SECTOR OVERVIEW

CURRENT SCENARIO

100% FDI
in exploration and production;
49% FDI in refining under automatic route

2nd largest
refiner in Asia. From a total capacity of 63 MMTPA in 1998, the Indian refining sector has increased nearly fourfold to reach a capacity of 234 MMTPA from 23 refineries

INR 7.01 Bn
total inbound FDI (2000-19); FDI increased by 22% from April 2014 – March 2019

3rd largest consumer of crude oil

41.87 Bn tonnes -
Conventional hydrocarbon resources in 26 sedimentary basins of the country (oil and oil equivalent of gas)

OIL AND GAS: REFINERIES
Capacity (in MMTPA) as on 01.11.2017

Opportunities

- India is already a refining hub with 23 refineries
- Expansions planned for tapping foreign investment in export- oriented infrastructure, including product pipelines and export terminals

49% FDI
Under Automatic Route

Indian Oil Corporation
HMEL
Chennai Petroleum Corporation Limited (CPCL)
Bharat Petroleum
Hindustan Petroleum Corporation Limited (HP)
Reliance Industries Limited
ESSAR Oil Limited (EOL)
Oil and Natural Gas Corporation (ONGC)
ONGC Mangalore Petrochemicals Limited (OMPL)
Numaligarh Refinery Limited (NRL)

Bathinda(9) Panipat(15)
Koyali(13.7)
Bongaigaon(2.35)
Digboi(0.65)
Barauni (6)
Kralia(7.5)
Haldia(7.5)
Paradip(15)
Vizag(8.33)
Hatipaka(0.07)
Mangalore(15)
Chennai(10.5)
Kochi(15.5)
Narimanam(1)

EOL, Vadinar(20)
RIL (SEZ) (35.2)
Mumbai (12)
Mumbai (7.5)
RIL (DTA) (33)
Bor, Bina(6)
Bathinda(9)
Bongaigaon(2.35)
Digboi(0.65)
Barauni (6)
Kralia(7.5)
Haldia(7.5)
Paradip(15)
Vizag(8.33)
Hatipaka(0.07)
Mangalore(15)
Chennai(10.5)
Kochi(15.5)
Narimanam(1)
To boost the CGD sector, the 9th CGD Bidding Round was launched in April 2018 for 86 Geographical Areas (GAs) covering 174 districts in 22 States/Union Territories of the country. With the conclusion of the 10th round, coverage of CGD networks will extend to about 70% of the country’s population—spreading across 50% of India’s area. The growth of CGD coverage has the potential to attract total investment of more than INR 1,20,000 Cr in the gas value chain.

Current network: 16,770 km, with a capacity of 369 mmscmd
Expected addition by end of 13th Five Year Plan: 11,377 km, with a capacity of 473.5 mmscmd
Incremental Capacity Additions till FY30: 1,295 km, with a capacity of 33 mmscmd
Total network by end of FY30: 29,442 km, with a capacity of 875 mmscmd

Currently, India has a natural gas pipeline network of 16,770 km, with a capacity of 451 mmscmd. By the end of the 13th Five Year Plan (FY22), the natural gas pipeline network is expected to cover 28,442 km with a design capacity of 875 mmscmd forming a nation-wide gas grid and providing uniform pipeline network coverage.
INDIAN STRATEGIC PETROLEUM RESERVES

- The Government has commissioned the Strategic Petroleum Reserves (SPR) to maintain the nation’s energy as well as economic security.
- Under phase 1, the government has already built 3 reserves at Visakhapatnam, Mangalore, and Padur in Kerala — with a combined capacity of 5.33 MMT.
- The Ministry of Petroleum and Natural Gas (MoPNG) is soliciting commercial partnerships for the Phase II SPR programme for 2 locations - Chandikhol in Odisha and Padur in Karnataka - with a total capacity of 6.5 MT.

LNG TERMINALS:

- The import of LNG is being carried out at 4 existing LNG terminals, which have regasification capacity of about 26.3 MMTPA (~95 mmscmd). Liquefied Natural Gas (LNG) supply is forging ahead on both coasts, with 10 new R-LNG terminals (5 on west and 5 on east coast) coming up. Together with the four existing terminals, overall capacity will reach 72.5 MMTPA.
GOVERNMENT SUPPORT & INITIATIVES

A. Discovered small fields

In May 2016, the Ministry of Petroleum and Natural Gas (MOPNG), put out a total of 46 contract areas (Discovered small fields) in 67 oil & gas fields through online international competitive bidding

- On 7th February 2018, GoI approved the Discovered Small Field Policy Bid Round-II. Through this, 59 discovered small fields/unmonetised discoveries, estimated to have 194.65 MMT Oil and Oil equivalent gas in place, were offered for bidding

B. Hydrocarbon Exploration Licensing Policy (HELP)

HELP (March 2016) provides a uniform licensing system to cover hydrocarbons such as oil, gas, coal bed methane etc. under a single licensing framework

