

# HEADING UPSTREAM

## REALISING THE ENERGY SECURITY DREAM



IndianOil

# ABOUT INDIANOIL

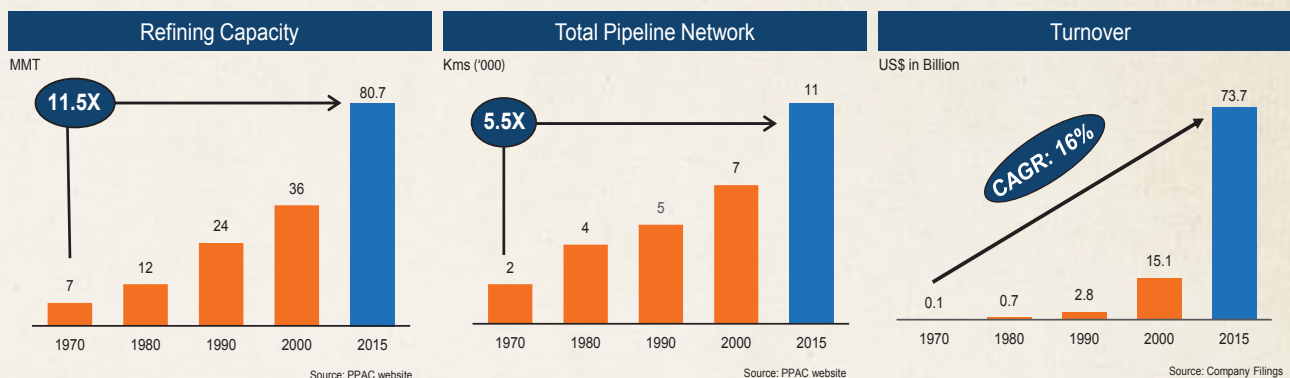
Indian Oil Corporation Ltd. (IndianOil) is India's downstream national petroleum major and the largest commercial enterprise, with a sales turnover of Rs. 4,50,756 crore (US\$ 73.7 billion) for the year 2014-15. IndianOil is ranked 119<sup>th</sup> among the world's largest corporates (and first among Indian enterprises) in the prestigious *Fortune* 'Global 500' listing for the year 2015. With a dominant share in national refining and pipelines capacities as well as marketing of petroleum products, IndianOil has been meeting the energy needs of the country for more than five decades now. As India's flagship national oil company, with 33,000 employees, it has achieved several glorious milestones in its corporate journey.



\*Note: Company Filings and Petroleum Planning and Analysis Cell (<http://ppac.org.in/>). USD-INR:62.5050 (as on March 31, 2015)

Workover Rig - Niobrara Shale Project, USA





## GLOBAL PRESENCE, AWARDS & RECOGNITIONS

### Subsidiaries & JVs

Having set up subsidiaries in Sri Lanka, Mauritius and the UAE, the Corporation is simultaneously scouting for new business opportunities in the energy markets of Asia, Africa, Middle East, CIS Countries, Australia, North America & Latin America. It has also formed about 9 subsidiaries and 21 joint ventures with reputed business partners from India and abroad to pursue diverse business interests.

### Awards & Recognitions



Note: IndianOil is ranked 43<sup>rd</sup> as per Platts Rankings 2014.  
IndianOil is ranked 119 amongst *Fortune* 'Global 500' Companies in 2015.  
US\$-INR: 62.5050 (as on March 31, 2015)

## ACROSS THE HYDROCARBON VALUE CHAIN

With a corporate vision to be 'The Energy of India' and to become 'a globally admired company,' IndianOil's business interests straddle the entire hydrocarbon value-chain – from exploration & production of crude oil & gas, refining and pipeline transportation to marketing of petroleum products, including natural gas and petrochemicals, besides forays into alternative energy of wind, solar and globalisation of downstream operations.

