MANAGEMENT'S DISCUSSION & ANALYSIS

BUSINESS ENVIRONMENT & OUTLOOK

Economy

The year 2019 saw the global economy as well as the Indian economy slip into lower growth. Global economic growth dropped to 2.9% in 2019 from 3.6% in 2018. As trade tensions eased towards the end of 2019, there was expectation of a fragile recovery in 2020. However, the emergence of COVID-19 pandemic in the first quarter of 2020 resulted in unprecedented lockdowns across the world, adversely affecting the global economic growth. The IMF, in its baseline scenario, expects the global economy to contract by 4.9% in 2020. It had last contracted by 0.1% at the depths of the worldwide financial crisis in 2009.

For India, the GDP growth plummeted to 4.2% in 2019-20, from 6.1% in 2018-19. The growth in the first three quarters of 2019-20 was slower on account of a slowdown in manufacturing and investment, along with the NBFC crisis weighing in on financing conditions. It was adversely affected by the COVID-19 crisis in the last quarter, with the country entering into a nationwide lockdown. Due to the extended lockdown till May, economic activity came to a halt in the initial months of the current fiscal and started catching up again with the lifting of the lockdown in phases thereafter. However, it will take time to overcome the massive and unprecedented hit from COVID-19.

INDUSTRY STRUCTURE & DEVELOPMENTS

Global Energy Scenario

The growth of global primary energy consumption slowed to 1.3% in 2019, less than half that of 2018 (2.8%). Renewables contributed 41% of the increase in energy demand, the largest among energy sources, followed by natural gas. Apart from nuclear energy, all fuels grew at a slower rate in 2019 than their 10-year average.

The growth in primary energy demand was driven by China, which accounted for more than three-quarters of net global growth, while India and Indonesia were the other two largest contributors. US and Germany posted the largest declines in energy terms.

Carbon emissions from energy use grew by 0.5%, which is less than half of the 10-year average growth of 1.1% per year.

Oil

Global macroeconomic growth was impacted during the year by trade tensions and other geopolitical issues, leading to a slower growth rate in oil consumption. Global oil consumption in 2019 increased by 0.8 million barrels per day (mb/d) to 99.8 mb/d for the year, growing at 0.7% compared to 1.0% in the previous year.

In the first quarter of 2020, the negative impact of COVID-19 further brought down global oil demand to 93.3 mb/d, a decline of 5.6 mb/d compared to the same quarter in 2019.

Global oil production remained flat at 100.5 mb/d, but exceeded demand with rising oil production from non-OPEC countries, especially US, offsetting the loss of oil supplies from Iran. Crude oil prices averaged at $64 per barrel (Dated Brent) in 2019, a 9% decrease from those of 2018.

Natural Gas

The growth of natural gas consumption too slowed down in 2019, with an increase of 78 billion cubic metres (bcm), or 2.0%, compared to a higher growth of 5.3% in 2018. The increase in gas demand was driven by the US (27 bcm) and China (24 bcm).

Gas production grew by 132 bcm in 2019, or 3.4% year-on-year, with the US accounting for most of the increase (85 bcm). US natural gas production grew by 10% from the 2018 level.

Global LNG supply grew at a record of 12.7% year-on-year in 2019 (+54 bcm) driven by record increases from the US (19 bcm) and Russia (14 bcm) as well as continued growth from Australia (13 bcm), plunging the market into over-supply. In 2019, due to a combination of factors, including lower gas demand in Asia, a recovery in Japan's nuclear power production, larger global supplies of LNG, mild global temperatures and increased US production, gas prices in the global markets fell by a far bigger amount than crude oil prices. Henry Hub prices decreased by almost 20% to $2.53/mmbtu in 2019 from $3.13/mmbtu in 2018. Asian spot prices too declined to $5.49/mmbtu in 2019 from $9.76/mmbtu in 2018 on the back of global LNG over-supply, declining demand in Japan and Korea, and a slowdown in Chinese imports.

DEVELOPMENTS IN THE INDIAN ENERGY SECTOR

With the Indian economy growing at a steady pace over the years, the energy demand too had been growing steadily. In fact, it was way ahead of the global average. In the longer term, India is expected to emerge as a bright spot for global energy demand growth.

The oil & gas sector is among the eight core industries in India and plays an important role in influencing decision-making for all the other important sectors of the economy.

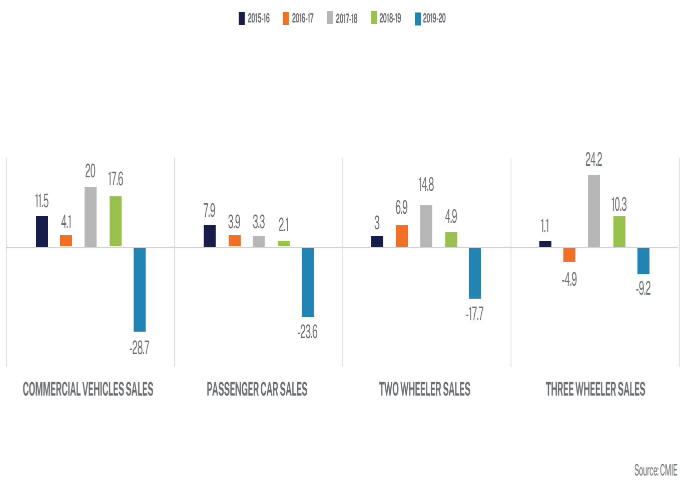
Oil

India's petroleum products consumption had been growing at a healthy CAGR of 5.2% in the last five years (2014-15 to 2019-20). In 2019-20, consumption growth slowed down to 0.2% from 3.4% in 2018-19. Consumption in 2019-20 was 213.69 MMT as compared to consumption of 213.22 MMT in 2018-19.

During the period April 2019-February 2020, petroleum products consumption grew at a modest 2.0% year-on-year. But the demand slowed down significantly in the latter half of March 2020, with the implementation of a nationwide lockdown in the face of the COVID-19 pandemic, leading to a steep decline of 17.8% during the month. Restrictions on movement of people and goods, as well as slowdown in industrial activity affected the demand of petroleum products in all sectors, including manufacturing, aviation, transport, tourism, hospitality, e-commerce and real estate. This sudden sharp reduction in demand affected the overall growth of POL consumption for the year 2019-20.

