The energy transition in oil and gas

July & August roundup

Hello readers,

After a brief pause I'm back with a roundup of the biggest stories about the oil and gas industry and the energy transition over July and August.

This (Northern Hemisphere) summer has seen the relentless decline of oil prices as the world is increasingly over-supplied with oil – a situation that looks set to increase over the year ahead. However, over the longer term the outlook is much more uncertain – below I look into BP and Exxon's very different visions of the future. This edition also covers the latest challenges for LNG in the US, the crisis in the European biofuels market and the latest developments in blue ammonia.

In a news story that would be fit for the Onion's satirical outlet if it weren't true, the Washington Post reveals that gas company Venture Global has found a solution to operating planet-warming fossil fuel infrastructure on the US Gulf coast, where global warming is causing sea levels to rise and increasing the severity of hurricanes. Rather than shift away from warming the planet, the company instead intends to protect its USD 21 billion LNG terminal with a 26-foot high sea wall. While the gas industry may have the cash to afford flood defences like this, marginalised communities across the US Gulf remain on the frontlines of the impacts of climate change.

To understand how the fossil fuel industry has influenced the public and governments to get us to the state we're in now, InfluenceMap has published a really useful report looking at the narratives the fossil fuel industry has used systematically for decades. These narratives – "solution scepticism, policy neutrality, and affordability and energy security" – have been hammered home repeatedly and used to slow the growth of renewable energy and electric vehicles (EVs).

Please share this newsletter with your colleagues and contacts who can subscribe here. It's always great to hear from you, so do email me any feedback or suggestions.

Thanks,
Murray

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Stat of the month: 0

Number of LNG terminals in the US that reached a final investment decision this year to date - Financial Times.

Oil and gas in the transition

Rich countries issue record licences for oil and gas extraction

Permitting of new oil and gas fields in 2024 is set to unleash the highest levels of greenhouse gas emissions since 2018, with record numbers of licences awarded by countries that have the least dependence on fossil fuels, and the greatest ability to transition off them. The analysis by the International Institute for Sustainable Development (IISD) also found that the UK, the US, Canada, Norway and Australia – wealthy countries that should be leading the transition off fossil fuels – are responsible for more than two-thirds (67%) of all new oil and gas licences issued globally since 2020. “Rich countries with relatively low dependence on fossil fuel revenues should be the first to stop issuing licences. We’re not seeing that in the data.” said co-author Olivier Bois von Kursk.

Industry split on the future of oil

In August, both BP and Exxon published their energy outlooks, with very different visions of the future, in many ways reflecting their different corporate strategies. BP expects global oil demand to peak next year, plateau for a decade, then drop by about 20% by 2050 in its ‘current trajectory’ scenario.

While BP said oil would continue to “play a significant role in the global energy system for the next 10-15 years”, Exxon sees no end to growth in demand for oil, with oil demand staying above current levels all the way through to 2050. It believes that while EVs will cut demand for oil for cars, though only by 25%, demand in commercial transport and industry will grow. This scenario would lead to a devastating 2.4°C of warming, according to Michael Mann, a professor at the University of Pennsylvania, who described it as “a window to a dangerous version of our planet, where Exxon places profit over people” and “disastrous for humankind”. If that is the corporate kool-aid, then it’s absolutely no surprise that they have no intention of transitioning away from fossil fuels. For what it’s worth, I think BP’s outlook better reflects the outlook for the market, whereas Exxon’s looks more like wishful thinking.

Gas lobby takes aim at the International Energy Agency

The International Gas Union (IGU) also published its outlook, and took aim at the International Energy Agency's (IEA) scenarios for what it argues are unrealistic expectations of future energy demand. The industry gas body expects global energy demand to keep rising at the rapid pace it has done since the end of the Covid-19 lockdowns, whereas the IEA forecasts expect demand to rise much more slowly.

Unsurprisingly the gas industry argued that more investment in gas is needed to meet the demand they expect. One reason the IEA's forecasts are more likely to be accurate is because the IGU is using, or falling into, what is known as the 'primary energy fallacy'. This is the idea that all current total primary energy demand, from fossil fuels, will need to be replaced by renewables. However, this is simply not true – because fossil fuel technologies are hugely inefficient and wasteful, a much smaller amount of energy is needed to achieve the same result in an electrified energy system. Therefore, the faster electrification happens, the less total energy the world will need.

US gas – more methane & export uncertainty

US oil and gas drillers emit four times more methane than official government estimates, according to new research from the Environmental Defence Fund. This is even higher than a previous academic study which found emissions were three times higher. Earlier this year we looked into why measuring methane matters, and why governments' reliance on industry estimates are frequently so wrong.

