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2022 oil and gas industry outlook

Oil and gas companies build momentum as they look to reinvent themselves

By now, close to 50% of the world's population has received at least one dose of the COVID-19 vaccine.[1] Corporates are finalizing their return-to-office hybrid plans. Global GDP is expected to recover fully by the end of 2021.[2] Oil demand, and thus mobility, is back to 95% of pre–COVID-19 levels, and oil has escaped its corridor of uncertainty of $40 to $60/bbl without impeding the energy transition. Oil and natural gas (O&G) companies couldn't have asked for more.

But O&G companies haven't sat still over the past year. Real change is occurring moving into 2022 as many companies look to reinvent themselves:

- Practicing capital discipline (global upstream capex is projected to increase by only 4% in 2021)[3]
- Focusing on financial health (debt reduction of 4% in 2021) [4]
- Committing to climate change as more North American O&G companies join their European counterparts
- Transforming business models

The positivity of such changes is reflected in our survey, where nearly two-thirds of O&G executives state that they are highly positive about the strategic changes made by their organizations.[5]

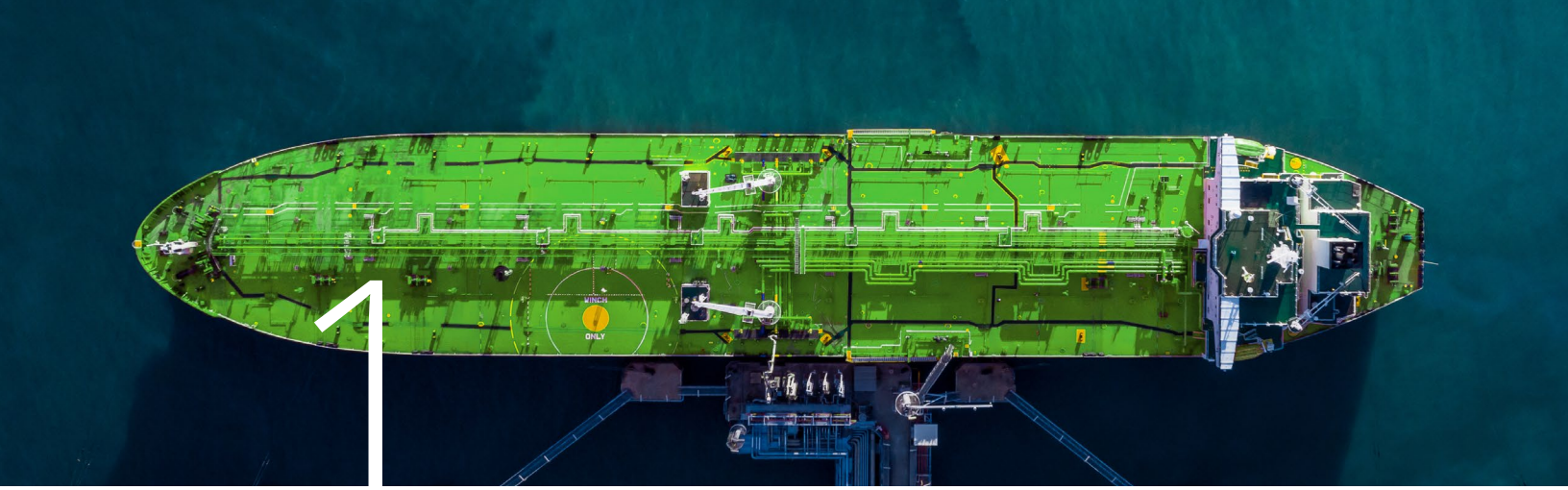
The journey of transformation has just begun for the industry, and simply managing or riding oil price cycles aren't options anymore. Over the next 12 to 18 months, O&G strategists should:

- Streamline and optimize their resource portfolios
- Embrace and develop smart goals for the energy transition
- Attract, train, and retain employees in a tight labor market
- Come to terms with additional environmental, social, and governance (ESG) requirements

Purpose-driven, tech-enabled, and human-powered organizations with smart interim goals and progressive communication and disclosure strategies can make it happen. There are five trends that will likely influence the direction of the industry over the next 12 months, from hydrocarbon producers to consumers of energy.

About the Deloitte survey

To understand the outlook and perspectives of organizations across the energy, resources, and industrials industries, Deloitte fielded a survey of more than 500 US executives and other senior leaders in September 2021. The survey captured insights from respondents in five specific industry groups: chemicals and specialty materials, engineering and construction, industrial products, oil and gas, and power and utilities.



