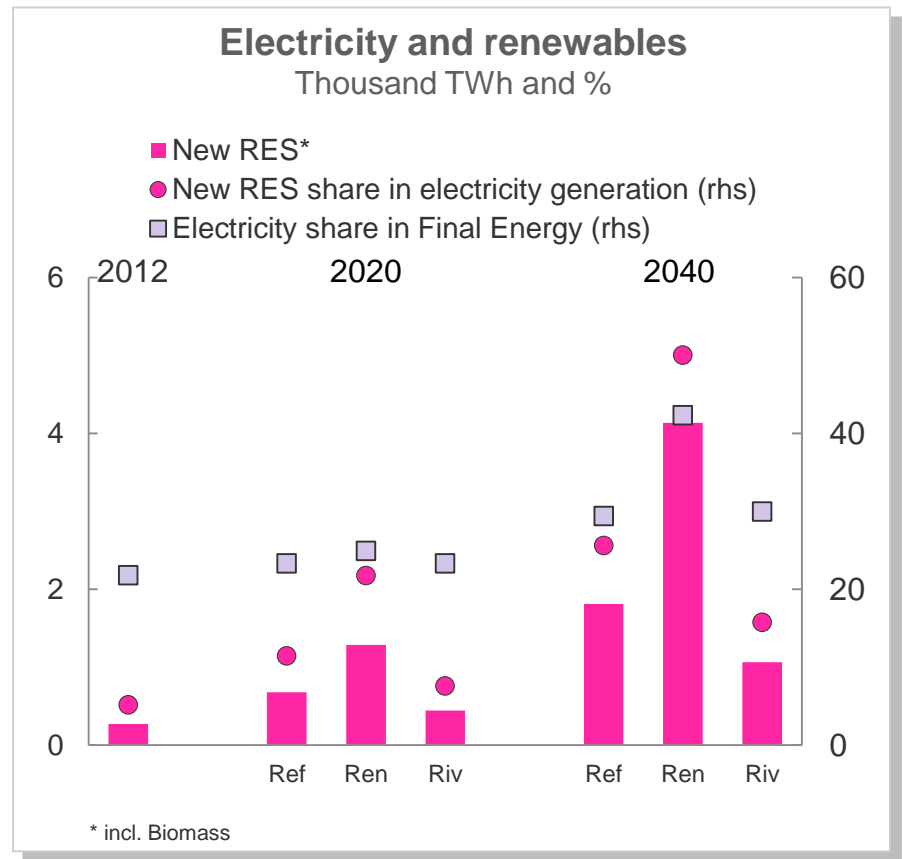
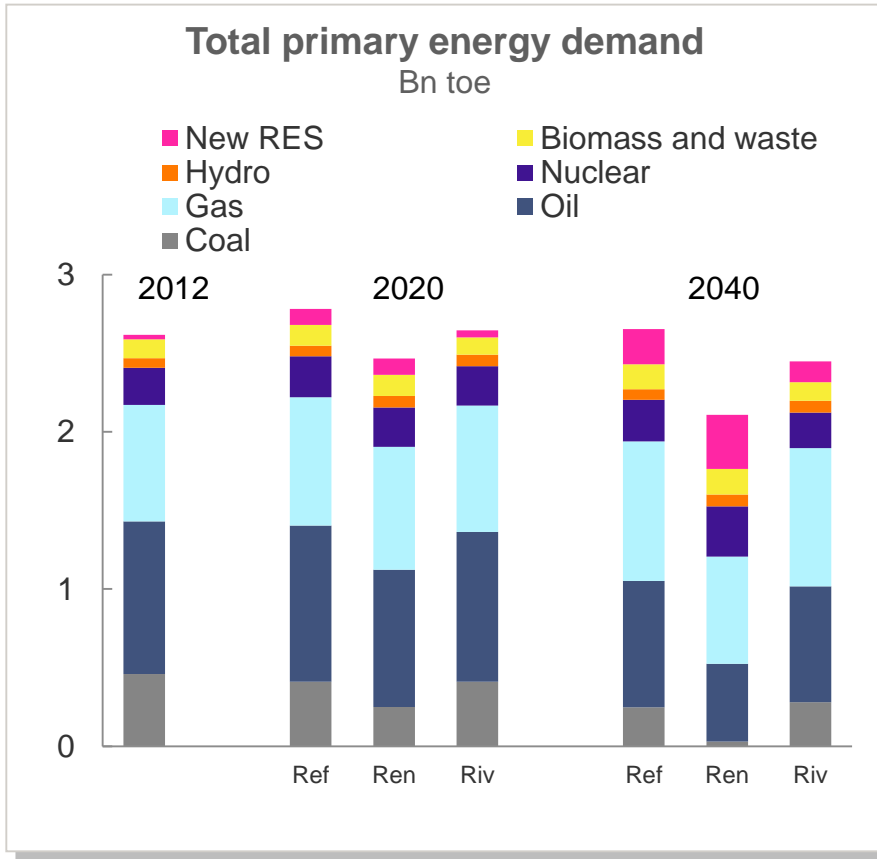
... in particular in transport and power