The US LNG industry, the largest in the world, is continuing to face uncertainty and challenges. The future of the Biden administration's 'pause' on LNG export approvals still hangs in the balance of the presidential election, with Donald Trump committing to end it immediately and Vice-President Kamala Harris likely to re-start approvals, but still coming under pressure from campaigners to restrict exports.

Meanwhile, ExxonMobil and Qatar Energy's Golden Pass export terminal in Texas has been delayed by six months after the construction contractor went bankrupt following "ballooning costs" at the project. Also in Texas, NextDecade's Rio Grande export terminal had its permitting approval revoked after a successful legal challenge found that the approval had failed to adequately consider environmental justice impacts and the proposed carbon capture and storage (CCS) facility at the terminal. Rather than face deeper scrutiny from regulators, NextDecade has dropped the CCS facility from its plans and is now proposing that the terminal would go ahead without its emissions

being abated. After a boom in recent years, no LNG terminals in the US have reached a final investment decision this year.

Japan creating markets for its surplus LNG

Reuters published a great in-depth analysis of how major Japanese companies are building markets for excess LNG across South and South-East Asia. With Japanese utilities, usually importers of LNG, set to have contracted more LNG than they will need to meet domestic demand, the government and private companies are making a major push to build new LNG terminals and gas power stations across the region. The companies are hoping to profit from trading LNG to these new markets, and from running the new facilities. Countries in the region, while they may welcome the additional investment, are likely to face high and volatile energy gas costs, significant fuel import bills, as well as decades of carbon emissions and air pollution.

UK drops defence of new oil and gas fields

The UK government has dropped its defence of the decision to grant licences to two new oil and gas fields, Rosebank and Jackdaw, which are being challenged by UK NGOs Greenpeace UK and Uplift. The government's decision follows the UK Supreme Court's ruling earlier this year that the emissions from fossil fuels extracted should have been assessed in the permitting process for an onshore oil field. The government's withdrawal leaves the decision on the future of the fields in the hands of the courts, and the project developers Shell and Equinor have committed to fight the case in court.

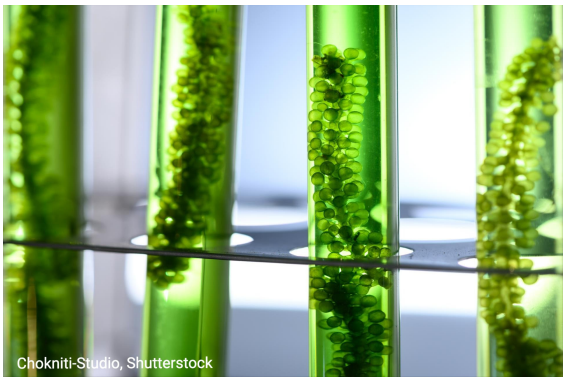
Energy transition strategies

Shell cuts exploration staff

Shell is reportedly planning on cutting one in five jobs in its teams responsible for exploration and developing oil and gas reserves. CEO Wael Sawan has committed to cut operating expenses by USD 3 billion by the end of 2025; however, the move could also be indicative of concerns about long-term demand for oil and gas, and reflect the company's strategic pivot to focus more on LNG shipping and trading.

Falling profits

Investment bank Morgan Stanley has warned that European oil and gas company profits are set to fall, reducing expectations for share prices in 2025. According to the bank, there are four conditions under which the share prices of energy companies had historically flourished: when oil and gas prices, interest rates and inflation expectations were rising and when the rest of the market was subdued. "Going through the checklist, we find that none of these are in place at the moment. In fact, most of these factors are pointing in the opposite direction", the bank's analysts said.



"Biofuels have been a key part of energy transition plans for many major oil and gas companies, as a ‘clean’ technology that sits very close to their existing skills and expertise – refining and selling liquid fuel. The shift in the market could have a big impact on achieving their ‘clean’ energy goals."

Clean energy investments

The European biofuels market entered a full-blown crisis this summer, as Shell paused construction at one of Europe’s biggest biofuel plants and one of its biggest energy transition projects. Shell said the pause on construction at the biofuel refinery in Rotterdam is expected to cost between USD 600 million and USD 1 billion. The project has experienced delays and technical difficulties, but the alleged flood of cheap Chinese-made biofuels into the European market may have tipped the scales.

The European Commission has now intervened to place tariffs on Chinese imports, however this alone may not be enough to keep European production competitive. Biofuels have been a key part of energy transition plans for many major oil and gas companies, as a ‘clean’ technology that sits very close to their existing skills and expertise – refining and selling liquid fuel. The shift in the market could have a big impact on achieving their ‘clean’ energy goals.