### Gas

- ❑ Co-promoter of Gas JV Petronet LNG Ltd.
- ❑ R-LNG marketing
- ❑ City Gas Distribution
- ❑ Building LNG terminal at Ennore, Tamil Nadu

### Petrochemicals

- ❑ World-scale Naphtha Cracker unit of 857 TMTA capacity
- ❑ 2.6 MMTPA petrochemicals capacity
- ❑ India's 1<sup>st</sup> SBR Plant
- ❑ Exports to 70 Countries

Moving beyond the value chain

### Globalisation

- ❑ Exports
- ❑ Consultancy
- ❑ Training
- ❑ Downstream Marketing

### E&P

- ❑ Domestic: 8 blocks
- ❑ Overseas: 7 blocks (Includes 10% stake in integrated upstream & LNG project in Canada)
- ❑ Operatorship

### Alternative Energy & Sustainable Development

- ❑ Wind power: 69.3 MW capacity
- ❑ Solar energy: 5MW solar plant
- ❑ Plan to scale-up renewables capacity to 260 MW by 2021



## INDIANOIL IN E&P

"Problems are just opportunities in work clothes that have sprung up to be conquered. All of us are endowed with boundless capabilities, limited only by the power of will, imagination and passion. It takes will, drive and faith to beat the odds, live the dream, and achieve the unachievable"

