COMMENTARY

THE FUTURE OF OIL AND GAS: THE WRITING IS ON THE WALL

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Marakon
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SUMMARY

Renewables will take an increasing share of global energy supply over the next decades. And as they become more economical, they will displace carbon-based energy sources over time. While carbon-based energy and chemical production will still increase to support global growth, demand volume is set to decline within long-term oil and gas (O&G) planning horizons. It is no longer a question of whether renewables will begin to replace traditional sources of power and chemicals but when.

The O&G industry is in transition and O&G players need to decide what markets to focus on and how to win in the future by leveraging current assets and capabilities. Success will depend on: (1) choosing the path forward that best fits with the company's starting position, and aligning organisation and resource allocation, (2) building a stakeholder coalition to execute without painting the company into a corner, and (3) monitoring trigger points for strategic shifts to adjust investment focus and sequencing along the way.

ONE SCENARIO FOR THE FUTURE: THE 10-YEAR VIEW

While some specifics of the unfolding energy transition remain opaque, fundamental shifts and trends that shape the O&G outlook have largely moved beyond debate:

- The world will transition to alternative energy in a non-uniform fashion, with developing countries lagging developed countries and choosing energy mixes that reflect local techno- and socioeconomics.
- Renewables with competitive costs and improving energy storage options are displacing conventional energy sources at scale and pace.
- Given its low cost, coal will remain a main source of energy for some time with gas providing a key alternative, especially for peak-balance supplies where regulation is favourable. Nuclear will maintain its share in the future energy mix, given progress with safer and small reactors.
- The race between electricity, ammonia and hydrogen is still on, but the window of opportunity for the latter is closing. Competition for supplying chemicals feedstock is growing, including from renewables. The circular economy will likely not offset growth in demand for chemicals.
- Super majors will continue to 'optimise' economically feasible production sources within existing portfolios; however, their exploration success will gradually decline to a point where they require reserves currently held by national oil companies (NOCs).
- While NOCs have first right to national oil reserves and are here to stay, potentially to the 'end,' developing countries continue to allow exploration and production (E&P) access to super majors and others at a price.

INDUSTRY OUTLOOK DRIVERS TO WATCH

In addition to current market dislocations and volatility, three forces may accelerate the trends that underpin the 10-year-view scenario:

1. **Policy:** Global ambitions to reduce greenhouse gas (GHG) emissions underpin government action in the form of regulation and taxation that will either simply limit the role of the O&G industry or make the industry less competitive; at the same time, governments can be partners in a transition.
2. **Direct Market Forces:** Entrepreneurial activity and innovation supported by subsidies are driving cheaper supply of renewable energy and chemical feedstock, partly to meet the sustainability objectives of customers and partly independent of it, as the cost of production continues to drop.
3. **Investibility:** Large investment funds are diverting capital away from companies that do not meet strict environmental, social and governance (ESG) criteria, which will likely drive up the cost of funding for the O&G industry in the medium to long run.

FUTURE PLAYS TO LEVERAGE CURRENT SOURCES OF ADVANTAGE

The O&G industry is in transition and each of its players will need to decide in which markets they will participate and how they will compete under changing conditions. Sustainability will be a key consideration with regard to both which resources to focus on, and how to extract those resources and bring them to market. As shown in Exhibit 1, there are fundamentally only six plays for O&G players.

MATCHING FORWARD PATHS TO STARTING POSITIONS

The starting position for O&G players in terms of current assets and capabilities (especially access, technology and balance sheet strength) will inform what macro strategy alternatives are realistically available to them in the medium to long term.

Exhibit 1: Perspective on Forward Paths Available to O&G Companies

	Future Plays	Likely Candidates
1	Long-term Global O&G Supply • Able to access advantaged resources and win with technology • Continue exploration and acquisitions globally and focus on costs • Focus on key customers and building coalitions for public support	1. O&G Super Majors 2. NOCs with low costs 3. Merging O&G Majors
2	Long-term Regional O&G Supply • Trim back to plays that fit with regional resource landscape and logistics • Continue exploration locally, make selective acquisitions and focus on costs • Focus on key customers and building coalitions for public support	1. Focused O&G Majors 2. Focused, Medium-sized NOCs
3	EXP or End-Of-Life Specialist • Build out competitive advantage in exploration or end-of-life production • Use of ‘open’ EXP approaches; build safe cost advantages in end-of-life • Make selective acquisitions of acreage/late life assets	O&G Specialists
4	New Energy/Materials Resources • Advance into new arenas, e.g., renewable energy/materials, even if ‘late’ • Shift portfolio at pace, securing upside from acquisitions with ‘strings of pearls’ • Leverage current sources of competitive advantage: access/technology	1. O&G Majors 2. O&G SMEs 3. Small NOCs (w/o Gov’t support)
5	National Economy Transformers • Advance into new arenas relevant to the national economy • Shift portfolio at pace, supported by government policy/subsidies • Leverage best local talent and exploit local markets with supply gaps	NOCs
6	Exit via Sale/Wind Down • Identify the best point of exit vs. value preservation via wind down • Build shareholder/stakeholder support for chosen path • Secure advantaged divestiture capability and personnel for the long wind down	1. O&G SMEs 2. Small NOCs (w/o Gov’t support)

Source: Marakon analysis and company reports

In addition, the role that individual companies play in national economies and the countries' dependence on O&G players to diversify and transition their economies, will shape the set of opportunities. Even resource-rich enterprises may lack support to transition, and in other instances stakeholder influence will drive companies that could play 'to the end' to transition.

Taking a view on the optimal path forward will be essential to protect the value of producing assets, development assets and assets to be developed.