Motor Spirit (MS or petrol) consumption grew by 6% in 2019-20 as compared to 8.1% in the previous year. High Speed Diesel (HSD) consumption declined by 1.1% in 2019-20 compared to a 3.0% growth in the previous year. In fact, HSD registered negative growth in 2019-20 after five years of positive growth. Apart from lower sales in March 2020, persistent slowdown in the automotive industry, with falling sales and piling inventory, contributed to the overall decline in MS and HSD sales. Slowdown in the economy, problems in financing vehicle after the NBFC crisis, increase in insurance cost, and anticipation of BS-VI transition from April 2020 were among the factors that led to the poor performance of the automobile industry.

DOMESTIC SALES GROWTH RATE (% Y-O-Y)



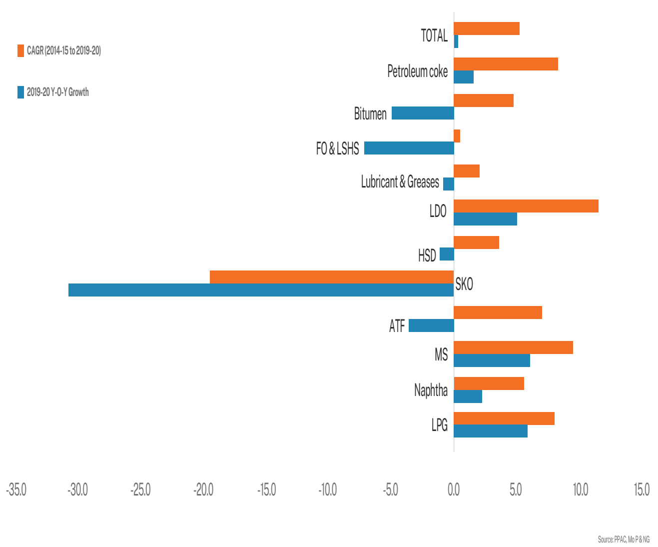
Source: CMIE

In July/August 2018, the Government had increased the axle load limit for all trucks. This move helped increase the freight capacity of the entire population of trucks in India by 20-25%, equivalent to three years of incremental freight demand, thus negatively impacting HSD demand.

The civil aviation sector was the worst hit due to the pandemic, resulting in fall in ATF demand by 32.4% in March 2020. ATF sales had also endured the effect of grounding of Boeing 737 Max and closure of Jet Airways earlier during the year 2019-20. The overall ATF demand fell by 3.6% during the year.

While LPG consumption continued to grow, it was lower at 5.9% in 2019-20 as compared to 6.7% in the previous year. Other products that contributed to the overall POL growth during the year were naphtha (2.2%), light diesel oil (5.0%) and petcoke (1.5%), whereas sales contracted for bitumen (-4.9%), furnace oil & low-sulphur heavy stock (-7.2%), lubes & greases (-0.8%) compared to the previous year.

GROWTH IN DEMAND OF POL PRODUCTS (Percentage)



Source: PPAC, MoP&NG

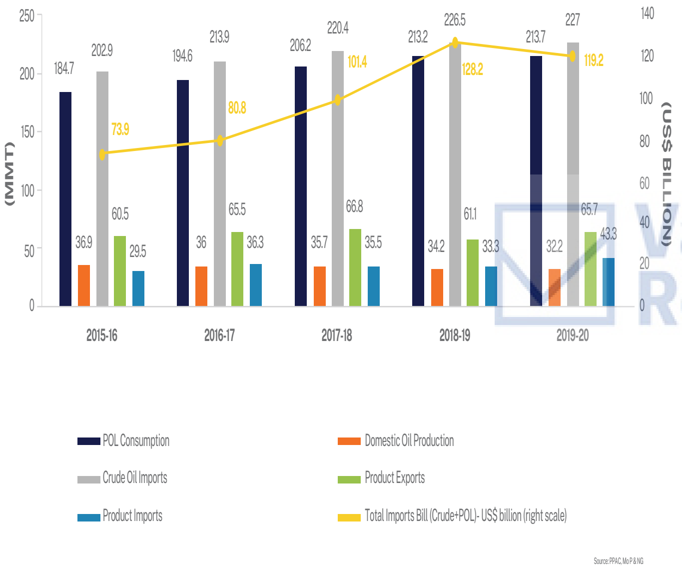
Domestic crude oil production during 2019-20 was lower by 5.9% at 32.2 MMT, as the diminishing phase of many fields continued. Crude oil and condensate production by public sector entities decreased by 2.5% while production by private sector entities decreased by 14.5% in 2019-20 as compared to the previous year. However, improvement in production levels is expected in the near future with the Government's thrust on ramping up domestic production through investment-friendly policies.

Indian refiners processed 254.4 MMT of crude oil in 2019-20 as compared to 257.2 MMT in 2018-19, a decline of 1.1%. Cheaper, high-sulphur crudes to the extent of 75.5% were processed during the year.

Crude oil imports registered 0.2% growth over the previous year in quantity terms, rising to 227 MMT. In value terms, the crude oil import bill was US$ 101.4 billion during the year compared to US$ 111.9 billion in 2018-19. POL products imports increased by 29.9% during 2019-20 to 43.3 MMT as compared to 33.3 MMT in the previous year, while their import bill rose from US$ 16.3 billion in 2018-19 to US$ 17.9 billion in 2019-20. The rise was due to increase in imports of all products except naphtha and aviation turbine fuel (ATF). The total import bill of crude oil and products for the year 2019-20 was US$ 119.2 billion, down from US$ 128.2 billion in the previous year.

Exports of POL products increased by 7.5% to 65.7 MMT in 2019-20 from 61.1 MMT in 2018-19 primarily due to increase in exports of naphtha and HSD. However, in value terms, products exports decreased to US$ 35.8 billion in 2019-20 as compared to US$ 38.2 billion in 2018-19.

OIL SUPPLY-DEMAND TREND IN INDIA



Natural Gas

India's natural gas consumption during the year increased to 63.9 billion cubic metres (bcm), registering a growth of 5.2% as against a growth of 2.8% in the previous year. On the supply side, gross natural gas production during the year was 31.2 bcm, 5.14% lower than that of the previous year. LNG imports rose by 17.2% to 33.7 bcm during the year, from 28.7 bcm in 2018-19. LNG demand saw a surge due to fall in spot prices, leading to increased buying.

