The energy transition in oil and gas

March roundup

Hi everyone,

The huge difference between the latest climate science and what the oil majors are doing, and saying, came into incredibly stark relief this month.

The Intergovernmental Panel on Climate Change (IPCC) published the summary of its latest round of assessment reports, warning once again that "there is a rapidly closing window of opportunity to secure a liveable and sustainable future for all". In what shouldn't be a surprise to you, it finds that existing fossil fuel infrastructure will push us past 1.5°C, while existing and planned projects would put 2°C out of reach. Achieving the Paris Agreement goals requires rapid, deep and immediate emissions reductions this decade, leading to a substantial reduction in fossil fuel use and minimal use of unabated fossil fuels.

Judging by this month's announcements, the oil and gas industry - in this case most obviously Shell and TotalEnergies - have still not heard the IPCC's message. Shell is now well off track to meet its already-inadequate targets, while TotalEnergies says it isn't planning to reduce emissions from the oil and gas it sells at all this decade. More on all of that below.

Here at Zero Carbon Analytics, we published a briefing on why gas use needs to fall rapidly, bringing together the latest research across Paris-alignment, energy security, sustainable development, health and hydrogen conversion. It includes a major US study which found that, taking methane leaks into account, gas can be as harmful as coal for the climate.

As always, please share this newsletter with colleagues if you find it useful - they can sign up here.

Thanks, Murray
murray.worthy@zerocarbon-analytics.org

New to the newsletter? Subscribe here!

Stat of the month:

3.8%

Reduction in Shell's 'net carbon intensity' since 2016. The company is aiming to reach a 20% reduction by 2030.

Oil and gas in the transition

Shell reviewing oil and gas production cuts

In last month's newsletter, I suggested that Shell may be looking to follow BP in revising up its oil and gas production plans. This month, Shell's CEO Wael Sawan confirmed to The Times that the company is reviewing its target to cut oil production by 1% - 2% each year this decade, stating that "cutting oil and gas production is not healthy." (Arguably a poor choice of words given the impact of oil and gas on air pollution and climate-induced health risks). It's clear that Sawan's primary focus is the company's share price - he's certain, and says his investors feel the same way, that Shell is undervalued. A final decision on revising its production targets should be announced at its capital markets day in June.

Despite the review, Sawan says the company stands by its 'net zero' by 2050 goal. The mismatch between the company's short-term plans and the immediate and rapid emissions cuts the IPCC says are needed shows the risk in relying on 2050 targets as a benchmark for effective corporate climate action. Unsurprisingly, the company has called on investors to reject the resolution from campaign group Follow This at its AGM that would require targets for its absolute Scope 3 emissions (those from the products it sells) that are in line with the Paris climate agreement.

Shell struggling to meet existing climate targets

As part of its climate strategy, Shell has a target of cutting the carbon intensity of the products it sells - which make up around 90% of its total emissions - by 20% from 2016 to 2030. In 2022, nearly half way through that period, the company has managed just 3.8%.

> **“Given so much of the hype around hydrogen has focused on using it where it’s not appropriate, it’s a refreshing surprise to see a project putting hydrogen to use in the sectors that need it most.”**

Even for the emissions from its own business (Scope 1 and 2) the company looks to be in trouble. It is aiming to cut these emissions by 50% from 2016 to 2030, and has so far managed around 30%. The vast majority of reductions to these emissions have come from selling assets with higher emissions, but the company’s plan to increase investment in oil and gas supply is at odds with this strategy. According to the company’s annual report, “new investments across our portfolio will increase our Scope 1 and 2 emissions between 2023 and 2030 and that they will exceed reductions associated with planned divestments and natural decline.” This leaves the company heavily dependent on capturing emissions using CCS to close that gap, but with CCS currently capturing less than 1% of the company’s own emissions, and the long timelines involved in getting new CCS projects up and running, Shell would have to massively increase CCS investment in the near-term to hit those 2030 targets, which it hasn’t indicated it’s planning to do.