Rising costs in offshore wind were cited by Equinor as the reason for scrapping plans for projects in Spain and Portugal, following a similar decision in Vietnam last year. The company has insisted it is committed to its target of 12-16 gigawatts of renewable capacity by 2030, but with the caveat that it was not a “hard target” and would not be pursued at the expense of profitability. It appears that for Equinor some targets are “harder” than others.

Hydrogen & ammonia

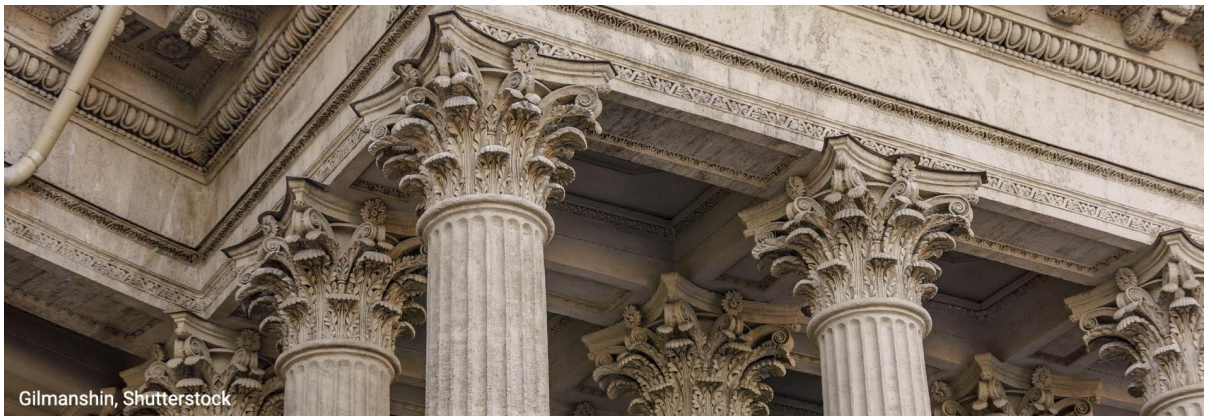
The UAE's ADNOC has committed to buy 35% of ExxonMobil's proposed blue hydrogen plant in Houston Texas. The project would produce hydrogen from natural gas, using carbon capture and storage to reduce emissions. If built, it would be the largest project of its kind in the world and would export hydrogen and ammonia to Europe and East Asia. The status of the project has been in doubt, as it remains unclear if these kinds of hydrogen projects will benefit from the Inflation Reduction Act's generous subsidies. Notably, ADNOC's investment in the project is contingent on "supportive government policy and necessary regulatory permits".

Australian gas group Woodside has bought another Texas-based blue hydrogen project for USD 2.35 billion. The project, which is also one of the biggest of its kind in the world, is set to start production in 2025, four years ahead of Exxon's.

Shell has announced it is building a 100-MW renewable hydrogen electrolyser at its Rheinland refinery in Germany. The project, which just a few years ago would have ranked as one of the world's largest electrolysers, will focus on decarbonising the existing refinery that currently uses high-emitting unabated hydrogen for its operations.

COP

Azerbaijan's plans for a climate fund financed by oil and gas companies are still being developed, ahead of an expected announcement at COP this year. The fund would be financed by oil and gas producers, either through lump sums or portions of revenue (this differs from their plans earlier in the year for a USD 0.20 per barrel contribution). The latest report indicates that revenue made from clean energy investments by SOCAR, its state-owned oil company, would be reinvested through the fund, which would at least prevent petrostates using it as a green investment fund for their own profits. There are still many hurdles to go for the proposed fund – others in the industry still need to come forward with offers of cash, while critics will likely point to the small and voluntary nature of the fund when much greater sums could be found by taxing the industry more.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From Zero Carbon Analytics

As the climate warms, extreme weather events are becoming more frequent and more damaging. Our briefing *Unnatural disasters* shows that these events are connected to climate change caused by the burning of fossil fuels and are therefore the responsibility of the worlds largest fossil fuel producers. It also shows that the only way to prevent worsening disasters is to phase out the extraction and use of fossil fuels.

Our latest briefing – *Big Oil in Court* – found that 86 climate court cases have been filed and that the number filed each year has tripled since the Paris Agreement. The research, co-published with Oil Change International, found that cases focused on climate damages, emissions reduction and misleading advertising have all been growing in recent years. Of the claims of false advertising that have been concluded, in all but one case the companies were found to have misled consumers or retracted their claims ahead of a decision by the courts.

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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!

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