Despite the near-term challenges due to the pandemic, gas volumes are expected to rebound owing to the large-scale rollout of city gas distribution (CGD) networks, setting up of fertilizer plants, expansion of pan-India trunk pipelines network, the proposed launch of a gas trading hub, and the Government's thrust on a gas-based economy.

OUTLOOK: A CHALLENGING TIME AHEAD

The COVID-19 pandemic that started unfolding in December 2019 began impacting demand since the beginning of the year and has caused prices to fall significantly. Consequently, the market remained over-supplied since February 2020. By the end of March 2020, the global road transport activity was almost 50% below the 2019 average and aviation business was below 60%. In April 2020, fuel demand is estimated to have plummeted by a record 21.8 mb/d year-on-year. As per IEA projections, oil demand in 2020 is expected to fall by 7.9 mb/d, the largest in history, before recovering by 5.3 mb/d in 2021.

ANNUAL : GLOBAL OIL SUPPLY & DEMAND (in mbpd)

In the backdrop of over-supply, OPEC nations and Russia failed to reach an agreement on production cuts in early March, thereby causing crude oil prices to fall sharply by about 30%. On 11th April, OPEC, Russia and other oil-producing nations finalized an unprecedented production cut of 9.7 mb/d effective from May 2020.

However, even the announcement of a deep cut in production by OPEC+ could not comfort the market over concerns of economic slowdown, increasing travel restrictions, lockdowns to contain the spread of COVID-19, oversupply and lack of storage capacity, which led to the crash of oil prices in April 2020. U.S. crude oil futures turned negative on April 20, 2020 for the first time in history, as traders sold heavily because of rapidly filling storage space at the key Cushing, delivery point in Oklahoma.

Brent prices averaged at $23.3/bbl in April 2020, falling by almost 30% from the March average of $33/bbl and by almost 64% from the yearly average of $64/bbl in 2019. However, the price recovered in May and continued in the range of over $30/bbl.

Global gas prices too fell to a record low as there was no end in sight to the supply glut. Henry Hub natural gas price for the month of April 2020 was down to $1.74/mmbtu from a yearly average of $2.57/mmbtu in 2019. Ample LNG supply, coupled with demand destruction, is expected to keep prices at record lows in the year 2020.

Refineries too felt the pinch as product demand dried up, and capacity utilization was down to about 50% globally.

The COVID-19 crisis is posing many challenges with significant impact on economic activity, corporate profitability, investments and capex plans during 2020 across sectors, which will lead to tepid domestic POL demand in the immediate and short-term. However, in the long run, India is likely to return to its growth trajectory and provide many opportunities as a global manufacturing hub. Besides, given the low level of per capita energy use in the country, raising the energy access bar will require increase in energy demand. However, the need for cleaner and greener energy solutions has never been so relevant; so, India in the long run will require more energy but less carbon.

Despite the uncertainty related to COVID-19, IndianOil's fundamentals remain strong and the Company is expected to follow a robust growth trajectory in the future.

INDIANOIL - LEVERAGING ITS STRENGTHS

IndianOil is one of India's most trusted national brands with a strong pan-India presence as an energy supplier. This hard-earned brand equity is a manifestation of the trust and patronage of millions of its customers. During the COVID-19 crisis, the Company once again demonstrated its deep commitment to its customers and the robustness of its supply chain infrastructure.

The Company has a stronghold over the petroleum downstream sector in India, being a market leader in oil refining, pipelines and marketing space. As a testimony to the robustness of its supply chain, the Company went ahead with its countrywide implementation of BS-VI fuels ahead of the impending national lockdown and completed it a fortnight ahead of schedule, on March 16, 2020.

During the lockdown months, the Company enhanced LPG supplies through a combination of enhanced imports and ramping up of secondary units to maximize LPG yield to meet consumer demand even as its own refineries were running at much lower rates due to lower overall demand.

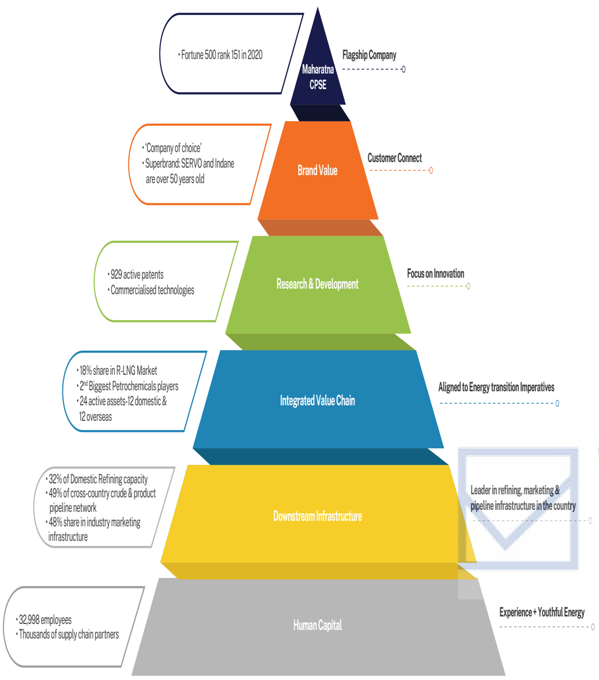
While oil refining and marketing continue to be its core businesses, the Company has taken major initiatives to achieve vertical integration and diversification for value addition. With upstream integration ratio of over 5.0% currently, production from the Company's oil & gas assets is on the rise. The Company is now a major player in the downstream petrochemicals business, which is a major value-driver. It also has growing presence in the natural gas value chain in India. Diversification into areas such as fertilizers is also reshaping the Company's business profile. The Company has also been an early investor in the renewable energy space, with a growing portfolio.

The Company has a renowned Research & Development set-up, which works hand-in-hand with its business verticals for creating research-backed products and technologies, besides being a key strength as the Company charts its path in new energy domains.

The Company has about 33,000 employees who run its countrywide and overseas operations. With over 8,000 of them under the age of 30 years, the Company's manpower has strengths of both experience and youthful energy.

While the Company's core business of refining and marketing of petroleum products is inherently a low-margin business, which again is subject to extreme vagaries of the international oil market, its focus on operational efficiency, cost optimization, integration and diversification have been pivotal in ensuring its growth and competitiveness. Moreover, the Company is today laying immense focus on digitalization as a driver of efficiency and growth.