Oil price impacts

High oil prices boost energy transition plans, challenging conventional wisdom

Oil prices have recovered to $80/bbl after turning negative in April 2020.[6] This escape from the corridor of uncertainty ($40 to $60/bbl) is significant, but conventional wisdom would suggest that at high oil prices, O&G companies display less capital discipline and would focus more on the core business than on new sustainability opportunities. Thus, it has often been assumed that high oil prices could slow the energy transition. But 76% of surveyed O&G executives state that oil prices above $60 per barrel will most likely boost or complement their energy transition in the near term. Let's look at why and how.

The current cycle of higher oil prices reveals two new trends, which will likely continue over the next year and challenge the conventional wisdom.

1. O&G companies these days are more disciplined with production and capital guidance, despite high oil prices. A fall in drilled but uncompleted shale wells (37% decrease between January 2020 and September 2021), flat production levels (projected increase of 2% to 3% in 2021), and debt reduction (projected decrease of 4% to 5% in 2021) suggest that the industry is no longer just managing the cycle.[7]

2. High oil prices are allowing companies to fund their net-zero commitments. For instance, after European O&G companies led in net-zero pledges in 2020, many US O&G companies, Canadian oil sands producers, and a few national oil companies (NOC) have joined the net-zero group in 2021.

A strong oil price enables investment in riskier and expensive green energy solutions, such as carbon capture, utilization, and storage (CCUS). Given that no single stakeholder can provide the necessary investment and absorb all commercial risks associated with building a CCUS industry, all participants in the entire O&G value chain (from EPCI, oilfield service (OFS), upstream, and midstream to downstream) become important, as they are involved in more than half of planned CCUS projects.[8]

However, each company will achieve and monetize this balance differently, creating a spectrum of companies that can be distilled into the four archetypes outlined in our recent report, *Oil and gas business in a low-carbon world.*

- *Net-zero pioneers* and *green followers* will most likely leverage this phase to aggressively fund their bold vision of making sustainability their core business.

- *Low-carbon producers* and *hydrocarbon stalwarts* will most likely monetize this period to optimize and decarbonize their hydrocarbon operations.

2

Mergers and acquisitions

ESG playing larger role in M&A transactions

Oil prices have been rising since the start of 2021, bolstered by recovering demand and capped supply from OPEC.[9] However, upstream M&A activity, which typically follows oil prices, remains well below prepandemic levels. The total count and value of US upstream deals during the first eight months of 2021 were 30% and 46%, respectively, down from the same period in 2019.[10] While the ongoing capital discipline of O&G companies is the primary reason behind the lull in upstream M&A activity, limited visibility of buyers (especially large companies) into the carbon profile of sellers or their assets is a growing factor.

Companies pursuing their net-zero goals are either looking to acquire low-carbon-intensity barrels or divest the high-intensity ones, implying that there might be an acreage consolidation or portfolio restructuring on the horizon. But a large resource size and an attractive offering price may not be enough to elicit a response from a buyer focused on meeting its net-zero targets. Therefore, M&A activities would need not only to be financially accretive, but also to support ESG goals. But only 12% of all upstream deals in the United States during 2021 year-to-date actually highlighted reduction in emissions, realization of decarbonization synergies, or improving ESG performance as one of their primary reasons.[11] What is limiting ESG's bigger role in due diligence for M&A deals?

This situation can be attributed to a variety of factors, such as lack of standardized reporting practices and inexperience in modeling ESG risks and opportunities into deal due diligence, among others. Around two-thirds of our survey respondents suggest that uniform reporting standards and guidelines, as well as clarity about the impact of ESG reporting on valuations, can help market participants in accelerating the adoption of ESG in M&A.[12]

Furthermore, advanced digital technologies, such as satellite imaging, blockchain, the Internet of Things, and data analytics can arm due diligence teams (including institutional investors, who have a decisive vote on mergers) with verifiable and auditable ESG information. Indeed, we have seen supermajors backing research projects with satellite operators, potentially as a way to ensure the validity of their emissions reporting.[13] Similarly, a strong ESG profile can be leveraged to defend against hostile takeover bids from buyers having a weaker ESG profile.

O&G companies should also seek to develop a holistic view of ESG beyond their operational focus and proactively engage with regulators for framing ESG rules. This would also involve offering feedback to the US Securities and Exchange Commission (SEC), which is potentially seeking to mandate ESG disclosures along with Form 10-K by the end of 2021.[14] Consequently, the dealmaking process under the energy transition would require O&G companies to establish a new equation for valuations that would consider both asset price and ESG profile. Such acquisitions would not only broaden the asset base, but also help buyers achieve their ESG goals more quickly and efficiently.

3

Oilfield services

Business models shifting to enable a new energy era

The oilfield service (OFS) sector had slashed costs and optimized operations to stay afloat even before the pandemic. Being traditionally dependent on upstream cycles, the sector is now likely to see a permanent structural shift as rapid energy transition shifts the scales of O&G revenues and spending. Not surprisingly, spending in OFS, which declined during the pandemic, is expected to remain about 25% below 2019 levels until 2025.[15] With margins at the mercy of another price cycle and reduced spending, many OFS companies are crafting a new strategy for the future of energy.

