

Oil and gas bouncing back – need for further acceleration to grow green shoots

October 2021

By Manas Majumdar, Partner, Leader -- Oil and Gas and Chemicals, KPMG in India

(6 min read)

Key takeaways:

- *Oil and Gas sector is bouncing back, and the prospects are positive. This positive momentum needs to be maintained and sustained; three-dimensions need to be focused on –*
 - *enhancing self-reliance through increased domestic oil and gas production*
 - *digitalising oil and gas downstream supply chain to bring in efficiencies to customers*
 - *and reinventing to decarbonise the hydrocarbon value-chain and be forward-looking.*

The past year or so, has not been kind to any country and definitely not to India as the second wave of COVID-19 ravaged the country. The oil and gas sector has not remained unaffected – petrol sales dropped by ~7 per cent in FY21 from FY20 and diesel consumption (which is a key indicator of freight and economy) was affected even more with a drop of 12 per cent from pre-COVID-19 FY19-20.¹

The immediate shocks to the sector from internal demand drop and external price impact have put a dent on its growth prospects, that too just as the country was aspiring to return to its secular and more importantly sustainable growth trends of an energy hungry and fast-growing nation. This would require a comprehensive and forward-looking plan for the sector across its value chain and even beyond.

Fortunately, it seems that we have started to turn the corner – results from the last quarter (Q1 FY21-22) indicate that petrol sales have grown 35 per cent not only from Q1 FY21, but also that in Jul'21 sales were just about 4 per cent higher than Jul'19, matching pre-COVID demand levels. There is potential cheer even for one of the harder hit segments of aviation, where passenger traffic has increased by 137 per cent in the month of July'21 as against during July'20.² All these indicate that the sector is bouncing back. The question then is - how high will it go? And the answer will depend on how well it secures its present across the sectoral value chain and builds for the future beyond oil and gas.

Enhancing domestic energy security – focus on exploration and production

The first part of securing the present lies in securing our own energy requirements. In the past few years, The Ministry of Petroleum and Natural Gas (MoPNG) and The Directorate General of Hydrocarbon (DGH) have undertaken many reforms and put in significant effort in burnishing India's image on ease of doing business; that said, it has not led to major overseas investment in India.

Some key pointers that can accelerate India's energy self-reliance through improved exploration and production (E&P):

The information contained herein is of a general nature and is not intended to address the circumstances of any particular individual or entity. Although we endeavour to provide accurate and timely information, there can be no guarantee that such information is accurate as of the date it is received or that it will continue to be accurate in the future. No one should act on such information without appropriate professional advice after a thorough examination of the particular situation.

© 2021 KPMG Assurance and Consulting Services LLP, an Indian Limited Liability Partnership and a member firm of the KPMG global organization of independent member firms affiliated with KPMG International Limited, a private English company limited by guarantee. All rights reserved.

- Free up oil and gas pricing entirely, including in the residual parts where price remains controlled for natural gas
- Bring the sector into the GST ambit (in particular, natural gas needs to be brought on priority) to prevent breaks in the GST chain and the corresponding inefficiencies
- Bring a suitable Production Linked Incentive (PLI) scheme for the oil and gas sector. The current PLI scheme of the Central government, while suited for manufacturing, needs to be customised for E&P
- Ensure easy extension of tenure of E&P contracts without onerous terms (and incentivise them for additional production during the extended life)
- Revisit the PSU operating structures to make them nimble and efficient as asset managers and induct private sector partners to enhance production and oil recovery

In fact, there may be a cause to open the sector entirely to new capital, new ideas and indeed, a new India.

Digitalising and bringing efficiencies – focus on refining and marketing

Consumers are increasingly becoming more versatile and savvy to the spectrum of fuel choices – liquid fuel, gas, bio-fuel blends and electric. With this evolving and dynamic customer preference, fuel retailers also need to bring in flexibility through multi-fuel offerings and non-fuel streams, both in amenities and services. The ability to manage such a varied portfolio of offerings (and in future to be able to provide localised/personalised offerings) requires significant data analytics and digital processing to meet customer demands effectively.

In addition, such a complex product-market supply chain necessitates a digital transformation of the classical route-to-market approach to a much more optimised solution that matches available energy supply options (own or third party) to differing consumptions and energy mix choices. It is also important to embellish this supply chain optimisation, with an overarching view through setup of integrated command and control centres (from refinery gate to retail outlet), such that profitability can be maximised across the chain.

Of course, as we digitalise to accelerate efficiencies and to address supply chain complexity, we need to ensure all safeguards are put in place for this information technology - operational technology (IT-OT) convergence in terms of pro-active cyber security protocols. This is essential for a sector such as oil and gas and hence becomes synonymous with national security.

Reinventing for the future - decarbonising the oil value chain

Now while the above steps will ensure a long runway for oil and gas companies, it is also imperative that they pivot towards the inevitable low-carbon future. There are already heightened sensitivities on environment and climate, and sustained pressure from stakeholders.

The first step towards decarbonisation can be by building a circular economy in production and usage – this is already being done in some petrochemicals. Accordingly, the refining slate needs to be re-designed or modified for maximum flexibility to make inter-fuel choices without significant challenges or disruptions as markets shift away from fuels such as diesel, ATF, LPG etc. over time. The decarbonisation strategy would also require a push towards a more direct oil-to-chemicals route, maximising chemicals more than liquid fuels.

Also, as more efficient, and focused yield refinery capacities come into place, it will be critical for older and inflexible refineries with higher energy intensity and emissions potential, to be phased out. In addition,

The information contained herein is of a general nature and is not intended to address the circumstances of any particular individual or entity. Although we endeavour to provide accurate and timely information, there can be no guarantee that such information is accurate as of the date it is received or that it will continue to be accurate in the future. No one should act on such information without appropriate professional advice after a thorough examination of the particular situation.

refineries need to enhance their green energy usage for both energy and feedstock requirements, including for renewable energy and green hydrogen over the next decade, while further scaling up production of biofuels for blending in transport fuels.

So to conclude, while the oil and gas sector is already on the path to revival to pre-COVID-19's demand levels, the key point to note is that **a 3-D reinvention is required** for the sector to take it to new levels through **focus on domestic self-sufficiency, digitalisation across the value chain and move to decarbonisation**. These three dimensions will lay the foundation for the sector to adopt new technologies for transitioning to a low-carbon world and ensure affordable and sustainable access to energy across India. The first step towards accelerating these use cases for energy transitions will be to ensure a level regulatory playing field and to enable strong public-private collaboration in low/no-carbon investments – the time to put the pedal to the metal is now.

For more on this, read KPMG in India's publication [ENRich 2020 : The Net Zero Future](#)

¹ Petroleum Planning & Analysis Cell, Ministry of Petroleum and Natural Gas (MoPNG), accessed on 21 September 2021

² Petroleum Planning & Analysis Cell, MoPNG, accessed on 21 September 2021