IndianOil: The Energy of India



OPPORTUNITIES, CHALLENGES & THREATS

Short-term Perspective

The COVID-19 pandemic has come as an unprecedented shock, with fast-moving changes to which the Company has been adapting. The hit to products demand owing to the nationwide lockdowns in March, April and May 2020 was unprecedented, and accordingly the Company scaled down its operations temporarily. LPG was the only product that registered substantial growth during the period, and this challenge was met through scaled-up operations of secondary refining units and additional imports.

The Company, with its robust infrastructure and a motivated force including its employees and channel partners, maintained the supply lines without any disruption, ensuring timely, safe and hygienic fuel deliveries. During these testing times, the Company saw its digitalization efforts paying off as a significant proportion of its employees seamlessly moved to 'work from home' mode virtually overnight. It also provided its customers with cashless and contactless means of payment and encouraged digital transactions.

The heightened volatility in crude oil prices in the recent times has also come as a major challenge for the Company. Oil price volatility, exchange rate fluctuation alongwith lower demand, made cash management challenging, affected the working capital cycles, and led to short-term debt build-up.

In normal times, operational excellence, cost optimization, diversified crude sourcing, use of cheaper heavy crude grades, energy efficiency, etc., have been pivotal to margin protection, but the current upheaval was clearly unprecedented. However, the Company is confident of holding to its capital expenditure commitments and has no plans of cutting down its budgets.

In the natural gas business, demand likewise took a hit due to the lockdown. R-LNG offtake by gas customers and the Company's own refineries fell due to lower runs owing to lowering of demand. The Company took the route of deferment or force majeure to reduce its offtake from LNG suppliers as per the contractual obligation to safeguard itself, and may use these measures in the future depending on the economic recovery trajectory.

In the petrochemicals business too, the lockdown affected demand adversely. Since the segment is highly correlated with economic activity, it is expected to see a downswing in the short-term. However, some products such as LAB, PET films & PET bottles, and certain grades of polymers have seen a healthy demand due to their applications in safety equipment, health & sanitation or in packaging of essential commodities. The Company produces non-woven grade polymers specifically used in the manufacture of masks, personal protective equipment and hygiene products. In addition, the Company has already manufactured the specific grade used in syringe barrel application.

Moreover, the Company's polymer production facilities have the flexibility to modify the quantity of each grade produced depending on the requirement. The Company's strategy of local positioning of products along with using a mix of contract and spot sales has helped in securing markets and margins along with lower logistics costs.

With subsequent relaxations in lockdown conditions, ensuring the safety of employees, contract workers and channel partners along the supply chain is a priority for the Company. Setting up new best practices of working together, yet being physically distanced in the workplace, keeping productivity levels high while complying with this new way of life, at least in the short-term, will be a continuing challenge. But, the Company is confident that its robust systems with increased digitalization and a fully motivated work force will deliver yet again in the time of national requirements.

Medium-term Perspective

In 2019-20, domestic petroleum demand took a hit and grew at a modest rate of 0.2%. The ongoing economic slowdown, coupled with auto sector slowdown, were the key factors for the slump in demand. The COVID-19 crisis has hit the demand further, but recovery from the same is expected with relaxations in lockdown and resumption of economic activity. However, growth in product demand could be affected over the medium-term depending on the impact of the current crisis and future waves of the virus on economic activity. Sectors such as aviation, hospitality, and tourism are the most hit sectors due to the pandemic and recovery will depend on how quickly the spread of the virus is contained.

On the petrochemicals front, demand from the personal hygiene sector is expected to go up in the post-Covid period, and the Company will align its production and investments to capture this growing segment. However, depending on the recovery path the Indian and global economies take, the overall demand for petrochemicals business is also expected to follow the same trajectory. Nevertheless, given the long-term growth potential of petrochemicals business - over the medium term, the Company aims to increase its petrochemical capacity, expand customer base within and outside the country and enhance contribution of petrochemicals business to the Company's bottom - line.

International crude oil prices are likely to remain at low levels in the current and next year on account of weak global demand and this is expected to help limit the cost pressures for the Company. However, extreme volatility in crude oil and product prices (as well as fluctuations in the dollar rate) with narrow or negative margins, as witnessed in recent times, could come in the way of financial stability.

Considering that oil prices are likely to remain low for a longer duration, the Company is proactively evaluating prospective upstream assets across the globe that have lower break-even cost of production, substantial reserves/resource base and are techno-commercially viable. Over the medium term, the Company plans to keep scaling up its production from its E&P assets, while building in-house technical expertise.

Recent policy changes in the retail space along with growing competition in the domestic fuels market present a continuing challenge for the Company. Deregulation of the markets has been given a further impetus with the earlier norm of granting authorization for marketing transportation fuels with a minimum prior investment of ₹ 2000 crore in the domestic oil & gas sector now revised to granting entities with net worth of ₹ 250 crore (with some additional criteria) the permission for setting up of new retail outlets. This is expected to increase competition in the market. The Company aims to protect its market share in the domestic market by further integration of retail digitalization initiative, focus on customer value proposition, differentiated value added products, along with focus on operational optimization and agile engineering and project management.

Along with this, in view of changing policy and demand imperatives in light of issues such as air pollution, energy security and sustainable development, the Company plans to strengthen its efforts in the areas of bio-energy and electric mobility in India, over the medium term.

Amendments in the Motor Spirit & High Speed Diesel (Regulation of Supply, Distribution & Prevention of Malpractices) Order, 2005 for door delivery of HSD and entry of private players & new start-ups in this area present a new way of business and has special relevance in the context of a Post COVID-19 world. The Company has been a pioneer in this space, which presents a new business opportunity. Nevertheless, the advantage of this low investment model would make the competition fierce in this segment.

IndianOil has been on a digitalization journey and the COVID-19 crisis has given further impetus to technology applications in monitoring and controlling critical business functions such as those in the refineries, supply & distribution and retailing. In the medium term, the Company's digitalization initiatives are expected to create a firm ground for the future way of working. Reskilling and upskilling the workforce for this new paradigm will be a priority for the Company in the short to medium-term.

Long-term Perspective - Strategic Intent

The COVID-19 crisis has come as a grey rhino event. Given its far-reaching ramifications, it is expected to have an impact on the long-term as well.

COVID-19 could lead to a new world order, shift in global trade & supply chain patterns, global power balance. Some of this could be in favour of India in terms of contributing to its growth opportunities.