Exhibit 2 provides a perspective on the macro alternatives for different types of players and what a company would have to believe to choose a specific macro forward path.

Larger NOCs with highly competitive resources will likely play a big role for a longer time with the option to transform themselves into international oil companies (IOCs). Medium-sized NOCs with less competitive resources may merge with larger entities or take on a changing role in their local and national economies.

Exhibit 2: Perspective on Forward Paths Available to O&G Companies

Company Types		Forward Path Options	What You Would Have to Believe
Super Majors		1 Play to the end/acquire assets and companies	Sufficiently large to access advantaged resources and win with technology relative to large NOCs
Majors and Medium Sized	Linked to size/asset positions	1 Get large (with M&A)	Get into the league of Super Majors to play to the end
		2 Focused value chain play	Identify a niche profitable market/product with secure molecule offtake (own the chain end-to-end)
		3 Transformation/sector exit	Clear path to using existing assets and capabilities in new lines
		4 Exit via sale/merger	Assets of greater value to another company due to synergies
		5 Wind down assets/company	Assets unattractive to other industry players
Small		1 Specialist play	Can identify a clear source of sustainable competitive advantage, e.g., exploration or end-of-life EOR
		2 Sell assets/company	Company/assets of greater value to another company than to current shareholders
		3 Wind down assets/company	Assets unattractive to other industry players; production still valuable to shareholders
NOCs	Linked to size in economy/asset positions	1 Play to the end/acquire assets and companies	Sufficient scale, funds to compete
		2 Transform the economy	Depending on societal imperative, i.e. not a company decision, ability to transform company, economy
		3 Exit via sale	Depleting and increasingly uncompetitive resources; too small to national transition

Source: Marakon analysis and company reports

IOC super majors will continually 'optimise' towards economically feasible production sources, building on their existing advantaged portfolios, technology and access to capital to compete with NOCs. Investments behind renewables may be seen as a distraction.

Without a clear source of competitive advantage, medium-sized and smaller O&G players will lose their right to play faster than IOCs, unless they focus on select value chains or value-adding capabilities. They will need to carefully plan how to protect the value of molecules in their portfolio, transition to new business models and/or exit via a sale or merger.

CHOOSE (OR FIRM UP) A FORWARD PATH

While some players appear already committed to a specific forward path, others remain on the fence. Resources allocated to facilitate transformation are still limited relative to the challenges ahead.

For the most part, the hard work to determine what forward path will preserve or grow value still needs to be addressed. It requires taking a view on where profit pools will open and when, and at what point in time to pivot, if feasible, given sources of competitive advantage.

Being too early (e.g., making major bets on carbon capture and storage (CCS) or hydrogen) may be as expensive as being too late (e.g., jumping on the solar and wind bandwagons). Executives, boards and investors should be wary of lofty promises of returns and potentially expensive forays into new arenas where others may already hold unassailable competitive advantage.

Choosing the optimal forward path requires executive and board alignment around five hard questions:

1. **View of the Future:** What is our outlook for the industry and the value of our assets and capabilities under different scenarios—near, medium and long term?
2. **Strategy Alternatives and Choices:** What strategy alternative do we pursue given our outlook and existing assets and capabilities? How do they stack up for investors against the strategy currently pursued? Which do we choose and why?
3. **Future Trigger Points:** What are the trigger points for shifting our portfolio within and/or away from oil and gas? When do we expect them to occur, and how will we recognise them?
4. **Resource Allocation:** What does this imply for where and how we allocate our resources (people, time, assets and capex) today and over time?
5. **Coalition Building:** How do we manage through any transition, internally and externally, to retain stakeholder and shareholder support?

HOW TO EXECUTE

There are four areas to deliberately drive and safeguard success, independent of the chosen path:

1. **Government Support/Access:** Ensure support for the chosen path forward, including subsidies and advantaged access to resources and capabilities.
2. **Stringent Investment:** Update management processes and standards to use the balance sheet in support of exploiting key assets and shifting towards growing value chains and future platforms.
3. **Technology:** Stay out in front of the innovation and idea frontiers that will underpin future plays and success, ensure coherence and sequencing of investment, and scale back from legacy plays.
4. **Balancing Value and Dividends:** Update the equity story as necessary, but do not move aggressively away from the balance between value and dividends that the company has historically offered; be cognisant of investor-base needs.

CONCLUSION

Wherever you are in setting your forward path, continuous consideration of the questions set out above and ensuring focus in execution is critical to ensure value is protected—if not grown for the long term.

In a follow-on Commentary, we will elaborate on how O&G players can successfully transition to renewables by leveraging current assets and capabilities.

Written by:
Johann Franke
Director, London
jfranke@marakon.com
+44-20-7664-3682

ABOUT MARAKON

Marakon is a strategy and organizational advisory firm with the experience and track record of helping CEOs and their leadership teams deliver sustainable profitable growth. We get hired when our client's ambitions are high, the path to get there is not clear (or taking too long) and lasting capabilities are as important as immediate impact.

We help clients achieve their ambitions for sustainable profitable growth through:

- Stronger strategies and advantaged execution based on:
    a. A better understanding of what drives client economics and value
    b. Insight into changing industry dynamics and the context in which clients need to succeed
- A stronger management framework to generate better ideas and link decisions and actions to value
- A stronger organization with a more focused top management agenda and well-aligned resources
- A more confident and effective leadership team that's focused, decisive, and strategic

We have a joint team delivery approach where client ownership and engagement is paramount. Partners are highly engaged in the work product and supported by strong analytical and industry relevant capability. We work as advisers and catalysts in close, trust-based relationships with top management teams.