Source: IHS Global Insight and International Energy Agency (history), Statoil (projections)

# Energy and electricity in North America

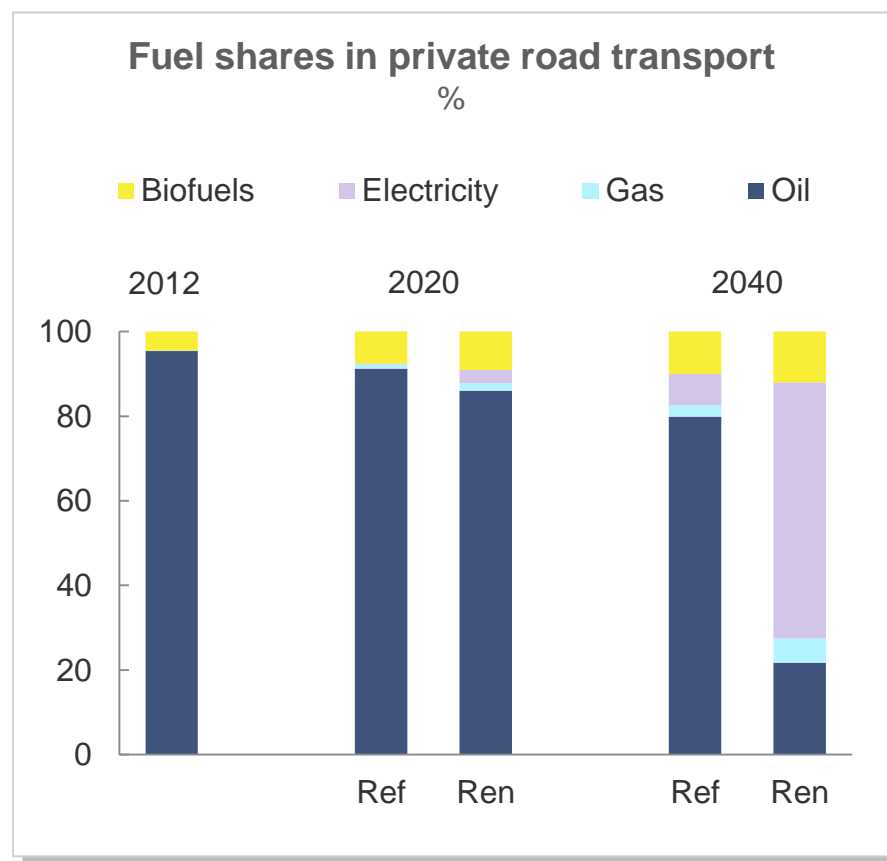
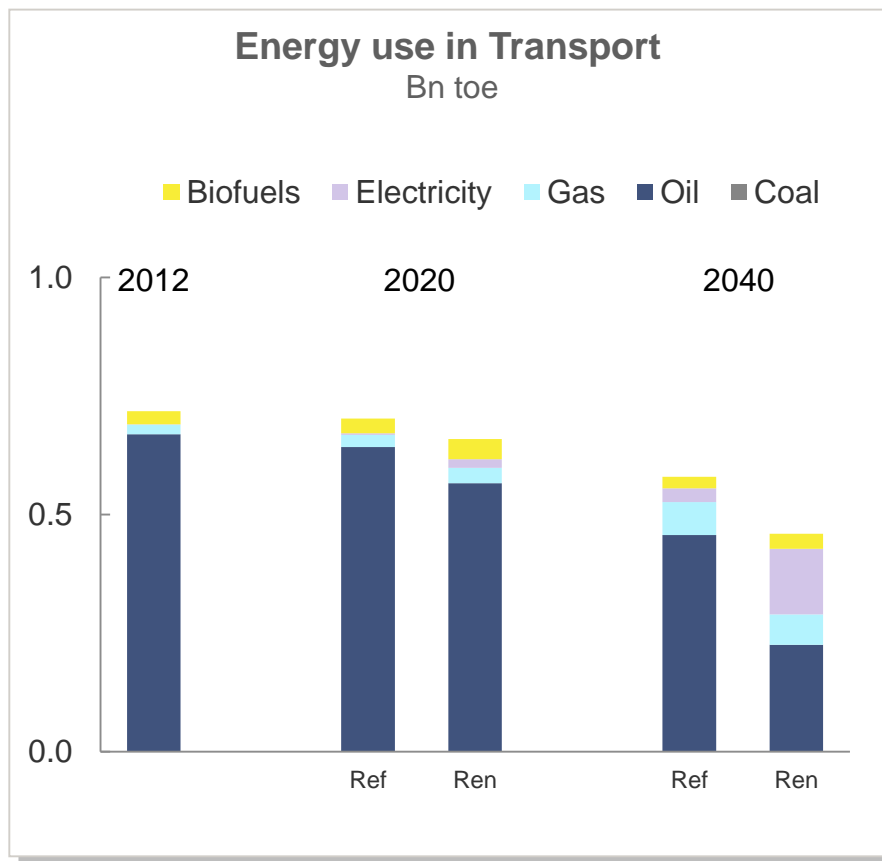
Significant changes, especially in *Renewal*