There could also be long-term behavioral shifts if the crisis lingers and these could have a bearing on energy demand growth and energy mix of the future. While the nuances of such changes are hard to predict at this juncture, some fundamentals will stay unchanged.

First of all, India's economy will expand and grow over the long-term, while there may be some pain in the interim period, and this expansion forms the fundamental basis of energy demand growth. Besides, given the low level of energy use per capita in the country, raising the energy access bar will require increase in energy demand. Secondly, the need to address climate change and air pollution continues to be highly relevant and will need to be addressed over the long-term.

As regards, oil demand, with GDP growth in the country road freight movement will continue to grow and drive diesel demand. Passenger movement demand is also set to increase in tandem with economic growth and urbanization and thereby drive petrol demand in the country over the long-term. Development of airports, thrust on manufacturing in the country, tourism, air ambulance and pilgrimage sector, coupled with government liberalizations, connectivity schemes like UDAN Regional Connectivity Scheme, will support the growth of the aviation market in India in the long run.

Petrochemicals will continue to be a key demand driver over the long-term propelled by economic growth and low per capita petrochemicals consumption rates in the country.

The Company, therefore, believes that despite the expected pain in the medium-term, India's energy demand is set to grow over the long-term, driven by the demands of economic growth and the need to fulfil sustainable development goals.

The Company's long-term strategic intent would, therefore, be to continue to leverage on the oil demand growth in the country as its flagship supplier. At the same time, energy transition is a reality and a much needed change in the way the global energy systems function. Technology, policy and businesses are shaping the energy transition towards a clean and green energy future, the need for which has become even more imperative, given the learnings of how a physical event like this pandemic crippled the world with its might. The Company's long-term strategy, therefore, aims to align its businesses and investments to these forces of the energy transition. The key tenets of the long-term strategic intent of the Company are:

Fortifying refining & marketing business

A key component of the Company's long-term growth strategy involves augmenting infrastructure and capital investments in line with the growing demand. Capacity augmentation and thrust on enhanced value addition especially through integration with petrochemicals, CO_2 capture, among others are key focus areas for the Company's refineries. Embarking on capacity expansion of the Company's refineries such as Barauni Refinery expansion from 6 to 9 MMTPA is one such step in this direction. Along with this, there will be continued thrust on best-in-class services to its customers through automation, digital interventions, technological support and new business models. In this regard, focus on non-fuel revenue generation from the retail outlets is seen as a promising area along with retailing of greener energy forms, in view of challenges posed by relaxation of entry pre-conditions in the fuel retailing segment and changing consumer behavior. Rural markets will continue to be a major focus area for the Company for transportation and cooking fuel sales. As rural incomes and prosperity rise over the long-term, the quality of life improvements and growth in vehicle ownership will propel rural transportation and cooking fuel demand.

Integration of Value Chains

The integration of business has been a strategy of the Company for more than 20 years, which has paid off in terms of value creation and providing stability from turbulences in the international oil market. At the same time the Company strengthened its upstream presence by building a judicious E&P portfolio. On the other hand, it went ahead with downstream integration into petrochemicals in a big way. The Company will further be setting up an integrated paraxylene (PX) and purified terephthalic acid (PTA) complex plant in Paradip at an estimated investment of ₹ 13,805 crore to facilitate textile sector. The long-term growth prospects of Petrochemicals in India as well as globally continue to be bright and this sector is set to be a key driver of oil demand; hence, this business segment will be a focus area for the Company's long-term investments. Over the long-term, focus will be on capacity augmentation, overseas expansion and getting into the areas of niche petrochemicals and further forward integration into textiles. In the E&P segment, the Company plans to significantly scale up its production from its E&P assets, with inorganic growth both within and outside the country over the long-term.

Total Fuel Solutions

The Company's vision is to straddle the entire energy value chain and not to be restricted to the petroleum sector. It views retail outlets of the future to be 'energy pumps,' where customers have an assortment of fuel options on offer. The energy transition has thrown open a multitude of opportunities across the entire energy spectrum with focus on cleaner, greener and more efficient forms and uses.

Natural gas has an important role in the energy transition owing to its low carbon intensity and its role in grid integration of variable renewable energy. Due to its inherent advantages and backed by a major policy thrust by the Government towards a gas- based economy, the Company has been investing in and building its natural gas portfolio in a big way. The Company is today the second biggest player in the R-LNG market in the country. Over the long-term, the Company's steady investments in cross-country pipelines, R-LNG Terminal and CGD will further enhance its presence in this sector while contributing to building of the nation's gas infrastructure. The Company's aggressive investments in the recent CGD bidding rounds, will establish it as a big player in the growing CGD market in the country. Its scaled-up presence in the R-LNG sector, through capacity booking in upcoming terminals are envisioned to enlarge its role in the R-LNG market significantly over the long-term. The Company is also eyeing opportunities in the futuristic areas of small-scale LNG dispensing model (LNG@Doorstep) and mobile CNG dispensers for promotion of gas as a greener transportation fuel.

Bio-fuels is another space the Company is gearing up with great zest, emboldened by the renewed policy thrust on modern bio-energy. The Company has been raising the percentage of ethanol-blending in petrol over the years. Besides investing in areas of Compressed Bio-gas (CBG), 2-G ethanol, waste to fuel, bio-diesel from used cooking oil, it is also integrating refinery processes with bio-fuel production along with cutting-edge R&D in the area of bio-energy. The CBG initiative under the umbrella of Government of India's SATAT (Sustainable Alternatives towards Affordable Transportation) aims at streamlining the value-chain where the producers supply cascades of CBG filled cylinders to the fuel station networks of the Company for marketing as a green transport fuel. The Company envisions itself as a major driver of bio-energy in the country over the long-term.

The Company has been an early investor in wind-power and solar energy farms among Indian downstream companies. Further investments, coupled with continued R&D in Hydrogen, fuel cells, waste-to-energy and bio-fuels, are integral to its downstream vision. Besides, the growth potential and global momentum for electric battery technologies has made it a compelling choice for many oil majors and for the Company too. The Company is focusing on collaborating in Battery Manufacturing and Battery Swapping and Charging Stations as a part of its Total Fuel Solutions strategy and has started offering electric vehicle charging as well as battery swapping facilities at select Retail Outlets with immense potential for scaleup. The Company envisages taking a big share in the high potential market over the long term.

