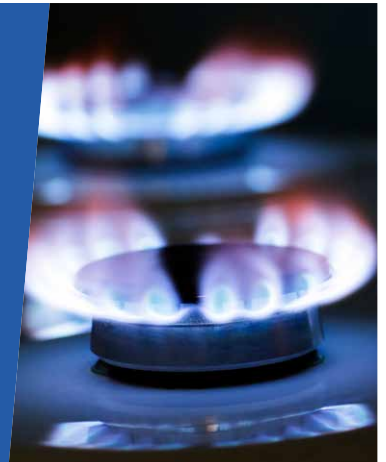


# Global energy brief

## Continuing demand for oil & gas

### How much more oil and gas will the world need?

There's no one response to that question, since the answer depends on so many geopolitical, economic and social variables. These include population growth, technological developments and the ways in which governments will implement their agreement to keep global warming to below 2-degrees Celsius.



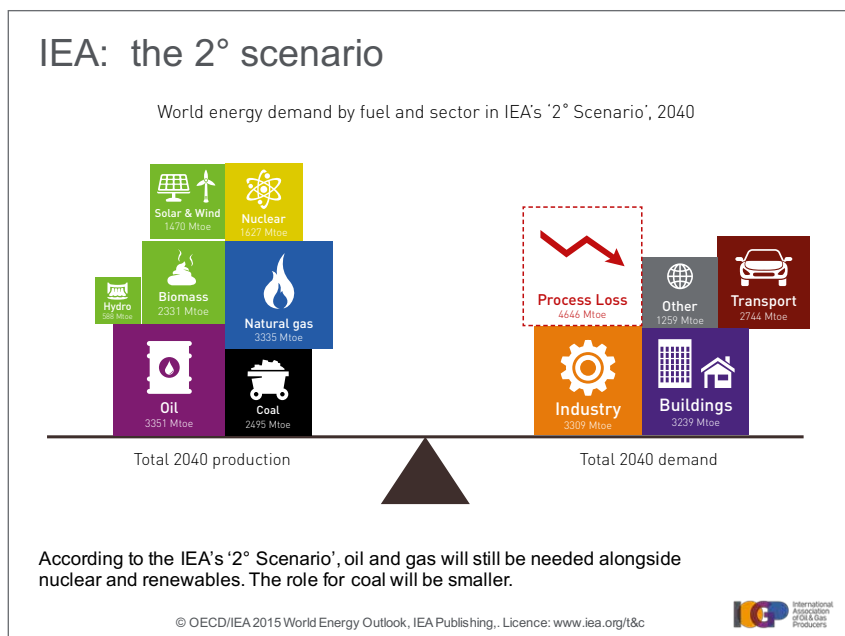
With no definitive answer to hand, you might want to know what some of the experts say.

Three recent reports – from the International Energy Agency (IEA), BP and Statoil – provide a glimpse into what may be your energy future.

Starting with the latest forecast by the IEA (an independent body): in what it deems to be the most likely scenario for 2040, the world will need about 25% more oil and gas than it uses today to meet energy demand – a total equivalent to about 17.9 billion tonnes of oil. Or, to put it another way, **for the next quarter-century, oil and gas will still be required to meet about half of global energy demand** – just as it does now. This will be alongside growth in renewables and a fall in the demand for coal.

But what if the governments of the world fully adhere to the commitments they made at the UN's Climate Change summit in Paris (COP21)?

Even in that more rigorous scenario, which keeps global warming to below 2-degrees Celsius, oil and gas will still have essential roles to play, accounting for 44% of energy use. As the illustration below shows, these fuels will be crucial in meeting the demands of industry and wider society for heat, light, transport and other essentials.