With a broadening decarbonization mandate across industries, companies have an opportunity to lead the way for customers by fully reengineering traditional OFS business models and solutions outside the traditional "oilfield" services and to other industries. How? Many large service providers have already diversified beyond core services. For instance, a large OFS company has restructured its business by making big bets on cloud and edge computing, whose rate of growth is expected to outpace that of their O&G business in a few years.[16] Similarly, Halliburton and Baker Hughes are partnering with startups and academic institutions, through their Halliburton Labs and Baker Hughes Energy Innovation Center, respectively, to accelerate technology development for diverse energy and industrial applications.[17]

However, digitalization will only help to a certain extent. The sector needs to get even leaner and greener. Providing integrated solutions for decarbonizing upstream projects, implementing subscription-based revenue models, or diversifying into the low-carbon space could be key enablers of the future OFS strategy. Rightly so, about 30% of executives surveyed believe that building capabilities in adjacent areas such as hydrogen and CCUS will help them thrive the most in the future.[18] Suppliers already have an advantage in leveraging subsurface and reservoir geology expertise and applying it to new emission abatement techniques like CCUS.

One example of this is a partnership between a large OFS company and a major cement manufacturer to develop and deploy CCUS solutions for cement manufacturing.[19] Companies could even diversify some O&G capabilities and replace up to 40% of their revenue by servicing renewable markets, according to Rystad Energy.[20] Already, OFS is just one of the segments in Baker Hughes' business, the others being energy machinery, hydrogen, CCUS, and digital tech.[21] Baker Hughes is also developing processes and technologies across the carbon capture value chain, including setting up the first global and full-scale neutral "blue" ammonia production plant in Norway.[22]

In bringing about fundamental transformation, partnerships, alliances, and consolidation appear to be gaining importance. Partnerships between OFS and tech companies have already become increasingly common; now the low-carbon or new energy rationale could become a dominant driver. In fact, 20% of OFS deals in 2021 involved a target company with operations in renewable energy, as compared with 5% between 2017 and 2020.[23] In the coming years, companies have huge scope to create a new charter for themselves by recreating their business profile, diversifying their work approach, establishing expertise in the low-carbon space, and exerting more control of their growth.

4

Fuel retailing

Convenience and experience supersede fuel as the new anchor to attract customers

The accelerated energy transition is driving faster adoption of electric vehicles (EVs), which could account for 50% of new passenger vehicle sales in the United States by 2030.[24] While major automakers are increasing EV production in the United States , some are also aiming to end the production of internal combustion engine vehicles by 2035.[25] Apart from the disruption created by the electrification of transportation, traditional fuels (diesel and gasoline) also face competition from other low-emission fuels, such as hydrogen, and renewable fuels. Renewable diesel production in the United States is expected to increase ninefold between 2020 and 2024, owing to favorable policies, strong consumer demand, and the conversion of existing petroleum refineries into renewable diesel refineries.[26]

Furthermore, the generational shift from baby boomers to millennials is changing the fueling preference of consumers from brand and price to convenience and user experience. According to a recent Deloitte fuel retail survey, convenience-led retailers are edging ahead of traditional fuel-led retailers.[27] Even high-income earners (annual earnings over $80,000), who account for the majority of revenues of fuel-led retailers, are also migrating toward convenience led-retailers.[28]

The interplay of the energy transition with changing demographics is creating a challenge for many fuel retailers, who must transform their operations to attract and retain a new generation of customers while also adapting to a changing fuel mix. A successful transformation strategy at this juncture would address both aspects of the challenge, as merely remodeling the infrastructure to accommodate new energy options would not be enough. Around two-thirds of our survey respondents view alternative fuel offerings, along with digital-driven customer engagement and experience, as a key requirement for transformation.[29] Even front-end operations of fuel retail outlets must be redesigned to focus on nonfuel offerings such as convenience stores, groceries, pharmacies, and curbside pickup of e-commerce products.

Consumers who regard customer experience as a key priority would also expect an improved customer experience to complement expanding product offerings. Leveraging digital technologies such as robotics, the Internet of Things, and artificial intelligence across front-end and back-end operations, along with digital channels, can ensure a delightful consumer journey across different touchpoints. One example is a smart gas station in China, where customers get a frictionless experience through an app that allows them to refuel their cars without stepping out.[30]

Developing strategic partnerships with technology companies can help by translating passenger mobility data into relevant customer insights. These insights can then guide strategy development for increasing footfall and dwell time in existing retail outlets while also helping finalize the location of new outlets.[31]

Similarly, partnerships with commercial fleet operators can help capitalize on the growing momentum of renewable fuels in the commercial trucking industry. Renewable diesel is gaining popularity over traditional petroleum-based diesel due to benefits such as lower cost, lower emissions, reduced engine wear, and state tax incentives.[32] Therefore, fuel retailers can offer targeted sustainable solutions such as renewable fuel sourcing agreements and vehicle maintenance services.