Source: IEA (history), Statoil (projections)

# Transport in North America

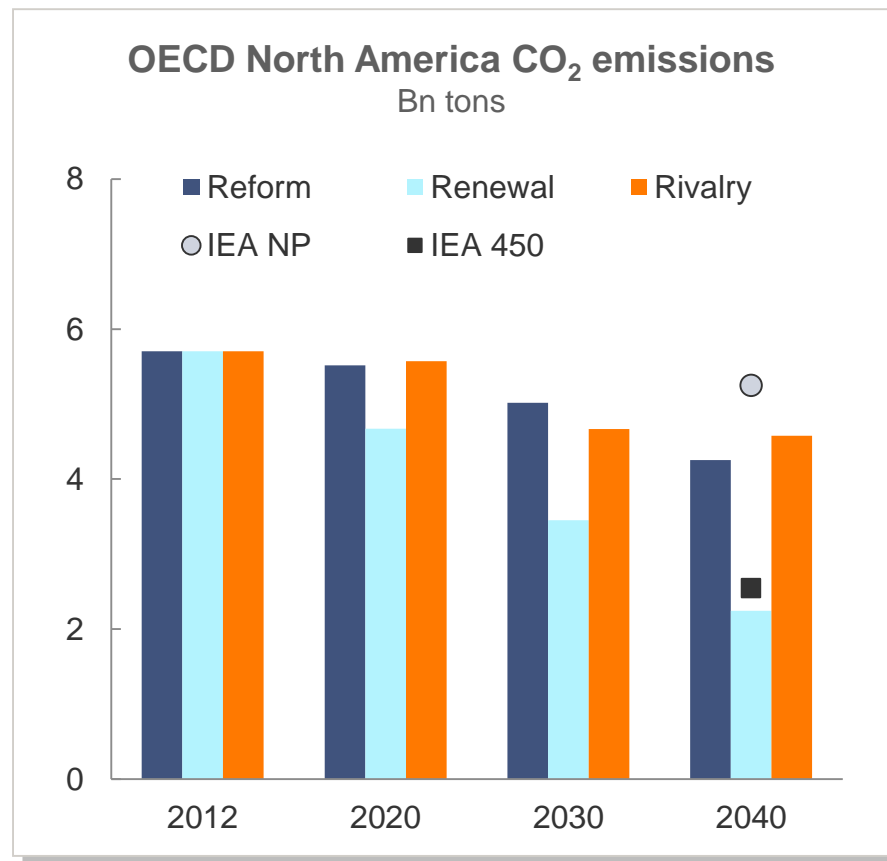
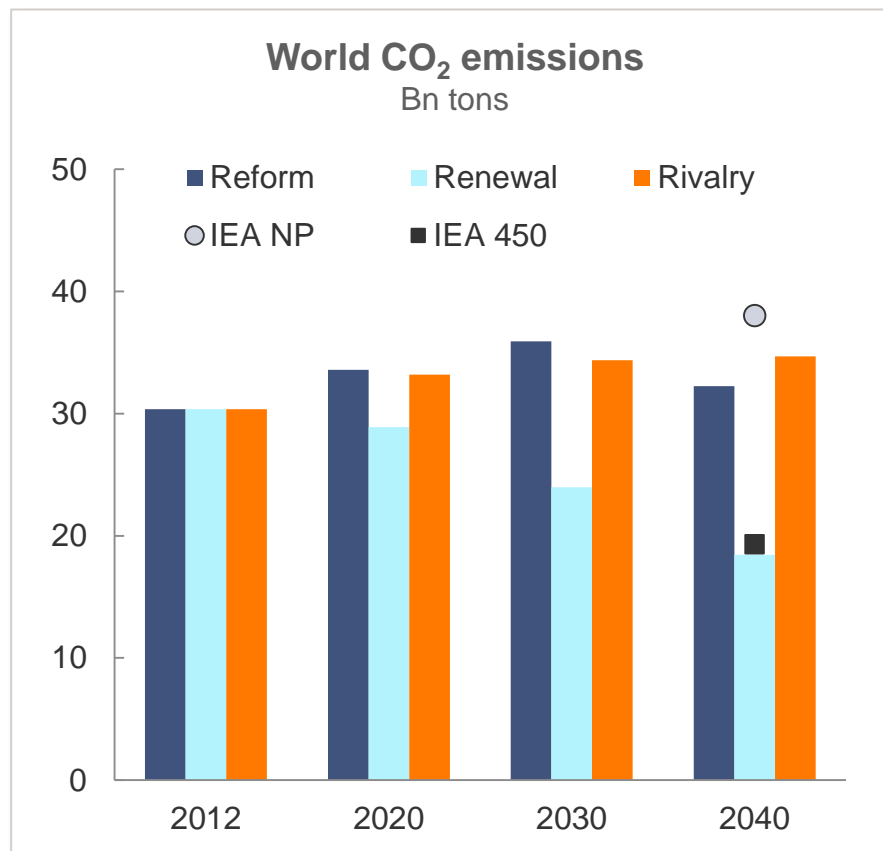
Efficiency, fuel change, electrification of light-duty vehicles in *Renewal*



Source: IEA (history), Statoil (projections)

# Renewal Scenario consistent with 2 °C-target

... CO<sub>2</sub> emissions vary, driven by energy intensities, fuel mix and CCS

