OIL AND GAS

# Playing the wild cards

***Alan McCrae*, PwC UK Oil and Gas Leader, and *Adrian del Maestro*, PwC Strategy& Director of Research, outline some of the big themes that will shape the global oil and gas sector over the course of the next 12 months.**

*Photo: Shutterstock/ Robert Anthony*

The end of 2018 was a sobering reminder for the oil and gas sector. It all seemed to be going so well too. Many of the majors reported robust earnings in the third quarter. Net income at BP was 106% up on the previous year (reaching \$3.8bn), Shell's profits rose 35% to reach \$5.6bn and ExxonMobil's earnings climbed nearly 60%, to hit \$6.2bn.

This swell of positive momentum came against a backdrop of a recovering oil price where Brent reached \$85/b. Talk of 'lower for longer' oil prices seemed to have evaporated. However, by late October 2018 the price began to slide, eventually slumping by more than 40% to just above \$50/b, starkly highlighting the volatility of the trading environment.

So, as we enter 2019, what are the big themes that will shape the sector and how might companies transform and respond to this sense of growing volatility?

## Geopolitical wild cards

From a supply and demand perspective, the market is likely to remain over-supplied for the near term, maintaining a downward pressure on prices. As illustrated in **Figure 1,** supply in 2018 recovered and is estimated to outpace demand by a factor of ~1.6. The last time we witnessed a similar level was in 2014, where supply outstripped demand by a factor closer to 1.8.

In late 2018 Opec+ took the decision to reduce output by 1.2mn b/d for 1H2019. This is a positive step, but they may well have to prolong the period or even reduce output further.

On the supply side a number of wild cards need to play out. For one, the waivers applied in the case of Iranian sanctions will end in May 2019. Iran's oil exports have plunged from 2.8mn b/d in April 2018 to roughly 1.1mn b/d by the end of last year. If the US administration decides to renew the waivers and hence allow more supply onto the market, Opec's hand may be forced. If the waivers are not renewed, more Iranian crude is removed from the market. This may support prices but also paves the way for Opec to lift its self-imposed production constraints.

Issues also continue in Venezuela, with output expected to fall below 700,000 b/d in 2020 – having reached 2.2mn b/d in January 2018, according to the US Energy Information Administration (EIA). However, the global over-supply has rendered these declines less relevant than expected.

The most important geopolitical wild card on the supply side remains the US. The US is now the largest oil producer in the world, with output tracking at some 11.7mn b/d, up 14% in 2018. The EIA has forecast this will reach 12.1mn b/d in 2019. With current pipeline takeaway capacity constraints in the Permian Basin set to ease in the second half of this year, the impact of US oil on global markets will increase further. No doubt this supply outlook will also weigh on Opec's mind.

As for the demand side of the equation, weakening global economic growth, a slowdown in China and escalating tensions around a trade war are diluting oil demand momentum.

It may seem somewhat paradoxical that in an era of seemingly ample supply that the industry still faces the prospects of a 'supply crunch'. However, that remains an ongoing risk which could trigger a price spike.

The impressive achievements in cost reduction after the price crash in 2014 saw global exploration spend decline dramatically, by nearly 60% between 2014 and 2017 to reach \$65bn, according to Rystad Energy figures. As a result, not enough new finds are feeding into the hopper. Rystad Energy estimates the volume of conventional discoveries (liquids and gas combined) has been in decline in recent years, from 16bn boe in 2014 to 11.9bn in 2018.

The net result is an emerging supply gap, which Wood Mackenzie believes is likely to open up in the mid-2020s, reaching 3mn b/d by 2030 and 9mn b/d by 2035.

## Energy transition and transformation

As we move towards a low carbon world, 2018 saw some of the majors continue to position their portfolios and business models to prepare for the energy transition. Highlights included BP acquiring the electric vehicle (EV) charging specialist Chargemaster and looking to install fast chargers across its service station network. Shell was also in acquisitive mood, buying EV charging company NewMotion and completing its purchase of the UK power retailer First Utility.

Likewise, Total expanded its presence in the French electricity market with the completion of its takeover of alternative power supplier Direct Energie. It also announced the acquisition of G2mobility, which provides EV charging solutions.