Director (P&BD)

IndianOil's Exploration & Production (E&P) group carries out exploration, development and production of oil and natural gas resources in 15 oil & gas assets across four continents.

The Corporation has partnership with 19 reputed national & international energy companies. Its assets comprise a balanced portfolio of exploration, development & production, encompassing conventional & unconventional resource play types.

Being the non-operator in most of the assets, IndianOil has developed its own state-of-the-art Project Management System which is unique in terms of performance management of its assets.

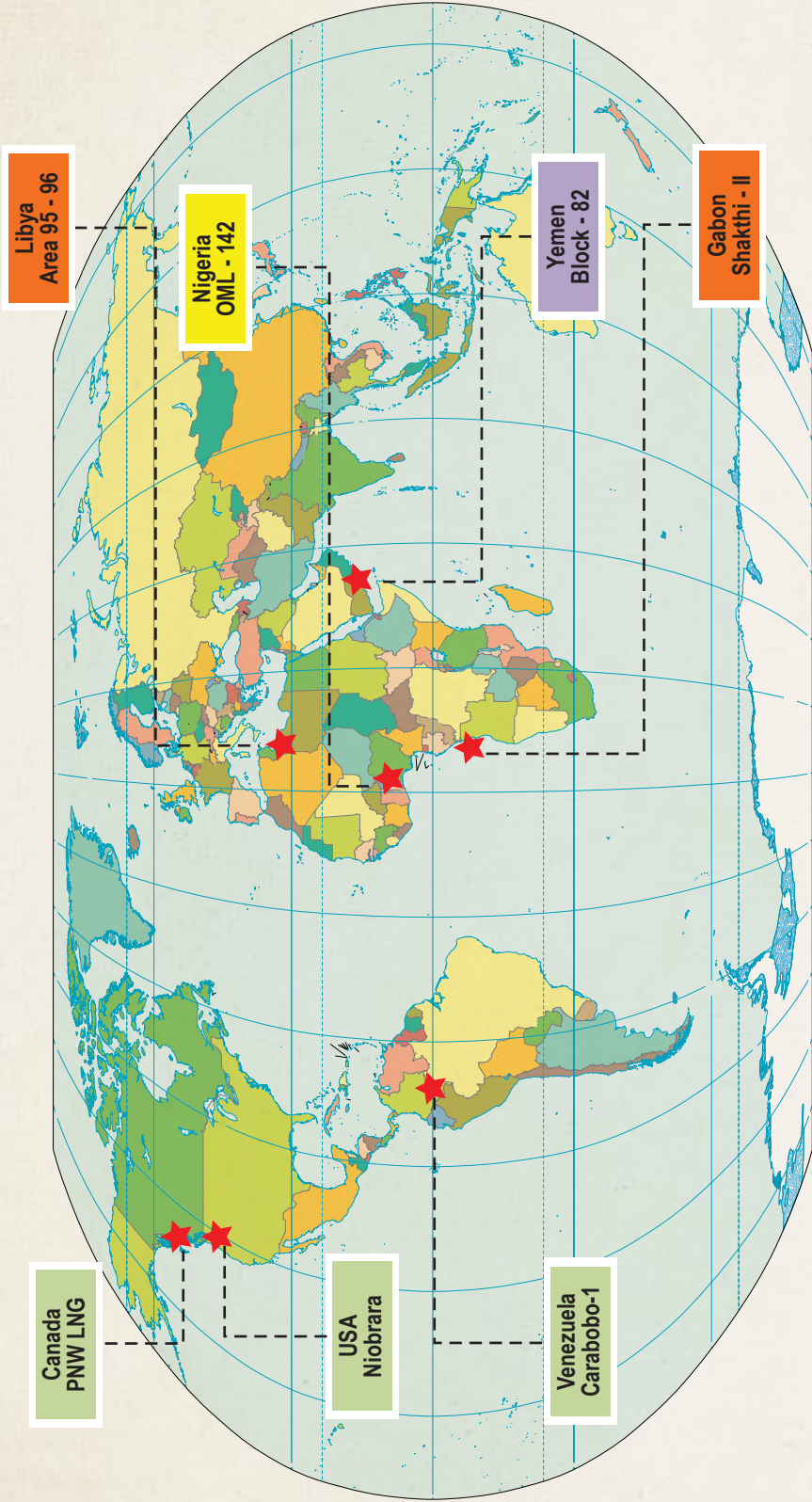
• No. of countries	7
• Partners	19
• No. of fields on production	3
• Assets under development	3
• Assets under appraisal	2
• Assets with oil & gas discovery	5
• Assets under exploration	2
• Total investment commitment	USD 5014 Million