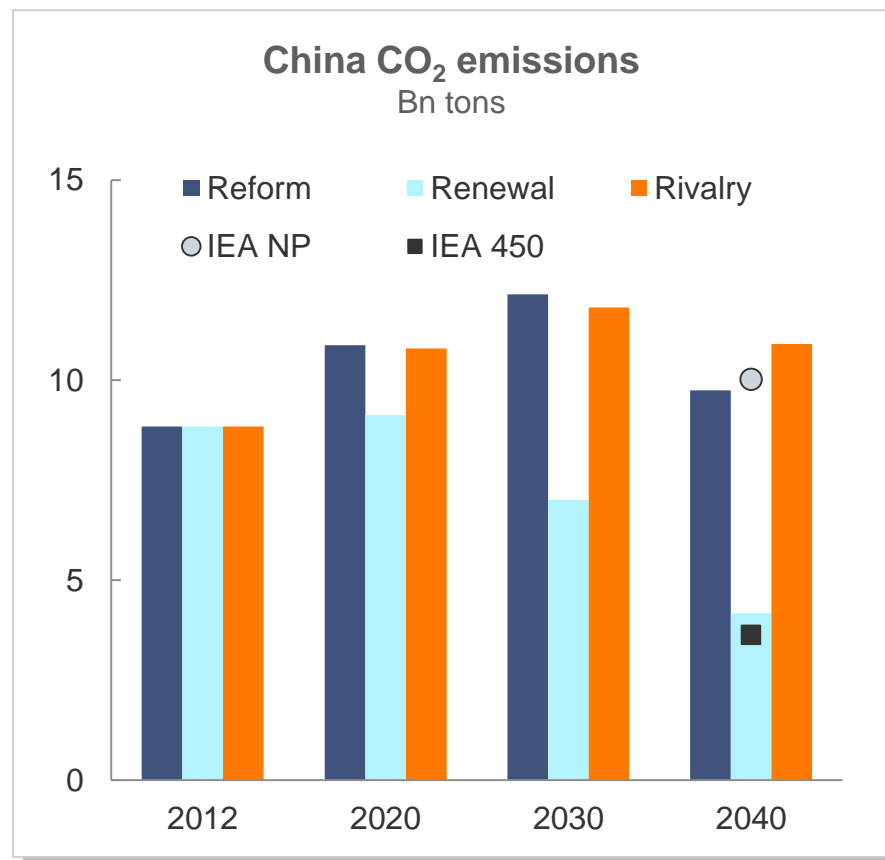
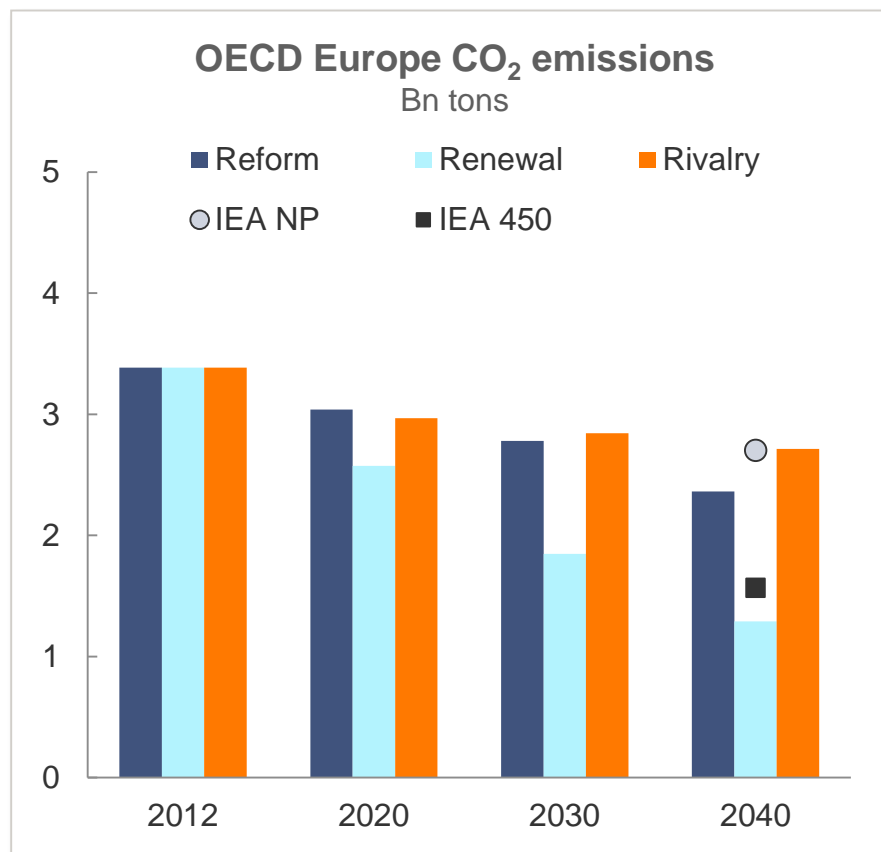


Source: Statoil, IEA WEO 2014



# Renewal Scenario consistent with 2 °C-target

... CO<sub>2</sub> emissions vary, driven by energy intensities, fuel mix and CCS



Source: Statoil, IEA WEO 2014

There's never been a better  
time for good ideas

Thank you!

[www.statoil.com/energyperspectives](http://www.statoil.com/energyperspectives)