- Under HELP, contracts are awarded based on ‘biddable revenue sharing’
- Contractor will have full marketing and pricing freedom for crude oil and natural gas to be sold at arm’s length basis, through a transparent and competitive bidding process
- For production enhancement, bringing new technology and capital, NOCs will be allowed to induct private sector partners
- For category I basins, the weightage in revenue-share has been reduced from 50% to 30%
- For Category II and III basins, revenue-sharing has been done away with and allotment of basins is based solely on the exploration work programme

C. Open Acreage License Policy (OALP)

- OALP allows a bidder to apply to the Government, seeking exploration of any block not already covered by exploration
- Under the new hydrocarbon exploration and licensing policy (HELP), Open Acreage License Policy (OALP) Bid Round 1 was launched on 19 January 2018
- Under OALP Bid Round I, 55 Blocks with an area of 59,282 sq. km were awarded on 1st October, 2018. OALP Bid Round II, with 14 blocks (area of 29,000 sq.km), is now in the offering. In OALP-III, 23 blocks (31,000 sq. km) in 12 sedimentary basins are being offered. Of these, 5 are coal-bed methane (CBM) blocks

D. Incentivising Production from Ageing Fields

- The upstream regulator Directorate General of Hydrocarbons (DGH) has proposed a draft ‘Policy Framework to Promote and Incentivise Enhanced Recovery Methods’ to boost oil and gas output from existing fields using Enhanced Recovery (ER) techniques
- The proposed incentive includes a 50% waiver of oil cess on gross oil production for EOR (and other unconventional oil production projects)

E. PAHAL - Direct benefit transfer in LPG (DBTL) subsidy

- Largest subsidy transfer scheme across the globe; more than 23.08 Cr LPG consumers have joined the initiative as of 6 December 2018
- Cash Given: USD 13.8 Bn
GOVERNMENT SUPPORT & INITIATIVES

F. Ujjwala Yojna

- A social movement to improve women's health by giving them freedom from sooty kitchens and hazards of collecting firewood. Target to provide 50 Mn free LPG connections to poor households in 36 months. Almost 45% of Indian households today have access to clean energy, up from 25.5% in 2005.

G. National Data Repository (NDR)

An integrated repository of Exploration and Production (E&P) data of Indian sedimentary basins. Its main objective is to provide reliable exploration and production data for India with provisions for seamless access and online data management.

- As on 31st October 2018, surface coverage of 28.485 LKM, out of 48.243 LKM, has been achieved under 2D Seismic data acquisition under the National Seismic Programme.

H. Refinery Expansion

- By 2030, India's annual refining capacity will rise 77% to 439 MT-equivalent to approximately 8.8 MBPD.
- India has the capacity to annually turn 249.3 MT of crude oil into fuel. This is expected to rise to 414.35 MT by 2025, and to 438.65 MT by 2030.

I. Coal Bed Methane Policy

- Coalbed Methane (CBM), an unconventional source of natural gas, is now considered an alternative source for augmenting India's energy resources.
- India has the 5th largest proven coal reserves in the world, and thus holds significant prospects for exploration and exploitation of CBM.
- The prognosticated CBM resources in the country are about 92 TCF (2600 BCM) in 12 states of India.
- In order to harness CBM's potential, Government of India formulated the CBM policy in 1997. Under this, CBM (being Natural Gas) is explored and exploited under the provisions of OIL Fields (Regulation & Development) Act 1948 (ORD Act 1948) and Petroleum & Natural Gas Rules 1959 (P&NG Rules 1959)- administered by the Ministry of Petroleum & Natural Gas (MOP&NG).

J. Floating Regasification Storage Units

- The Union Ministry of Shipping has issued guidelines for the setting up of floating storage regasification units (FSRUs) for handling liquefied natural gas (LNG) cargo at major port trusts.
1 Oil Field Services and Equipment (OFSE):
- Over the next 10 years, investments worth USD 102 Bn are expected in upstream equipment and services.
- Drilling and drilling-related services are likely to account for 35 - 40% of the total spend followed by oilfield equipment with 18 - 20% and completion and stimulation equipment and services with 18 - 20%.

2 Digital transformation in oil & gas:
- Digital Innovation and Transformation can help drive excellence and maximize value in the oil & gas sector.
- It has potential to increase oil production and recovery, reduce operational cost and minimize risk.
- Adoption of technology can help reduce development cost per Barrel of oil equivalent (BOE).

3 Fuel Retailing
- Government is encouraging global players to participate in India’s retail growth story.
OPPORTUNITIES IN OIL & GAS

4 Refining and Petrochemicals

- As per capita consumption levels of plastics increase, market fundamentals indicate an accelerated growth in demand; significant export opportunity exists.
- Strong growth in demand for petrochemicals is expected in the medium-long term horizon in the country. Thus, a plethora of opportunities will emerge due to availability of feedstock such as Purified terephthalic acid (PTA) and mono-ethylene glycol (MEG).
HOW WE HELP INVESTORS

RESEARCH CONTENT PROVIDED
POLICY ADVISORY/REPRESENTATION
STAKEHOLDER MEETING
SITE VISITS
LOCATION ANALYSIS
ISSUE RESOLUTION
REGULATORY CLEARANCE FACILITATION

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