### Our Experience in various Resource Play types:

Heavy Oil	Onshore* & Offshore	Gas Hydrates
Deepwater	Coal Bed Methane	Shale Oil & Gas

\*operator

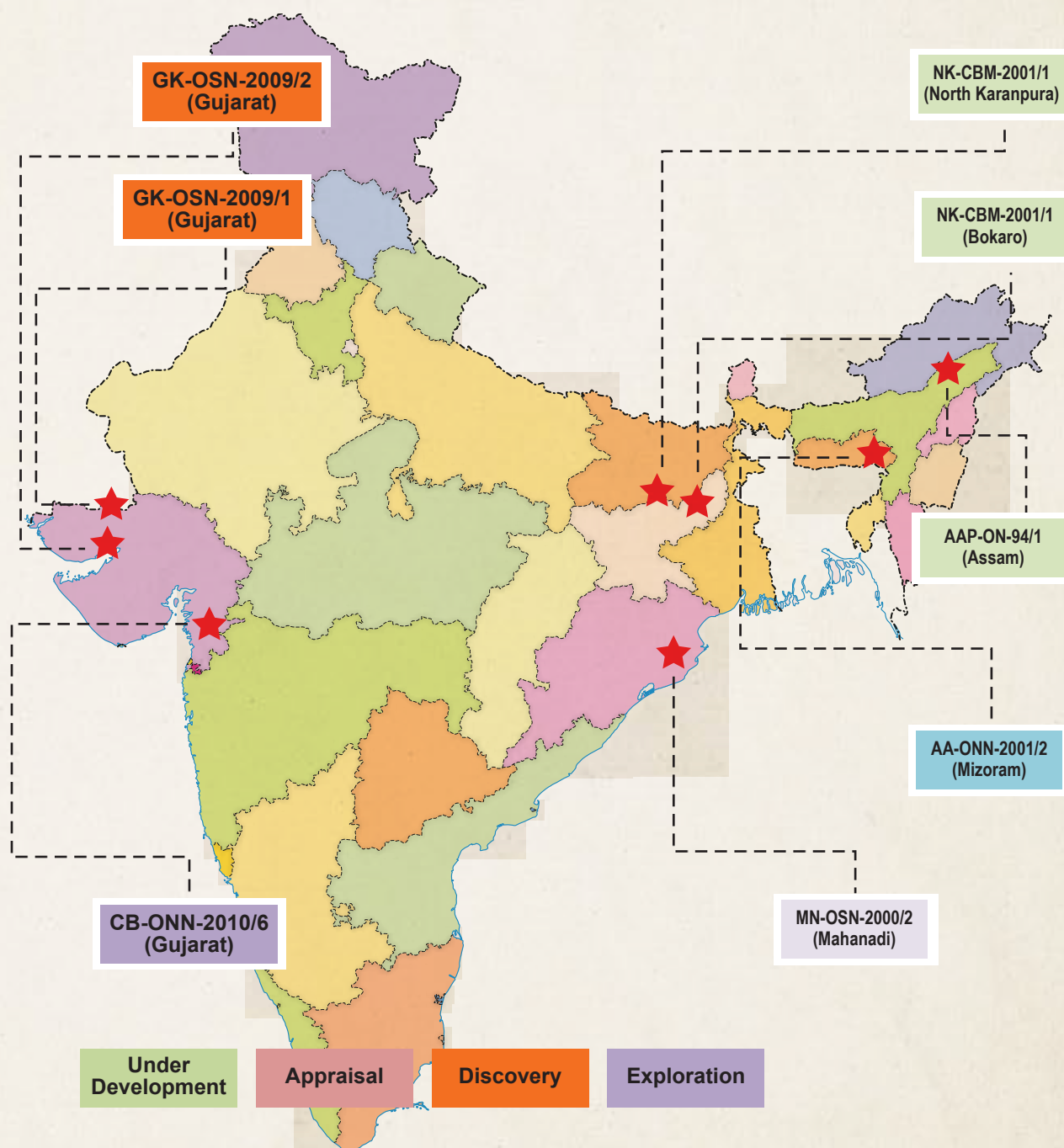
# INDIANOIL'S GLOBAL PRESENCE IN E&P



Producing    Appraisal    Discovery    Exploration

## INDIANOIL'S DOMESTIC E&P OPERATIONS

Being the leading National Oil Company in India, IndianOil shares the responsibility for effective exploration, sustainable development and management of the country's oil and gas resource base. As an operator, the corporation aims to maximise upstream value and enhance the prospectivity of the sedimentary basins of India.



# ASSET PORTFOLIO - A BALANCED AND ENVIABLE SPREAD

## 8 Domestic and 7 Overseas Assets

### Producing Assets:

The producing assets are located in Canada (Pacific NorthWest LNG), USA (Niobrara) and Venezuela (Carabobo Project- 1). IndianOil's share of present production is more than 10,000 boe/day. Upon full field development, the peak production levels from these assets are projected to be more than 50,000 boe/day.