There is a compelling logic to owning the electron as the world electrifies. However, these moves do raise the question about whether large oil and gas companies are well placed to succeed in this area? On the one hand they have very strong brands which will be critical in winning the trust of consumers. They also have a global footprint and the financial scale to deliver projects in a cost-effective manner. Additionally, they have prowess when it comes to energy trading.

However, margins are very thin in power retail and the need to own and manage the customer relationship is different to the CRM (customer relationship management) requirements of a typical forecourt customer, for example.

## Steering through 2019

There are five key areas that companies should focus on as they steer through 2019, transforming in response to market trends and the drive to a low carbon future.

### *1. Retain and embed the focus on capital discipline*

The industry must ensure its ethos of cost reduction is permanently embedded. The price slump late last year was a timely reminder of the need to retain focus and ensure organisations are fit-for-purpose at a much lower price point. To date this appears to be the case. CEOs have announced their intent to operate at lower break-even prices, such as BP aiming for its projects to break even at $40/b by 2021.

Moreover, capex spending, always a good benchmark for the health of the industry, is forecast to rise in 2019. However, this will be at the same relatively modest rate as the previous year of 8%, according to Barclays in its *Global E&P Spending 2019* report.

### *2. Invest in innovation to improve productivity*

The transformation of the US oil sector exemplifies how innovation can unleash productivity. But innovation will require investment, which may seem at odds with the point around capital discipline. Nevertheless, the reality is that cost reduction alone will not deliver growth.

When we look at R&D spend across a handful of leading international oil companies (IOCs) – BP, Chevron, ConocoPhillips, Eni, Equinor, Exxon, Shell and Total – overall spend declined by nearly 30% between 2013 and 2017, reaching $4.3bn. At an individual level, several companies substantially reduced R&D spend. For example, ConocoPhillips and Total cut investment in 2017 by nearly 15% versus the previous year, and Shell and Chevron by close to 10%.

If there are a few critical areas where operators should double down in coming years, R&D is one of them. Without constant technological innovation, companies will struggle to grow and operate more efficiently.

As for what type of technological innovation, clearly digital transformation boasts enormous potential. As highlighted in a previous PwC report,[1] with up to $1tn in estimated savings in capital and operating expenditures up for grabs over the next seven years, oil and gas companies that get a head start over their competition on digital innovation will have a distinct advantage.

Digital strategies include the use of drones, robotics, artificial intelligence (AI) and virtual reality to make drilling and exploration projects more efficient, speed up of resource recovery, lower labour costs and improved health and safety.

While each company's digitalisation template will vary depending on its market and positioning, companies should understand the value of making a bold move.

The good news is that the oil and gas industry has made strides recently in prioritising digitalisation – although it is not clear yet whether digitalisation is used frequently enough as the centerpiece of a growth strategy for the future.

### *3. Attract and retain the right talent to deliver growth*

In PwC's 2019 CEO survey, the availability of key skills was cited as the second-biggest potential business threat that oil and gas executives worry about, second only to commodity price volatility. In our discussions with senior executives, this complaint about a talent shortfall tends to be a proxy for frustration about not being able to find enough quality people with specific skills – from data scientists to software engineers – who could, for example, help implement a creative digitalisation strategy.

In order to implement a distinctive talent recruitment and development approach, oil and gas companies should create a competitive advantage through a more engaging people experience; provide a flexible workplace that encourages creativity and innovation; and use workforce analytics and talent management systems to provide a compensation structure that rewards inventiveness and places a (monetary) premium on gains from advances in specific priorities such as digital.