Eventually, companies that would be best suited to thrive during the energy transition are likely to be those that strive to move beyond fuel offerings by incorporating convenience as a core function of the customer experience and expanding to a full suite of products and services.

5

Workforce and talent

Greener jobs and differentiated benefits can help secure return and retention of workforce

The oil price crash of 2020 triggered the fastest layoffs (a total of 107,000 jobs) in the history of the US O&G industry.[33] Prices have nearly doubled since then, but only about 50% of lost jobs have come back.[34] Why? The cyclical hiring and laying off employees is adversely affecting the industry's reputation as a reliable employer, and a tenured, aging workforce (averaging 44 years) is reducing the available talent pool. Additionally, the mounting environmental mandate for O&G companies amid the world's transition to net-zero can magnify workforce challenges. In fact, even retaining those that have stayed back or those that rejoined could become a growing challenge.

Even for O&G companies with progressive strategies and healthy balance sheets, it would be difficult to differentiate themselves to the workforce in a tight labor market. Competition for top talent is strengthening not only within sectors such as construction or manufacturing, but also notably in sectors like technology. In Canada, a Calgary-based government grant program is offering free education to displaced energy workers with STEM backgrounds to absorb them into the technology industry.[35] So, how does the industry attract and retain skilled talent amid increased competition?

- The commitment to decarbonization could be the best recruiting pitch, but more than 75% of our survey respondents believe that flexible and agile workforce structures that empower remote, hybrid, and cross-border teams would help companies compete and retain talent in today's tight labor market.[36] Going beyond lucrative pay packages and the challenge of interesting work, they should rethink the value offered to the workforce. This includes:
  - Providing industry-leading health care and well-being
  - Developing a new charter of compensation benefits (e.g., bp's first-in-its-history share award program for all global employees, regardless of hierarchies or business)[37]
  - Developing agile workforce structures to directly match skills to projects, with reskilling programs and vocational trainings provided to reduce the skills gap

Building avenues for career growth through cross-skilling programs in the new energy space, creating an opportunity to foster and develop pathways for new roles such as carbon reduction analysts or emissions control officers

For companies with low-carbon goals, however, sourcing workers with green skills, or electricians and installers to deliver low-carbon technologies, is a struggle. As remote work structures necessitate technology innovation, upskilling the existing workforce becomes more important, as endorsed by around half of our survey respondents.[38] And while traditional roles such as geophysicists and petroleum engineers remain core to the business, new and evolving skills such as digital design, data science, design thinking, or cybersecurity are the needs of the hour. The dual imperative is clear: Organizations must build new strategies and align talent with new structures, and the workforce must meet the challenges of change and development.

Signposts important to watch as the oil and gas industry adapts to the changing landscape

The oil and gas industry has rebounded strongly throughout the year, with oil prices reaching their highest levels in six years. While the industry's recovery is better than expected, there still remains uncertainty over market dynamics in the coming year. The following signposts could help O&G companies determine their strategy and direction in 2022:

- **Recovery and changes in end-use consumption:** With the majority of the world's population expected to be vaccinated by early 2022, demand recovery and new trends in the demand mix, such as passenger versus commercial road fleet and business versus leisure travel, will be critical to watch.[39]
- **OPEC's strategy for rebalancing the O&G market:** Achieving stability in the oil markets requires continued cooperation and compliance between OPEC and other producers, who would seek to leverage oil production for balancing supply and demand.
- **Progress on net-zero goals and ESG disclosures:** While bold commitments to net-zero goals were made in 2020 and 2021, the initial impact of actions taken will be assessed in 2022. According to Deloitte's recent survey of financial executives in the energy and manufacturing industries, about 59% of respondents highlighted the development of ESG benchmarks, guidelines, and new metrics for reporting, along with quantifying climate-related costs and risks, as their key challenges.[40]
- **Regulatory and policy support:** The recently approved Infrastructure Investment and Jobs Act that allocates $7.5 billion for electric vehicles and charging infrastructure and $3.5 billion for large-scale carbon capture projects could provide the impetus for many green solutions.[41]
- **Bridge to a cleaner energy future:** While there are multiple pathways for lowering emissions, investments in bridge technologies between hydrocarbons and renewable energy solutions (e.g., hydrogen, CCUS) will be important to watch.

The choices O&G companies make and the trends they prioritize will decide the path forward and reverberate in their decision-making through the coming decade.

Let's talk

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