



Latin American Oil and Gas Has a Clean Future

The pandemic accelerated the energy transition but the world will rely heavily on the region’s hydrocarbons for several decades...

In May 2020 - at the height of the pandemic - the unthinkable happened. For the first time in history oil prices turned negative. The price of a barrel of West Texas Intermediate (WTI), the benchmark for US oil, fell as low as -\$37, which meant oil traders were paying people to take barrels of oil off their hands. The negative prices were temporary but the prospects for hydrocarbons were grim. With large swathes of the global population under lockdown, oil consumption had plummeted.

While oil’s long-term scenario looked just as bleak, with governments unveiling large green energy programmes in response to the crisis. The consensus on Wall Street is that electrons have replaced carbon and even oil companies like BP have declared peak oil.

But to misquote Mark Twain, reports of oil’s death are greatly exaggerated. The pandemic did accelerate the energy transition and is reshaping the oil industry yet we will be using hydrocarbons for decades to come. Oil will cede ground to electricity, but there will be growing demand for cleaner, cheaper hydrocarbons at the expense of ‘dirty’, expensive oil. And Latin America with its natural oil and gas surplus - it has 20% of global reserves but just 10% of the population - will play a crucial role as the world moves to cleaner fuels.

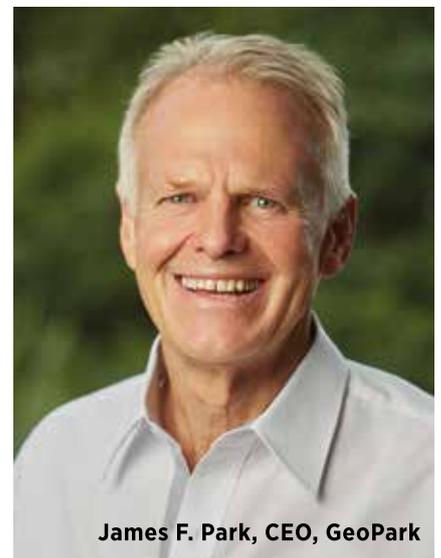
Pandemic impact

When experts talk about the pandemic accelerating the energy transition it often sounds quite benign. Yet it didn’t feel that way on the oil patch. “2020 was brutal”, remembers Fabian Yar, CEO of FYI, an Ecuadorian oil and mining services contractor, “suddenly all of our machines and men were grounded.” In most countries essential oil and gas production could continue, but expansion projects, of the type FYI complete for clients, were cancelled.

instantaneously. Within 30 days we had gone from seven drilling rigs to zero. We monitored our production and shut in some of the higher-cost wells before most others in the industry. When prices recovered to \$30, we began ramping production up, while other companies were only just starting to shut in. The fact we are self-funding with profitable, low-cost operations that produce more cashflow than we spend gives us important flexibility in a crisis.”



Even the most optimistic scenario still shows oil and gas providing 40% to 45% of the energy mix in 2050



James F. Park, CEO, GeoPark

For contractors it was a nightmare but well-run producers were in a better position. Take GeoPark, a US-listed, Latin America focused E&P firm that managed to grow in 2020. “When the pandemic hit and the oil price dropped, we went into crisis mode,” says CEO, James F. Park, “dropping our work programme by 75% almost

In many ways Covid-19 is exceptional, but oil industry veterans are used to dealing with black swan events, says Park. “Part of our 18 years of history is that we think we are exceptional risk managers. We are always expecting the worst to happen and have a plan b and plan c ready in case it does. The design of the company and its people



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means that we are always ready for a crisis. We are a low-cost operator and we pick efficient projects, indeed 95% of our production is cashflow positive with oil prices between \$25 to \$30 a barrel. We've been through multiple crises – in fact we were born in a crisis back in 2002 in Argentina when oil was just \$20. Then we had 2008/9 followed by 2014/15 – there have been so many ups and downs over the year. We don't have high-priced assets that are dependent on swings in the oil price, so we have built a company that can survive crises.”

Orion Energy, is a small Ecuadorian E&P that produces barely a tenth of GeoPark's output yet its reaction, explains CEO, Carlos Fernando Emanuele, was very similar. “We focused on the health of our people and the financial stability of the company. We postponed all our capex for 2020 and 2021, when we had planned to drill five wells.

