The energy transition in oil and gas November roundup

Hi everyone,

After a brief hiatus, this newsletter is back and in new hands, with a (not so) new name and a slightly wider remit. I'm Murray Worthy and I'll be trying to fill Micky's shoes and keep you up to date with the latest on the energy transition in oil and gas.

Before getting into what's been happening in the last month or so, I'd like to take a step back and have a quick look at where the energy transition in the oil and gas industry is at. 'Low carbon' activities - renewables, hydrogen and CCS - are set to make up just 13% of the sector's investments in 2022, with the other 87% still solidly focused on core oil and gas business, according to Rystad Energy. If the industry were serious about the 1.5°C limit of the Paris Agreement, it would need to stop exploring for new oil and gas now, as existing reserves will push us well past that point. That such a move still feels like a distant mirage shows just how far there is to go.

But despite the industry's slow pace of change, the energy transition is accelerating. The IEA has just revised up its growth forecasts for renewables up by nearly a third from its projections just a year ago, while earlier this year it predicted for the first time that fossil fuel demand would peak under current government policies, and in just five years' time.

Indeed this month, I'll be looking at why the industry isn't ploughing its record cash pile into new oil and gas production and what that might mean. I'll also be highlighting the industry's key announcements on clean energy, hydrogen and CCS, as well as some of the most notable new fossil fuel projects.

If you like what's in here - please forward this newsletter to your colleagues and contacts - they can subscribe <u>here</u>.

I'd also love any feedback on the newsletter, what you find useful, what you'd like more of, what's not so good, or if you think I've got something plain wrong - just drop me an email at <u>murray.worthy@gsccnetwork.org</u>.

Enjoy! Murray

Stat of the month: USD 500 million

Dividends oil companies paid to their shareholders every day on average in Q3 2022.

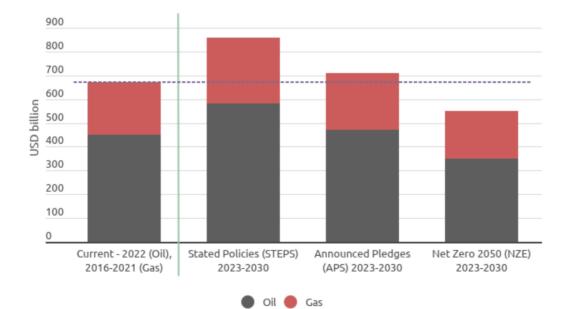


Oil and gas investment

This year, the cash has rolled in for the industry, but - to the surprise of many - companies haven't ploughed their winnings into new supply. Instead, they have passed the money back to shareholders in the form of dividends and share buybacks.

And those returns have been pretty significant. <u>Oil firm dividends rose by 75%</u> to a record USD 46 billion in the third quarter. <u>BP announced USD 2.5 billion in share buybacks</u>, while <u>ConocoPhilips</u> increased its share buyback programme by a further USD 20 billion.

Given record high energy prices and a global energy crisis, it's pretty surprising to see that, according to the IEA World Energy Outlook, investment in oil and gas supply is now just below what it thinks is needed to deliver governments' climate policies and long-term targets (the Announced Pledges Scenario). It's also well below the level needed for the policies governments have in place or have announced (the Stated Policies Scenario).



Current oil and gas investment vs IEA scenarios

There are a few possible explanations for why the industry isn't pumping more oil to cash in on high prices, as it usually does. It could be that the sustained pressure on climate is paying off, and companies are finally realising that more investment will lead to more stranded assets in the future. So this data from the IEA could be read as a sign that pressure is being felt, with current investment levels limiting warming to around 1.7°C.

Another explanation is that this is, in fact, "cartel-like" <u>underinvestment in supply</u>, as Javier Blas at Bloomberg argues. His take is that companies are intentionally keeping supplies tight to push up prices and, therefore, profits, and that the world of peak oil and declining demand is still a long way off.

But according to a recent presentation by Rystad Energy, the industry isn't actually underinvesting at all, it's just getting leaner. Since the 2014 oil price crash, the industry has been working hard to bring down its costs and increase efficiency so it can still make money even when oil prices dip. This means the industry now gets more bang for its buck, so, even with less investment, Rystad is forecasting nearly 2% growth in supply next year, and supply exceeding demand by 2024. Even then, they see oil remaining at around USD 90 a barrel for the next few years - high enough to see strong financial returns for the industry.

So while the low investment numbers may at first look like good news for the climate, what we may instead see is ongoing growth in supply with prices at levels that punish consumers and reward the industry. The upside of that, though, is that expensive fossil fuels are a strong driver for consumers to transition to cheaper renewables and electrification.

But with oil prices dropping a fifth in the last month over fears of a global economic slowdown, and the fallout from European sanctions on Russian oil still to be seen, the risks of volatility in oil prices remain high.



