

Twitter Thread by Josh Gabbatiss



Josh Gabbatiss

@Josh_Gabbatiss



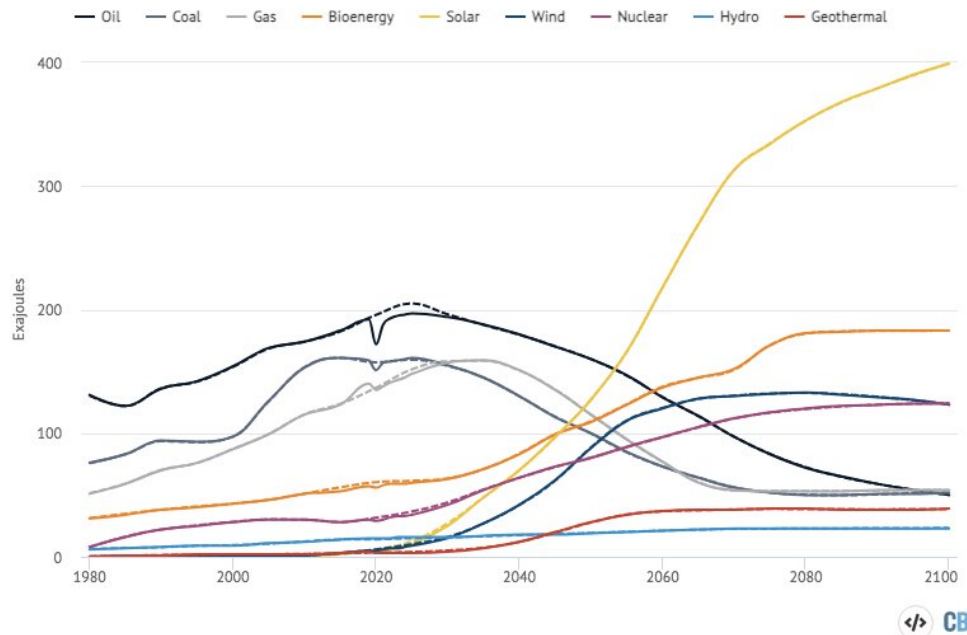
I took a look at Shell's first ever 1.5C scenario and found that it is... remarkably similar to its "well-below 2C" scenario.

Oil, gas, coal, solar.... all basically unchanged.

The key difference: A new forest the size of Brazil to suck up the extra CO2.

Shell's vision for primary energy use remains roughly the same in both Sky scenarios

Dashed line shows Shell's 2018 "well below 2C" scenario and the impact of Covid-19 on projections



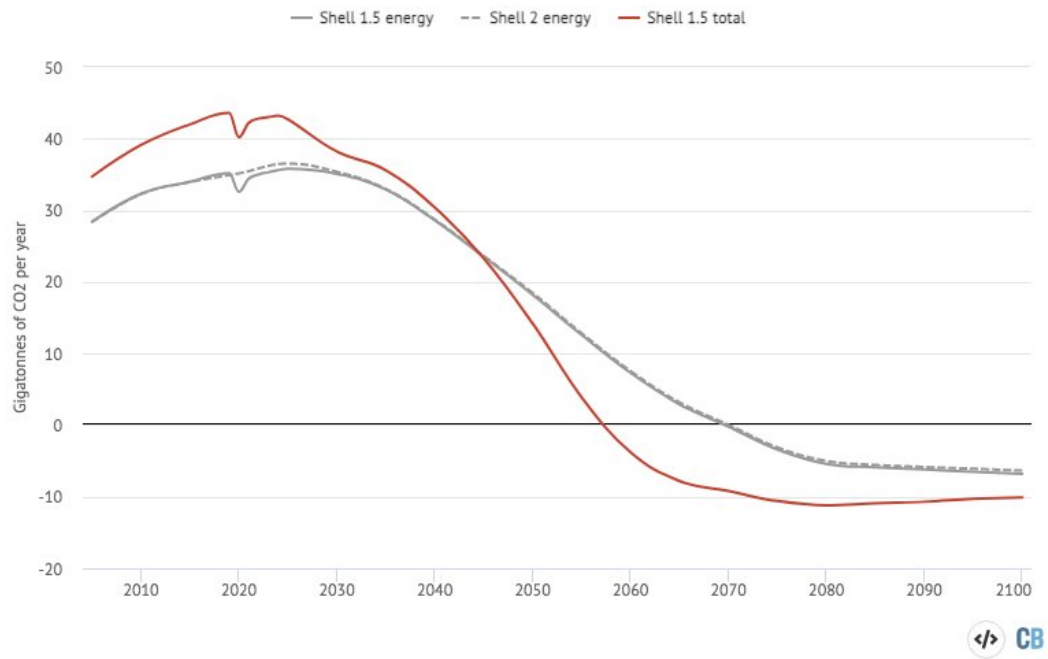
Including "nature-based solutions" in the outlook brings forward the date for net-zero emissions to 2058.