We also went into cash preservation mode. We thought that our payments, which come via the government, could get interrupted, so we took steps to conserve cash. We sat down with key suppliers and renegotiated terms to extend our cash runway. Fortunately, we do have a low-cost operation, so apart from April when WTI was in negative territory, we made money throughout the year with positive Ebitda and cashflow. We have an all-in cost of around \$11 per barrel, and during 2020 we earned close to \$25 per barrel, which meant that we were cash positive, despite tax contributions that we had to make to the government. The delay to our drilling meant that our production declined to 4,200 bpd from 4,500 bpd but we will be able to bounce back quite quickly.”

The lesson for investors is that well-

run, low-cost oil producers, regardless of size, can survive the types of price shocks we may see in coming years as the oil markets wax and wane on energy transition themes. Alfredo Mordezki, the manager of Santander Latin America Investment Grade ESG Bond Fund believes Latin America's oil plays should prove particularly resilient to lower prices. “Some Latin American oil fields are extremely competitive and break even at \$9 a barrel, which gives them a cushion to absorb lower prices. You also have some new fields, particularly in Brazil, that will attract investment because they look very productive.”

Not all oil is equal

But while the pandemic may not have killed oil demand, it is definitely reshaping the market. Canadian oil sands production suffered a record yearly drop in 2020, with output falling by 175,000 barrels. Its high costs were uncompetitive in the pandemic price drop. US shale producers also suffered. There, high-costs were exacerbated by shale producers' heavy debt loads. Meanwhile the rapid decline rates of shale wells require constant reinvestment – which is difficult during a global crisis – to maintain output.

Of course, it's far too soon to write off either oil sands or US shale. The oil industry is notoriously cyclical and sustained high prices will send production soaring again. Yet a longer-term challenge will come from the environment. As electric vehicles and biodiesel eat into oil's stronghold of transport, while renewable generation does the same to gas in the power market, the world will start becoming more selective about what hydrocarbons it uses. Light oil, think Brent or West Texas, is easier to refine into petroleum products than heavy oil, such as that produced by Canada's oil

sands. That means making it requires less energy and emits less emissions, giving it a lower environmental impact. Likewise, sweet oil, has less sulphur than sour oil, making it cleaner and easier crude to turn into petroleum. US shale produces light, sweet oil, yet the elaborate fracking process creates more environmental impact and greenhouse gas (GHG) emissions. That's especially true for shale gas, which creates 20% more GHG emissions than conventional natural gas.

Most people filling up their car at the petrol station don't know where the oil has come from. But institutional investors are starting to favour oil projects with lower emissions, says Mordezki. “We don't necessarily exclude E&P sector but we ensure that these entities present a robust ESG risks management profile. For instance, Ecopetrol, which is the national oil company of Colombia, has been pursuing ambitious environmental measures. It has cut gas flaring, which is still common in neighbouring countries like Ecuador.

Also, Ecopetrol is inherently a low emissions E&P because it produces lots of conventional natural gas, which creates 30% less emissions per barrel of oil equivalent, than crude oil.” GeoPark has also been actively investing in clean tech to improve the environmental of its oil, says Park. “We have cut gas flaring, we are changing from diesel to gas feedstocks and in Colombia we are joining an electricity grid that is 60% renewable. We are also investing in green infrastructure – for example we built a 40 km pipeline, which has replaced 205 daily truck journeys.”

As ESG investing manages larger sums of money its criteria will have a bigger impact on the oil market. “For an E&P firm one of the relevant ESG measures ▶▶



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is the CO2 emissions per barrel produced”, says Mordezki. “This is a game changer. We have been speaking to Petrobras, as institutional investors for the last 20 years, and never heard about its CO2 emissions per barrel. But now companies have to disclose this information and make efforts to improve KPIs if they don’t want to get a low ESG score. And given that funds look for the best-in-class companies, and often automatically discard the bottom quartile, then those that don’t disclose or don’t achieve some levels of ESG performance will find themselves missing out a huge pool of investment.”



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Alfredo Mordezki, Manager, Santander Latin America Investment Grade ESG Bond Fund

Responsibly-produced oil

CO2 emissions is an important factor, but not the only one. A trio of European banks recently announced they would no longer finance oil projects in Ecuador’s part of the Amazon. So, in addition to CO2 emissions, E&Ps also need to limit the environmental impact of their operations. Park welcomes the increased investor focus on ESG as it’s one of GeoPark’s strong points. “When we founded the company, we invented our own ESG principles – SPEED, which stands for Safety, Prosperity, Employees, Environment and Community Development. In the old days, investment advisors used to tell us to stop talking about SPEED at roadshows – needless to say now it’s back in fashion.