Fossil fuels

Despite the IEA's warning of peaking fossil fuel demand, many of the majors made announcements of long-life projects. Total announced it would be <u>exploring for oil and gas in South Africa</u>, and working with Eni on <u>exploring for gas along the previously-disputed Israel-Lebanon maritime border</u>. Any gas discoveries from offshore Israel-Lebanon would receive a huge boost if the EastMed pipeline is finally approved, with an investment decision <u>due before the end of the year</u>.

During COP, the Tanzanian energy minister announced that the country expected to sign agreements with Shell and Equinor for a <u>USD 40 billion LNG project</u> in December. With a final investment decision not due before 2025, and exports starting in the 2030s, Tanzania and both companies could be left with a very expensive stranded asset if gas demand falls in line with what's needed to limit warming to 1.5°C.



"Changing farming practices to ensure that so much methane from waste isn't produced in the first place is a much better option"

Similarly bullish on the long-term prospects for LNG, <u>Chinese oil and gas company Sinopec signed a</u> <u>27-year LNG deal with QatarEnergy</u>. The deal is the longest LNG agreement to date that will run into the 2050s. While the length of the deal has grabbed headlines, it also appears to be linked to Qatar selling a stake in its huge North Field gas expansion project. The length of the contract could also be a signal from Qatar to European buyers, who are much less willing to take on longer-term LNG contracts while they look for immediate supplies to deal with the energy crisis.

Equinor, however, <u>has delayed a decision on Wisting, the world's northernmost oil field</u>, to 2026, calling into question whether the project will ever go ahead. The company cited rising costs, which is pretty remarkable given current (and forecast) high oil prices. The Arctic didn't get a complete pass from Equinor, with the company proposing a <u>USD 1.4 billion development of the Irpa field</u>, aiming no doubt to take advantage of <u>tax breaks</u> for projects approved before the end of 2022.



Decarbonisation strategies

November saw further efforts by the industry to reduce the carbon intensity of their operations - that is the amount of carbon dioxide emitted when producing the oil and gas they sell. In the jargon of corporate carbon reduction, these are their Scope 1 and 2 emissions (these are dwarfed by the emissions caused by burning the oil and gas they sell - their Scope 3 emissions - which are estimated to make up around <u>90%-95%</u> of the majors' total emissions).

One side of this strategy is reducing the emissions from oil and gas operations themselves. In Norway, Equinor is now using <u>electricity from the world's largest floating offshore windfarm to power</u> <u>its oil and gas operations</u> in the North Sea. In a similar vein, Eni announced it will be working with state-owned Sonatrach on a 10 MW <u>solar project to power their oil operations</u> in Algeria.

The other side is companies shifting their portfolios to focus more on gas and oil production with lower carbon emissions - cited by analysts as the reason for <u>Exxon exiting its operations in</u> <u>Equatorial Guinea</u>, where it accounts for half of the country's total oil production. It also looks as though the hard financial realities of the high cost of operations and repairs to its ageing oil rig may have weighed on the decision.



Carbon capture and storage

ExxonMobil's focus on CCS continues, with the major signing an outline deal with Indonesian stateowned Pertamina for a <u>regional CCS hub in offshore Java</u>, <u>worth USD 2.5 billion</u> according to the White House. The project would provide geological storage from carbon captured from Indonesian industry, including chemicals, cement and steel production.

'Low carbon' investment

November also saw <u>Shell buy the largest biogas producer in Europe</u> - Nature Energy - for nearly EUR 2 billion. Biogas - or 'renewable natural gas' as the industry prefers to term it - is produced from agricultural, industrial and household waste, which can then be processed into biomethane and supplied into fossil gas grids for use in power generation, home heating or industry. The idea is that biogas can help reduce methane emissions from waste and avoid the emissions associated with fossil gas extraction (those Scope 1 and 2 emissions). However, it faces <u>significant challenges</u>, while changing farming practices to ensure that so much methane from waste isn't produced in the first place is a much better option. Renewable energy is also a cleaner and usually cheaper alternative for electricity generation.

Clean energy investment

It was a relatively quiet month for clean energy investments. In its efforts to diversify its portfolio, <u>Equinor has bought the solar developer BeGreen</u> - which is currently developing 6GW of solar across Denmark, Sweden and Poland.



Hydrogen

At COP27, <u>BP signed a memorandum of understanding (MoU) with Mauritania</u> to look into the potential of green hydrogen production in the country. In the negotiations, BP's CEO Bernard Looney (who attended the UN summit as <u>part of the Mauritanian government delegation</u>) also discussed <u>the potential for more gas exploration in the country</u> with the president, building on its existing production from the Tortue project on the border with neighbouring Senegal. Considering the domestic market and existing infrastructure, it's very likely any green hydrogen production would be for export - though Bloomberg NEF founder Michael Liebreich remains pretty confident that global hydrogen trade <u>is not going to be a thing</u>.

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