Responsible Business

No business can be isolated; they have to operate not only in an economic backdrop, but also in a social and environmental backdrop. There are a plethora of externalities and inter-connected relationships that weigh in on the success of the business. The current crisis has made businesses clearly understand the role of these backdrops and relationships as well as the importance of the wellbeing of their people for their sustained success. The Company has stood by its social and environmental responsibility, right from the beginning and has been constantly working to create value for its stakeholders and society at large, besides focusing on environmental sustainability. Globally, climate change and air pollution are to a large extent, the fallouts of the fossil fuel business and the Company is committed to address these issues. The Company is offering superior fuels (BS-VI) through continuous upgradation, promoting cleaner and greener fuels, implementing energy efficiency & energy conservation measures, renewable energy generation, waste & waste water management, R&D in carbon capture utilization & sequestration, and bio-energy, among others. The recent tri-partite MoU agreement with NTPC and South Delhi Municipal Corporation for a waste to fuel plant, with an intent of pan India expansion, is a small example of a replicable responsible business model. Pollution from plastics is emerging as a burgeoning problem and the Company has taken up this critical issue. Over the long-term the Company aims to build plastics neutrality model towards fulfilling Extended Producer Responsibility requirements of IndianOil and Plastics users. Such initiatives will continue to be integral to the Company's long-term growth strategy.

Digitalization

The digital revolution offers a new vista of efficiency and performance enhancement in the energy sector. The Company's downstream oil business is affected by a number of exogenous uncontrollable factors. These can be fluctuations in crude oil and product prices, supply risks, geo-political uncertainties, and an array of product market variables such as seasonality of demand, pricing & taxation, among others. In such a dynamic business scenario, systemic efficiencies are key to financial resilience. The Company's quest for efficient operations - led by identified frontier technologies like big data, analytics, artificial intelligence, AR/VR, cloud computing, block chain, Internet of Things, including setting up of a Centre of Excellence will further strengthen the ongoing digital revolution, etc. The COVID-19 crisis has proved that digital working and virtual meetings can be very effective and possible at a much greater scale and ease. The Company has been on its digitalization journey for a while now, but the current crisis is set to give further impetus to technology applications in monitoring and controlling critical business functions in the Company's refineries, supply & distribution and retailing.

Research & Technology

While technology is defining the path forward for the energy sector, thrust on research is equally imperative. The Company already has an extensive and renowned research set-up in place. While lubricants formulation and refining technologies have been the focus areas for a long time, the Company has expanded its R&D investments into bio-energy, alternative energy , nano-technology, petrochemicals, etc., in line with its strategy of integrated value chains, diversified businesses and also for deriving competitive advantage in the context of the ongoing energy transition. In the coming years the thrust areas for the Company's R&D will be fuel-efficient lubricants, greases and speciality products; refinery processes like FCC, hydro-processing, delayed coking; development of catalysts and additives: nano-technology interventions; alternative energy forms such as gasification, Hydrogen, fuel cells and solar energy; energy storage devices; development of second and third-generation bio-fuels, including bio-ethanol and bio-diesel; petrochemical catalysts; carbon capture, utilization & storage. Hydrogen is seen as the ultimate solution building a sustainable and secure energy future and is presently gathering a lot of momentum globally. The Company's R&D has been working in this area and targets making significant in-roads in building and developing Hydrogen Economy infrastructure in the country. Over the long term, the Company targets development of fuel cells for green mobility solutions and indigenous hydrogen storage solutions.

Collaborations & Partnerships

In today's environment of fast moving technological changes, partnerships between government, private sector and public sector enterprises, start-ups and technology companies have become imperative across businesses. The COVID-19 pandemic has once again highlighted the role of global cooperation. As the market-place demands entry into new arenas and uncharted territories, it is best to work in partnerships and leverage the synergies between the partners. Accordingly, the Company has forged many mutually beneficial alliances and is constantly on the look-out for more such synergistic value creation. These partnerships are strengthening the Company's endeavours in areas such as oil exploration & production, advanced bio-fuels, compressed bio-gas, petrochemicals, gas infrastructure, electric mobility and many others. The collaborations range from big global players like ExxonMobil and ADNOC on the one hand, niche players like with Lanzatech-USA; Phinergy-Israel; etc., and closer home CBG venture with a host of small entrepreneurs. Start-ups have emerged as the driving force of innovation in recent times. Compared to large companies, the niche focus, small and open set-up of start-ups make them highly amenable to innovation. The Company views investment in start-ups as an emerging force that can drive innovation and competitive advantage. In line with this, the Company has set up a start-up fund. In addition to this, the Company has been partnering with other CPSEs for investing in upstream oil & gas assets in India and abroad, in cross-country gas pipelines, CGD networks and fertiliser units, among others. The Company has partnered with Start-ups, which are being mentored and funded by it for innovation in areas of oil and gas, sustainability, socially innovative products. So far, around 10 Intellectual Property Rights (IPRs) have been generated. The Company aims at several strategic investments with startups to encourage 'Make in India'.

Global Outreach

The Company has investments in several overseas E&P assets, has downstream subsidiaries in Sri Lanka, UAE & Mauritius, and now representative offices in Nepal, Bangladesh, Myanmar, Singapore to explore business opportunities. The Company's SERVO brand of lubricants has been growing robustly in the international market. During the year, SERVO exports grew by 12.7% and the Company appointed lubricant distributors in four new countries, i.e., Myanmar, Indonesia, Qatar and Vietnam. The Company envisages a bigger role in this arena as it works towards its vision of being 'A Globally Admired Company.' Besides evaluating E&P opportunities in geopolitically stable countries worldwide, the Company is looking for opportunities in downstream business space in non-OECD economies, which will be leading centers for oil demand growth as incomes and prosperity rise. The Company is increasingly looking at markets in SAARC, ASIAN, Middle-East, Central Asia and Africa regions to scale up its overseas footprint and make inroads into global markets to realize its vision.