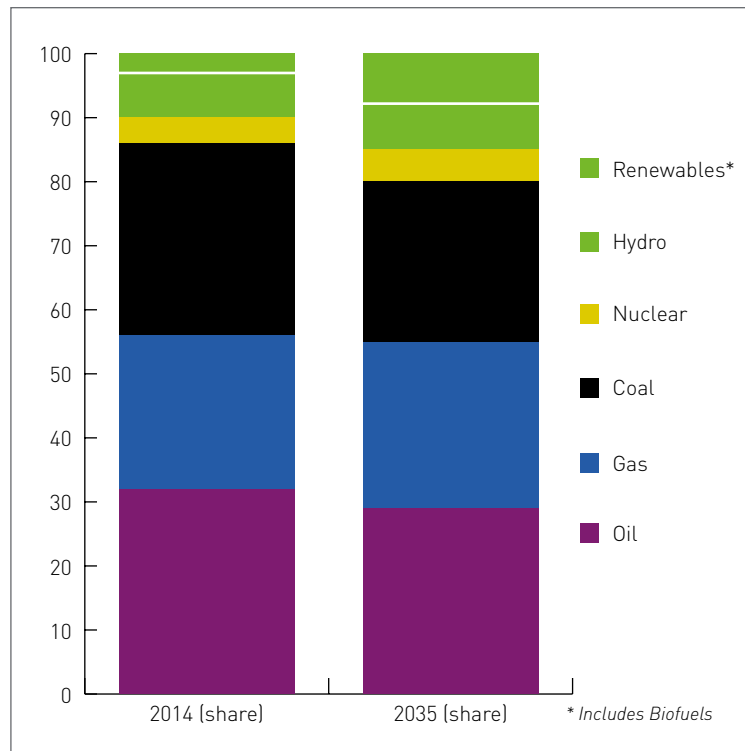


While renewables will, of course, have a bigger role to play than they do now, the IEA says they alone are unlikely to meet the needs of a growing global population.

BP’s forecast, which looks ahead to 2035, is similar. In its recent *Energy Outlook*, the company anticipates that oil and gas will account for 55% of the energy mix – about the same as today.

This is based on demand for gas growing by 1.8% per year, with its share in primary energy gradually increasing throughout the period. While demand for oil also grows – by just under 1% per year, its overall share in meeting energy demand is likely to decline.

The table below shows BP’s view of the shift in energy demand.

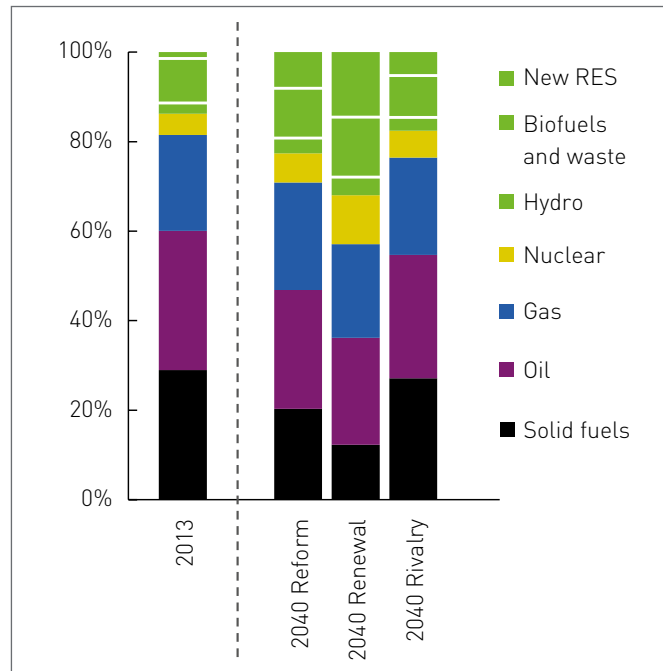


Statoil, the Norwegian energy company, has devised three scenarios based to cover the world’s energy future:

- Its *Reform* scenario is based on the assumption that nations signing up to the climate targets of the Paris agreement (COP21) will reduce their carbon emissions, but fall short of their targets.
- The company’s *Renewal* scenario assumes that the world will achieve its most ambitious energy and climate goals.
- The *Rivalry* scenario foresees less cooperation among nations, with developing nations emitting more carbon in their determination to improve their standards of living.

The table below, from Statoil’s *Energy Perspectives 2016*, shows the company’s reading of the current energy mix, together with the predicted demand according to each of the three scenarios.

Consistent with the IEA’s 2-degree scenario, Statoil forecasts the greatest growth in renewables. Nevertheless, demand for oil and gas in 2040 remains so high that the world will need the equivalent of more than 15 Norways – Europe’s largest producer of oil and gas – to meet growing demand.



But there is a potential problem. Between now and 2040, existing oil and gas fields will deplete by three to six per cent per year, Statoil says. Without continuous investment to make the most out of these fields and find new ones, the world risks facing a drastic energy shortfall no matter which scenario prevails.

And since the lead times for oil and gas production can be measured in decades, the time to start ensuring the world's energy future – and yours – is now.

**In summary:**

IEA, one of the foremost independent energy authorities, says that **the world will rely on oil and gas for between 44% and 50% of its energy needs in 2040.**

BP, looking to 2035, anticipates that **oil and gas will meet 55% of energy demand** – about the same as today.

Statoil, based on three scenarios, expects **oil and gas to account for between 51% and 45% of energy demand in 2040** – showing that even if the world manages to hit the UN's ambitious 2-degrees Celsius target, oil and gas will still be the largest component of the energy mix. To ensure future oil and gas supplies, investment is needed now.

**Sources:**

International Energy Agency *World Energy Outlook 2015* available from [www.iea.org](http://www.iea.org)

BP *Energy Outlook 2016* edition available in full from [www.bp.com/energyoutlook](http://www.bp.com/energyoutlook)

Statoil *Energy Perspectives 2016* available in full from [www.statoil.com](http://www.statoil.com)

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