“Our company’s success was determined on those principles. After all, you can’t be profitable if you are spilling barrels of oil all over the place. It was in our bones from the beginning and is reflected in our track record. We’ve been successful in Colombia for eight years by working with communities, building trust and creating development partnerships. We were the first E&P company in Chile, which is known for its stringent

environmental legislation. We haven’t been forced into ESG by the market because it has always been the genus of our success. I am a bit sceptical about the real-world impact of some of these ESG metrics because sometimes it feels like the stuff a company says on its website can have more weight than its actions on the ground.”

Mordezki admits that some scepticism about ESG investing is fair. “The big mistake that the investment community made with ESG is that we all came with different questionnaires to the companies. And the firms used this lack of consistency to tell their own stories which, unsurprisingly, were always success stories.”

However, he believes that there has been a big improvement recently. “Over the last two years we’ve seen a lot of work towards a consensus of what is material in each sector. So even though we have a slightly different system to other asset managers, they will be broadly similar because we all now agree about the crucial metrics for sectors.” That consistency will make ESG investing a more relevant force in the oil and gas industry. Indeed, clean tech won’t just be confined

to renewable energy, there will be increased investment in technology that can reduce oil pollution and CO2 emissions.

The future of oil

Making long-term predictions in the energy industry is a fool’s errand but oil investors will always seek to understand the future of the sector. The first thing to understand is that oil is not going to disappear, says Park. “Energy is a fundamental need of all mankind. Every man, woman and child need and use energy. As the global population grows and the developing world becomes more prosperous energy demand will keep growing. For example, the IDB predicts that by 2040, Latin America’s energy demand will have grown by 80%.

“It’s fantastic that tech advances and policy decisions help renewables become more affordable and reliable to provide a greater share of our energy needs but even the most optimistic scenario still shows oil and gas providing 40% to 45% of the energy mix in 2050. That’s about 120 million barrels per day (MBPD) of oil equivalent that needs to be produced.” It’s not just that people need energy,



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the governments of oil producing countries also depend heavily on the industry to pay for social programmes. One good example is Ecuador.

“Ecuador is a dollarized economy that can only grow by importing dollars”, says Emanuele. “The problem is that the economy has just been hit by the worst recession in living memory, while the national debt continues to grow and the fiscal deficit can’t be closed. In that context it’s hard to see how a president could ban the oil industry and in one sweep remove 7% of the country’s GDP. It would also lead to a loss of \$2.5 billion dollars in fiscal revenue, which is about 10% of the government’s budget.”

Those dry, macro figures disguise the real-world impact of oil revenues on everyday Latin Americans. “I think it’s great when I hear a major oil company talk about being carbon neutral in 2050”, says Park. “But what does that mean to a member of the community around our block in Putumayo, Colombia? These communities have basic needs that oil must solve now. Carbon neutral goals are good but you

also have to focus on the immediate health, social and economic challenges in the area around your operations.”

That economic reliance on the sector makes it impossible to phase out oil and gas in the short-term. Yet there will be changes in the Latin American oil and gas industry. The biggest regional players are the national oil companies (NOCs). Emanuele predicts that the Latin American NOCs will start to divest assets.

“These NOCs are dependent on their government’s ministry of finance for budget, which means they have struggled over the last five years when the average oil price is \$40. That’s a great price for us but it doesn’t work for the NOCs, whose breakeven oil price isn’t determined by their cost of operation but linked to government spending. We will see huge sales of NOC assets to private companies but it will vary among countries. Colombia’s Ecopetrol is the best-run NOC, it is autonomous from the government and will probably manage the transition well. At the other end of the scale, you

have Petrobras, where government interference tends to lead to bad business decisions. In Ecuador the government recently merged the mid-stream and up-stream state operators, to form Petroecuador. Right now, it doesn’t have the ability to invest and apart from one block all of its wells are drilled by third-party contractors.” The NOCs aren’t the only ones heading for the exit, says Park. “The majors are making lots of noise about leaving oil and gas for renewable energy, which is great because it creates more opportunities for independents like GeoPark. So, you will have hydrocarbon demand but less competition.”

Contrary to what you might have heard, oil is going to be an energy mainstay for decades. Producers of cleaner hydrocarbons will be favoured by investors, with successful E&P firms using the latest oil and gas clean tech. As a natural exporter of clean, cheap hydrocarbons, Latin America will play a global role in the new oil and gas market. And as the region’s majors and NOCs sell assets it will create a wide range of investment opportunities. ■

GeoPark’s Colombian operations show that responsible oil and gas can exist alongside nature