TotalEnergies’ zero emissions cuts

TotalEnergies remains similarly defiant to climate science, stating that it expects its Scope 3 emissions to remain virtually unchanged to the end of the decade, a far cry from the 43% reduction in global emissions the IPCC states is needed for a 50% chance of limiting warming to 1.5°C. The reason the company’s emissions aren’t set to fall is that it’s shifting to focus more on gas, planning a 40% increase in LNG output this decade. The company’s sustainability chief Helle Kristoffersen went as far as to say that “even when our gas-related Scope 3 emissions go up, the world is better off", claiming that its increased gas output is displacing coal. But the climate benefits of gas - and particularly LNG - over coal are limited and any investment in new gas power generation puts the Paris climate goals at risk.

Clean energy investments

In contrast to Shell and Total, BP managed a series of much more IPCC-aligned announcements this month - possibly because it declared its increase in oil and gas production last month.

BP not planning to compete in energy retail

One of the challenges the oil and gas industry faces in the energy transition is that renewable energy power generation hasn't produced the same return on investment as its core fossil fuel businesses. In an insight into how BP's addressing this challenge, the company's head of gas and low-carbon energy stated its renewables businesses are currently being revamped, moving away from solar and wind generation for selling directly into the electricity market as it doesn't see itself having a competitive advantage here. Instead, the company intends to focus on using renewable electricity to power its own EV chargers and to produce 'low-carbon fuels'. "We will not grow renewables for the sake of growing wind and solar", said Anja-Isobel Dotzenrath. "It is really about securing access to cheap - the cheapest - green electron." This followed the announcement last month that the company expected to spend USD 1 billion less on renewables up to 2030 than it had previously planned.

BP enters German solar market

Lightsource BP, BP's joint venture with solar power company Lightsource, announced it was entering the German market this month, with the company aiming to develop 300-400 MW of new solar every year by 2030. This would add the equivalent power of Germany's largest nuclear power station every four years - a pretty significant contribution to Germany's energy transition.

Hydrogen

BP also announced it would be investing up to EUR 2 billion in the green hydrogen cluster 'HyVal' at its Castellón refinery in Valencia, Spain. From an initial look at the project, the plans seem remarkably sensible - using zero-carbon green hydrogen (from renewables) to replace high-carbon grey hydrogen (from gas) and in hard-to-abate sectors in industry. Given so much of the hype around

hydrogen has focused on using it in places where it's really not appropriate - like home heating - it's a refreshing surprise to see a project putting hydrogen to use in the sectors that will need it most.

National oil companies

Abu Dhabi's ADNOC sold 25% of its shares to international investors in a massively oversubscribed Initial Public Offering (IPO). The company had originally planned to sell just 5% of its shares, but received USD 124 billion in orders - vastly in excess of the available shares - so revised the size of the offering up to 25%. The huge demand for its shares shows how promising investors see the prospects for investing in oil and gas from the Gulf. It also may start to open up the previously relatively-insulated company to ESG pressures from investors.

Petrobras' new leadership are aiming to rival Saudi Arabia for the future of oil production. Before Brazil's President Lula appointed the new CEO, there had been some discussion about whether the left-wing environmentalist would accelerate the company's energy transition plans. That debate has now been very clearly answered - he is not. Petrobras' CEO Jean Paul Prates told Bloomberg that "we may be the last to produce oil in the world" - a title usually reserved for Saudi Aramco's incredibly cheap and plentiful reserves. Brazil is now launching a major oil and gas exploration programme, aiming to make the country the fourth largest producer in the world.

New to the newsletter? Subscribe here!

In order to help gauge how oil and gas companies are positioning themselves in the energy transition, this newsletter specifically focuses on how they are moving into renewables and clean energy. To offer up-to-date analysis, it uses insight from media sources and subscription-based databases, like BloombergNEF.

Feel free to forward this newsletter on to colleagues!

Mailing address
Stichting European Climate Foundation
Fora - 180 Borough High Street, London, SE1 1LB