Risks & concerns

The risk governance structure at IndianOil is aligned to leading practices and regulatory guidelines. In its endeavor to attain sustainable growth, the Company constantly scans its external and internal business environment. The Company recognizes that risk is integral to business and is committed to managing it in a proactive and effective manner. The enterprise risk management framework at IndianOil is spearheaded by a Risk Management Committee (RMC) of the Board that ensures that the risk management activities are undertaken as per policy. Risk Owners of all divisions/departments identify and assess the risks in their respective areas/units and report it to Risk Management Compliance Board (RMCB), which comprises senior executives across divisions. The RMCB evaluates the risks reported and provides enterprise-wide view of the risks to RMC. The dynamic risk landscape presents a unique challenge to the Company, which it is committed to managing it strategically.

The risks identified for the Company inter-alia include:

- Economic Risks arising from international crude oil and products market fluctuations;
- Competition Risks arising from competitors within the existing businesses and from new businesses such as alternative energy sources;
- Operational Risks such as pilferages, labour unrest, unplanned shutdown of refineries;
- Financial Risks such as foreign exchange rate fluctuations, exposure to borrowings, non-recovery/ delays in recovery of outstanding dues;
- Security and Fraud Risks, including cyber-security, data leakage and physical security risks;
- Reputational Risks such as brand value risk; and
- Compliance Risks such as tax disputes and litigation,
- Change in Government policies, etc., impacting profitability and ability to do business.

In addition to these, COVID-19 has shown businesses across the globe that the pandemic risk, which was considered as highly unlikely, can be a reality and can have a far-reaching impact on the organization's risk spectrum. The oil industry in general and IndianOil in particular came under the twin assault of drop in prices of crude oil as well as products' demand destruction. The pandemic risk can and has not only triggered and amplified the already recognized risks such as economic risk, financial risk, security risk, but also created new risks such as stressed supply chains, high percentage of workforce exposed to risk of falling sick, among others. The situation has been closely monitored by the top management of the Company for business continuity in an optimized manner, keeping the market well-supplied as well as to ensure the safety of employees and frontline personnel engaged in production/delivery of petroleum products.

FINANCIAL REVIEW

The outbreak of COVID-19 resulted in reduction in demand and triggered volatility in international crude prices, petroleum product prices and foreign exchange rate. The reduction in benchmark prices resulted into significant write down of inventories in the downstream business of the Company as on March 31, 2020 and the same was valued at net realizable value. The lower benchmark prices also resulted in write down in carrying value of Investment in upstream assets.

The Standalone financial performance of the Company along with Segment wise information is summarized below:

(₹ in Crore)

Particulars	2019-20	2018-19	Variation
Revenue from Operations	566,950	605,932	(38,982)
EBITDA	22,356	36,952	(14,596)
Profit before Exceptional Items & tax	7,611	25,127	(17,516)
PBT	(3,694)	25,127	(28,821)
Net Profit	1313	16,894	(15,581)
Cash Profit	10,079	24,408	(14,329)
Borrowings	1,16,545	86,359	30,186
Revenue from Operations (Segment Wise)			
Petroleum	538,039	573,888	(35,849)
Petrochemicals	15,703	21,147	(5,444)
Other Businesses*	13,208	10,897	2,311
EBIT (Segment Wise)			
Petroleum	10,466	22,073	(11,607)
Petrochemicals	2,009	4,198	(2,189)
Other Businesses*	891	462	429
Other un-allocable (expenditure)/income-net	224	2,705	(2,481)

*Other Business comprises Sale of Gas, Explosives & Cryogenics, Wind Power & Solar Power Generation and Oil & Gas Exploration Activities.

Standalone Financial Performance

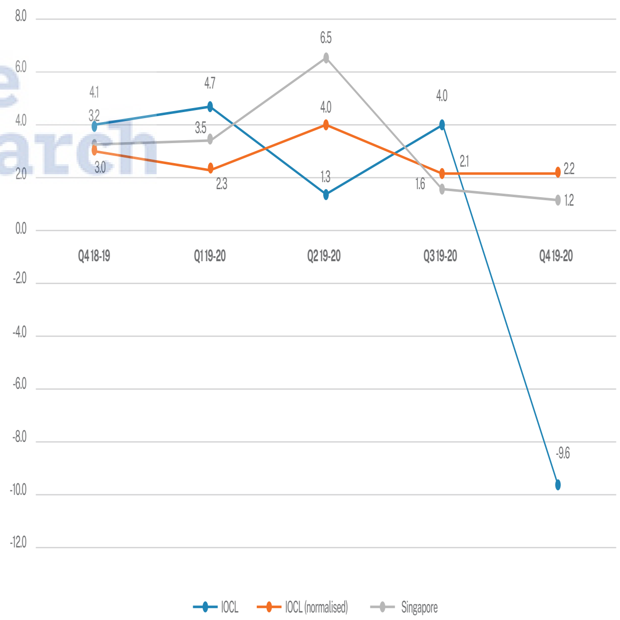
The Revenue from Operations has fallen by about 6% during the year. This is mainly on account of decrease in international product prices whereas quantity of sales volume was almost constant like last year. Average crude prices of Indian Basket registered a decline of 13% from \$69.88/bbl in previous year to \$60.47/bbl in current year. The revenue in petroleum segment declined by 6% mainly due to lower product prices and the decline in petrochemical segment by 26% partly because of lower prices and partly due to plant availability.

The Company's EBITDA, Operating Profit and Net Profit margin for the current year are 4.56%, 2.05% and 0.27% as compared to 6.99%, 4.97% and 3.19% in the corresponding previous year respectively. The decline in EBITDA and operating profit is mainly on account of lower refining margins and high inventory losses. The decline in net profit is additionally impacted by impairment losses provided during the year. Pursuant to the introduction of Section 115BAA of the Income Tax Act, 1961, the Company opted for lower income tax rate of 22% plus applicable surcharge and cess during the year. One-time net impact of the same on PAT after considering charge for carry forward impact of MAT is ₹2481.85 crore. Reduced margins, inventory losses and impairment provisions during the year also impacted the Company's return on average Capital Employed and return on Net Worth which declined from 18.10% (2018-19) to 7.72% (2019-20) and from 18.35% (2018-19) to 1.46% (2019-20) respectively.

The EBITDA margin for petroleum segment is about 4% and petrochemical segment is 19% during financial year 2019-20 as compared to 5% and 25% respectively in previous year. The petrochemical segment margins are lower due to fall in international spreads and also impacted due to non-operation of PX-PTA plant during part of the year. The margin in petroleum segment is affected by lower spread between international prices of petroleum products and crude oil, which also remained volatile during the year 2019-20.