Figure 1: World oil supply and demand growth, year-on-year change, 2014–2018 (estimated)

*Source: IEA Oil Market Report 2018, PwC Strategy& research*

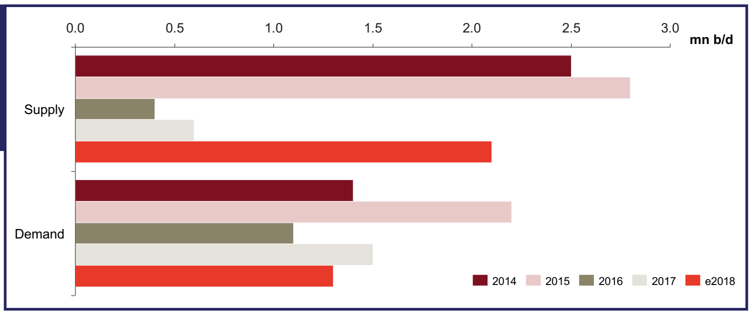


Figure 2: Strategic responses to volatile oil prices (selected examples)

*Source: PwC Strategy& research*

| Activity | Rationale & Comments | Degree of Activity for 2019 |
|---|---|---|
| • Transformational M&A | • Limited corporate plays to date across upstream (except Shell BG)<br>• Upstream wary of costs, debt and execution risk<br>• OFS more active in past few years with major mergers | |
| • Bolt on acquisitions / asset plays | • Tactical acquisitions<br>• Increasing focus on asset plays in recent months<br>• Strategic investments to boost reserves or build capabilities | |
| • Alliances | • Strategic alliances common method of achieving mutual benefits.<br>• More anticipated in 2019 as companies complement capabilities<br>• OFS use this to improve efficiency. Typically pre-cursor to M&A | |
| • Portfolio rationalization | • Opportunity to review portfolios and divest non-core assets<br>• Cash generative to support dividends<br>• PE will be a driver of deal generation | |

High Medium Low

Greater diversity should also be a focus with the industry – following the example of BHP Billiton in mining, which announced a target of 50% female workforce by 2025.

*4. Review and realign portfolios*

Given the ongoing oil price volatility, valuations of oil and gas assets can be challenging. Especially when it is not clear what the floor price is. Until there is a clear floor price established, it is difficult to see a wave of mergers and acquisitions (M&A) being triggered.

When considering portfolios there are essentially several broad plays, as highlighted in **Figure 2**. It is unlikely we shall witness many major transformational plays such as the Shell/BG acquisition. These are costly and risky to execute and difficult to demonstrate value creation aside from delivering cost synergies.

It is more likely we shall see smaller tactical acquisitions that reinforce existing capabilities or build new ones such as in low carbon energy. Other sources of deals will include mature basins, such as the North Sea. There we are witnessing a transition away from the majors to new entrants and frontier areas where independents are sitting on development opportunities but need to do deals to get access to capital. Partnerships and alliances are also an attractive option to create capabilities alongside other companies without incurring substantial costs.

*5. Develop an agile strategy*

Broadly speaking, we see three pathways evolving for oil and gas operators to consider:

- A gradual re-positioning to a low carbon world.
- A more radical exit from hydrocarbons with a focus on low carbon energy.
- A continued focus on hydrocarbons looking to optimise production efficiency over the medium term.

These are not 'do or die' choices; the world will still depend on fossil fuels meeting some 75% of energy demand by 2040, as noted by the International Energy Agency's (IEA) *World energy outlook 2018*. Moreover, demand for oil is forecast to grow, underpinned by petrochemicals and to a lesser extent aviation and heavy transport.

However, operators will need to adapt their business models to the impact of the energy transition if they are to deliver sustainable growth. For larger operators with financial scale and adjacent synergies they can, and should, position themselves for low carbon optionality. This may mean investing in renewables or focusing more on gas. For smaller players with limited financial resources, they need to focus on their core competencies, delivering oil and gas production as efficiently as possible.

## Challenges ahead

So, 2019 promises to be another year of change and upheaval. Supply and demand fundamentals are unpredictable and the oil price continues to be volatile. Underpinning all this is the relentless momentum of the energy transition.

To prosper for the long term operators will need to retain their discipline, drive innovation and nurture talent. All the time while developing an agile strategy that allows them to transform and navigate the energy transition. While we cannot be sure that all of the lessons from the 2014 downturn have been learnt, we can be confident that the industry is in a much better position to tackle these challenges in 2019. ●

1. *Drilling for data: the race to digitise upstream oil and gas*, PwC Strategy&, 2018.