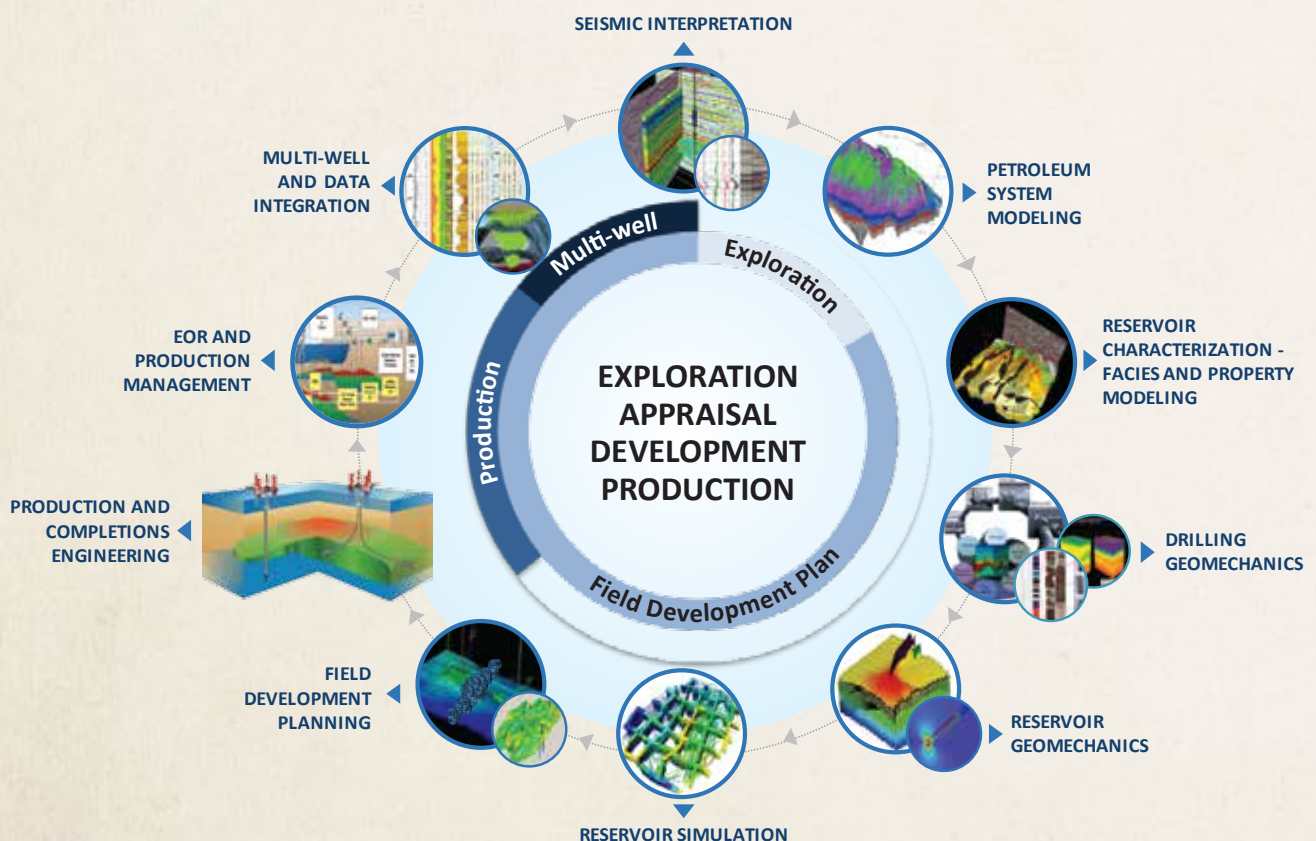
### Assets with Hydrocarbon Discovery:

In India, development activity is underway in three blocks located in Gujarat and Mizoram. Moreover, two overseas blocks located in Libya and Gabon have hydrocarbon discoveries. Development is in progress.

### Exploration Assets:

In India, three exploration blocks are located in the Cambay Basin, one of the prolific petroleum producing basins in India. IndianOil has successfully completed exploration activities as an Operator in two blocks in the Cambay Basin and recorded the lowest per well drilling cost as an operator.

IndianOil is carrying out exploration activities in one overseas block in Yemen. In consortium with Delonex Energy, IndianOil has secured one block located in Palmeira Area during the fifth Mozambique bidding round in the year 2015. Exploration activities will commence after formal award of the block.





## SETTING FOOTPRINT – THE UNCONVENTIONAL WAY

IndianOil is accelerating upstream growth by venturing into new frontiers with unconventional hydrocarbon assets through strategic acquisitions and partnerships with leading oil & gas operators.

IndianOil views unconventional resources as key elements of future energy supply. As a result, IndianOil has committed itself to exploring possibilities in heavy oil, shale gas / oil, coal bed methane, gas hydrates, etc.

### **Shale Gas / Oil:**

IndianOil has partnered with PETRONAS in the year 2014 for bringing in a portfolio of unconventional Shale Gas assets in British Columbia with over 200 tcf of gas in place. This strategic partnership and PETRONAS' experience will yield results in producing 2bcf/day of shale gas and its monetisation through the Pacific Northwest LNG project.

In USA, IndianOil and its consortium partners, Carrizzo Oil and Gas, Noble Energy and Whiting are actively engaged in production of shale oil from one of the most prolific Niobrara shale basins.