Without them their pathway for CO2 emissions is the same as the previous one.

(It's also towards the higher end of 1.5C emissions pathways.)

CO2 savings from "nature-based solutions" bring forward the net-zero date by a decade in Sky 1.5

When only based on energy-related emissions, Sky and Sky 1.5 follow a similar trajectory



The "Brazil-sized" forest idea isn't actually new, it has been kicking around for a couple of years.

It was referenced in the "well-below 2C" scenario although not formally included in it, and Shell's CEO has been framing it as the only viable way of getting to 1.5C.

Shell boss says mass reforestation needed to limit temperature rises to 1.5C

Ben van Beurden says 'another Brazil in terms of rainforest' will help achieve UN target

Adam Vaughan

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Tue 9 Oct 2018 18.35 BST



2,042



▲ Reforestation is seen as essential if the world is to restrict warming to 1.5C, as outlined by the UN. Photograph: Otto Bathurst/Jon Arnold Images Ltd/Alamy

Fine, but who is going to plant all those trees? Well... Shell says it will plant some of them.

Only yesterday Shell said forests were a key part of its net-zero strategy.

Not everyone is convinced though

<https://t.co/RaJm7tOHxb>

Shell turns to forests and the earth to soak up its emissions

By Reuters Staff

3 MIN READ



LONDON (Reuters) - Royal Dutch Shell set out plans on Thursday to boost the use of nature-based carbon offsets and carbon capture and storage (CCS) technology, two climate solutions in their infancy but seen crucial to controlling global warming.

Shell plans to use forests to remove 120 Mt/yr of CO2 by 2030.

Appropriate land for forestation is finite, and risks competition with food production and human rights of current land owners/users, esp Indigenous

— Greg Muttitt (@FuelOnTheFire) [February 12, 2021](#)

Given that Shell's 1.5C scenario also sees a big scaling up of bioenergy, the question remains: where are all those trees and bioenergy crops going to go?

The scenario relies on around 12 gigatonnes of CO₂ (GtCO₂) being removed annually using reforestation by 2060.

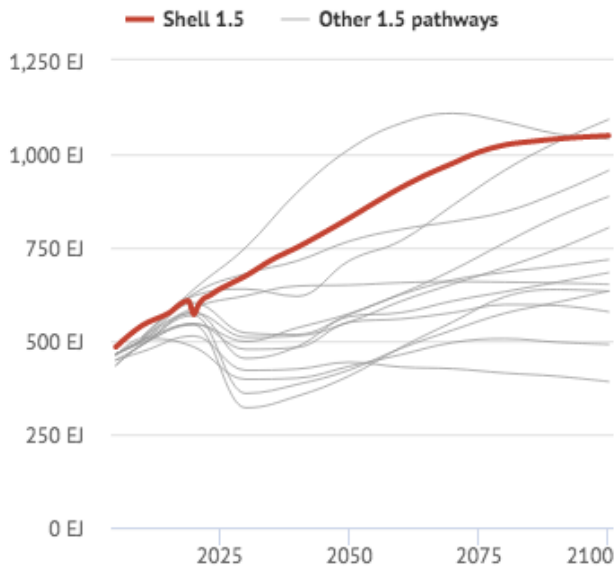
Bentham says that “although the scale of the task is very large”, research from institutions such as MIT and The Nature Conservancy suggests the “CO₂ drawdown in Sky 1.5 is feasible through reforestation and land carbon uptake”.

[Dr Joeri Rogelj](#), a climate scientist at Imperial College London who is involved in modelling 1.5C pathways, tells Carbon Brief that the figures quoted amount to the “maximum potential” of all possible nature-based removals that have previously been modelled.