At the beginning of the year, crude prices were about \$68/bbl which went up to \$74/bbl around April 2019 and touched a low of \$22/bbl in March 2020 and closed at same level. The average HSD cracks decreased from about \$13-14/bbl in previous year to \$11/bbl during the current year with high volatility and even touched a low of \$5/bbl during February 2020. Similarly, MS cracks which were about \$9-10/bbl in the previous year decreased to \$6/bbl during the current year and were even negative during the last week of March. The quarter-wise movement in refining margins are explained as below:

GROSS REFINERY MARGIN (\$/bbl)



As can be seen Singapore benchmark for refining margin fell significantly during the year on account of lower spread between international prices of petroleum products and crude. IndianOil current price refining margin (i.e. normalised) during the year has moved in tandem with international margins. The inventory holding by IndianOil is high on account of inland refineries, due to which, inventory gain/losses becomes significant during fluctuating price scenario and greater volatility is seen in reported margins. Singapore benchmark GRM got reduced from \$4.88/bbl in previous year to \$3.21/bbl in current year. As against this, the normalized GRMs of IndianOil reduced from \$4.81/bbl in 2018-19 to \$2.64/bbl in 2019-20.

The ratio of Current Assets to Current Liabilities continues to be above 1 and the Debt Equity ratio is at 1.24 in current year as against 0.79 in previous year. This is mainly on account of lower profits and higher capex met through borrowings. The interest coverage ratio and debt coverage ratio of the Company was about 2 times. The Inventory holding period of the Company is about 44 days and Company's average debt collection period is 9 days. Detailed financial indicators and ratios for the last five years are provided in a separate section 'Performance at a Glance' in the Annual Report.

Group Financial Performance

The Groups Revenue from Operations is at ₹5,76,589 crore during the year 2019-20 as compared to ₹6,17,251 crore in the previous year. The Net loss reported for the year

2019-20 is ₹893 crores as compared to profit of ₹17,377 crores in the previous year. The Company registered a loss on consolidated basis mainly due to lower refining margin and inventory losses at CPCL and provision for impairment of upstream assets at IndOil Global BV (Subsidiary of IOC). The detailed profit walkthrough from standalone to group is provided in Note 46 to Consolidated Financial Statements.

INTERNAL CONTROL SYSTEMS

Internal Control Systems is a set of rules, policies and procedures that an organization implements not only to provide direction and increase efficiency but also to strengthen adherence to policies. The Company has well-established internal control systems to ensure smooth and efficient conduct of its business. The Company has laid down various policies as well as detailed manuals, which cover almost all the aspects of the business. The internal processes and policies are reviewed from time to time so as to align them with the changing business needs. Organization-level controls have been established to ensure that management directives pertaining to the entire entity are carried out in an effective manner. Operational-level controls, anti-fraud controls and IT general controls have also been put in place to ensure that business operations are carried out efficiently and effectively and chances of errors/frauds are minimized. The Company has put in place adequate internal controls that are commensurate with its operations.

The Company has an independent Internal Audit Department, which is headed by a Chief General Manager, who reports to the Chairman. The Internal Audit Department has officers from Finance as well as technical functions. The audit assignments are carried out as per the Annual Audit Programme approved by the Chairman and the Audit Committee. Internal Audit carries out extensive audits throughout the year covering each and every aspect of the business. The Statutory Auditors are also required to issue the Independent Auditor's Report on the Internal Financial Controls over Financial Reporting for the Company under Clause (i) of Sub-Section 3 of Section 143 of the Companies Act, 2013. The report issued thereupon has been attached along with the Standalone and Consolidated Financial Statements respectively. The Audit Committee reviews the internal control systems with the Internal Auditors and Statutory Auditors before the Financial Statements are placed before it for recommending to the Board for approval.

HUMAN RESOURCES

IndianOil assigns very high importance to the development of its Human Resources with focus on its core values of Care, Innovation, Passion and Trust. The HR systems and practices of the Company focus on diversity and inclusion in all initiatives to build a cohesive workforce. The Company believes that the challenges surrounding the business environment can be best mitigated by a workforce that is motivated, adaptive to change, innovative and fast in learning.

Learning forms an integral part of the growth and enrichment of the workforce. With focus on aligning the various HR initiatives with the strategic Corporate Vision, many new initiatives were undertaken aimed at making the employees 'future-ready'. An enabling environment was created for the employees to enhance their domain knowledge as well as to enable them to work from home due to the countrywide lockdown imposed to avoid the risk of COVID-19. Integrated HR practices through focused recruitment, career path and learning & development have contributed to the future-readiness of the workforce.

The Company has a structured and robust succession planning framework for identification and development of talent for the leadership pipeline. IndianOil has not only groomed several visionary leaders who led and transformed the Company over the years but also groomed leaders for both public and private sectors. The engagement and motivation of the employees is always benchmarked with the national and international standards.

IR CLIMATE

The industrial relations climate in the Company has traditionally been harmonious. A collaborative and seamless IR climate has been maintained in the Company so that IndianOilPeople are ready for the challenges faced by the Company due to the changing business environment. This has been made possible by sharing the changes in the business environment, the consequent changes required in strategy and business models of the Company, the resultant impact on current business and people, along with future plans with the collectives and inviting views and suggestions from them through periodic structured communication meetings. The management and the collectives have mutual respect for each other's perspectives and regular structured meetings are held to discuss and deliberate on issues like productivity, welfare and the need to build a responsive and responsible organisation. The collectives have always steadfastly supported the management in overcoming challenges faced by the Company. The employee strength of the Company as on March 31, 2020 was 33,498, which comprised 17,704 executives and 15,794 non-executives.

OTHER INFORMATION

The details regarding the Company's CSR programmes, environment protection & conservation initiatives, technology absorption & adoption efforts, forays into renewable energy and foreign exchange conservation, etc., are provided in the Directors' Report and annexure thereto.

CAUTIONARY STATEMENT

The information and statements in the Management's Discussion & Analysis regarding the objectives, expectations or anticipations may be forward looking within the meaning of applicable securities, laws and regulations. The actual results may differ materially from the expectations. The various critical factors that could influence the operations of the Company include global and domestic demand & supply conditions affecting the selling price of products, input availability and prices, changes in Government regulations/tax laws, economic developments within the country and factors such as litigation and industrial relations.

IndianOil working relentlessly to fulfill the energy requirements of the nation