In the domestic arena also, IndianOil is associated with the Directorate General of Hydrocarbons (DGH – regulatory body for the hydrocarbons sector in India) for exploring prospects of shale oil in Northeast India. IndianOil has developed an enviable in-house competency for extracting oil from shale.

### **Heavy Oil:**

IndianOil is in partnership with Petroleos de Venezuela S.A. (PdVSA), Repsol, ONGC Videsh Ltd. (OVL) and Oil India Ltd. (OIL) for development and production from Carabobo Heavy Oil project located in Venezuela. Upon full field development and heavy oil upgradation, the project has the potential to produce 400,000 boe/day of crude oil.

### **CBM:**

IndianOil, in partnership with ONGC, is actively engaged in the development of two CBM assets located in one of the most prolific Gondwana coal basin in India.

### **Gas Hydrates:**

IndianOil, as a member of the National Gas Hydrates Programme (NGHP, a consortium of national E&P companies in India), is actively engaged in gas hydrates exploration in offshore sedimentary basins in India. The recently held gas hydrates expedition confirmed the presence of producible gas hydrates in the KG deep offshore areas in sand reservoirs. India has 134 tcf of potential reserves of gas hydrates and IndianOil is poised to be part of the pilot production testing in the forthcoming NGHP Expedition.

## ENDLESS POSSIBILITIES

IndianOil made a modest beginning in the E&P segment in the year 1997. Since then, it has not only built a balanced E&P portfolio but also developed a pool of technical manpower to oversee its upstream operations. It has created a niche for itself in the global E&P arena and commands good reputation and trust among globally renowned E&P consultants / firms.

With state-of-the-art interpretation centre “Anweshan”, IndianOil has developed technical expertise for asset evaluation, risk analysis, seismic data interpretation for identification of prospects / well locations,



drilling, planning & designing for drilling wells safely, efficiently and economically for onshore and offshore wells (shallow depth) and reservoir management.

IndianOil's E&P team has also developed the capability for management of its upstream assets worldwide with multiple partners. It has developed a state-of-the-art

“Project Management System” to monitor the E&P portfolio.

## ASPIRATION

To become a globally admired upstream player by

- Expanding its business portfolio in hydrocarbon-rich countries
- Partnering with global oil & gas majors
- Achieving significant presence across the hydrocarbon value chain.

## PARTNERSHIP OPPORTUNITIES

The oil & gas sector is among the six core industries in India and plays a major role in influencing decision-making for all the other important sectors of the economy. India's economic growth is closely related to energy demand; therefore, the demand for oil and gas is projected to grow, thereby making the sector conducive for investment.

The Government of India has adopted several policies to fulfil the increasing demand for oil and gas. It has allowed 100 per cent Foreign Direct Investment (FDI) in many segments of the sector, including natural gas, petroleum products and refineries, among others.



**IndianOil**

IndianOil, with over five decades of experience, has built up technical expertise in every facet of the hydrocarbons value chain, starting from upstream, refining, transportation and marketing to petrochemicals and renewables. The Corporation has formed strategic partnerships with leading oil & gas corporates in India and abroad. In India, owing to abundant upstream opportunities, the number of oil & gas fields under exploration, development and production has also risen over the years.

IndianOil's technical capabilities, asset quality and scale, as well as financial strength are unmatched among other National Oil Companies. The trust and strong partnership built over the past five decades with various Governments and international energy companies gives IndianOil an edge to chart new territories and expand its business in the interest of energy security.



## **H, S & E**

IndianOil is committed to conducting its business with a strong environment conscience, ensuring sustainable development, safe workplaces and enrichment of quality of life of employees, customers and the community. The Corporation practices sound H, S & E policies, in line with international standards and best practices, that are applied at every level of the hydrocarbon value chain. IndianOil believes that good H, S & E performance is an integral part of an efficient and profitable business management.



**IndianOil**

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Front Picture: PNW LNG Project - Drill Site Overview  
Back Picture: Xtreme Rig 17 - Drilling Rig, Niobrara