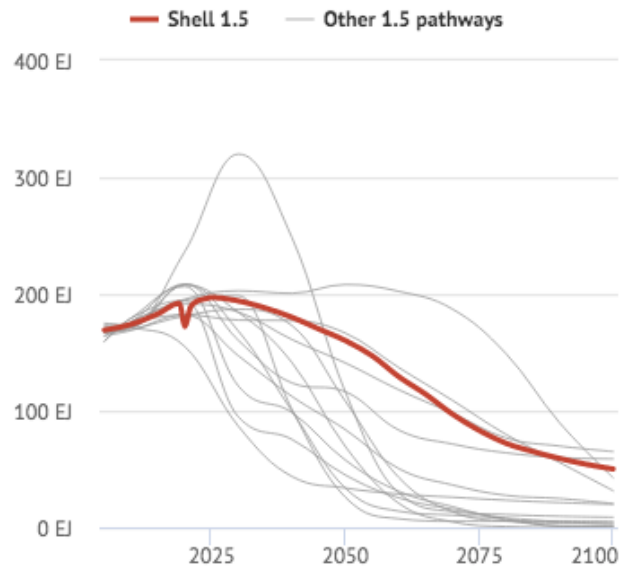
Shell's scenario sits towards the higher end of 1.5C scenarios that scientists have come up with for energy use, oil, coal and solar

For emissions removed using carbon capture technology, it actually sits at the lower end. 1.5C scenarios rely _a lot_ on (largely untested) CCS

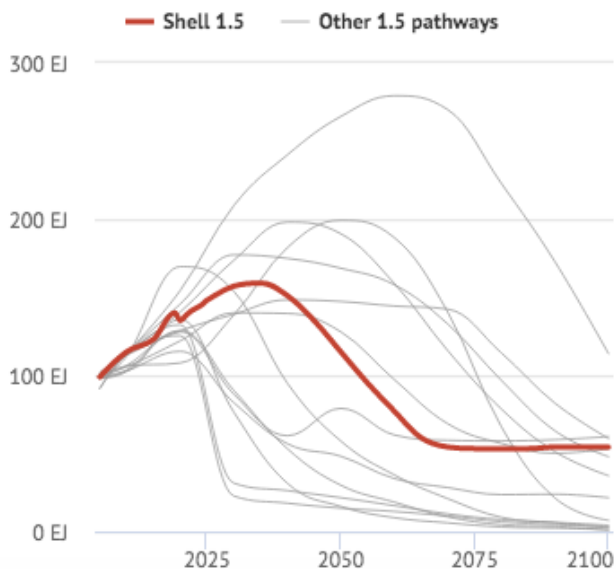
Overall primary energy demand



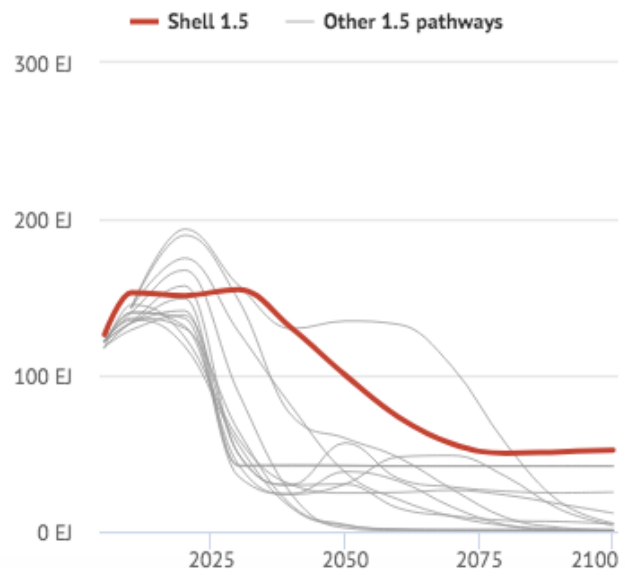
Oil



Gas



Coal



So getting to 1.5C is hard and most estimates say it will rely on lots of carbon removal.

Of course, the more fossil fuels are burned, the harder it gets.

Shell says oil and gas, “will remain significant for decades” and “there needs to be continued investment in...supply”.

Finally, Shell says it makes these scenarios not as forecasts or to reflect a business plan, but rather as “a useful tool for exploring future possibilities”.

A legal disclaimer adds:

“Ultimately, whether society meets its goals to decarbonise is not within Shell’s control.”

For more details on all of this, check out my analysis of Shells "Sky 1.5 scenario" in this piece >>>>

<https://t.co/Ngj6MRMMTk>