



INDIAN OIL

Indian Oil Corporation (IndianOil) is India's largest commercial enterprise, with a sales turnover of Rs. 3,99,601 crore (US\$ 61 billion) and profits of Rs. 10,399 crore (US\$ 1,589 million) for the year 2015-16. IndianOil is ranked 161st among the world's largest corporates (and first among Indian enterprises) in the prestigious Fortune 'Global 500' listing for the year 2016.

IndianOil has been meeting India's energy demands for over half a century. 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 refining, pipeline transportation and marketing of petroleum products to exploration & production of crude oil & gas, marketing of natural gas and petrochemicals, besides forays into alternative energy and globalisation of downstream operations. It has subsidiaries in Sri Lanka, Mauritius and the UAE. The Corporation is simultaneously scouting for new business opportunities in the energy markets of Asia and Africa. It has also formed about 20 joint ventures with reputed business partners from India and abroad to pursue diverse business interests.

Downstream Major



IndianOil - The Energy Of India

IndianOil accounts for nearly half of India's petroleum products market share, 35% national refining capacity (together with its subsidiary Chennai Petroleum Corporation Ltd., or CPCL), and 71% downstream sector pipelines through capacity. The IndianOil Group owns and operates 11 of India's 23 refineries with a combined refining capacity of 80.7 MMTPA (million metric tonnes per annum).

The Corporation's cross-country pipelines network, for transportation of crude oil to refineries and finished products to high-demand centres, spans about 11,750 km. With a throughput capacity of 85.5 MMTPA for crude oil and petroleum products and 9.5 MMSCMD for gas, this network meets the vital energy needs of the consumers in an efficient, economical and environment-friendly manner.

The Corporation has a portfolio of leading energy brands that includes *Indane* LPG cooking gas, *SERVO* lubricants, *XTRAPREMIUM* petrol, *XTRAMILE* diesel, *PROPEL* petrochemicals, etc. Besides IndianOil, both *SERVO* and *Indane* have earned the coveted Superbrand status.

IndianOil is the second largest player in the Domestic Petrochemical Market, besides exports to over 70 countries. The Corporation offers a full slate of petrochemical products and intermediates under the brand name *PROPEL* whose grades cover over 80% of the plastics applications. Over 50 polymer grades have been introduced and stabilised in the domestic market. IndianOil made its big-ticket entry into petrochemicals with the commissioning of the country's largest LAB (Linear Alkyl Benzene) plant at its Koyali Refinery in August 2004. An integrated PX/PTA (Paraxylene/Purified Terephthalic Acid) complex came up at Panipat in Haryana in 2006 with a capacity of 5,53,000 MTPA. A world-class Naphtha Cracker with downstream polymer units, set up at Panipat in 2010, is producing PP, HDPE and LLDPE.

To further consolidate its presence in the petrochemicals business, IndianOil is setting up a

polypropylene plant and an ethylene glycol plant at its Paradip Refinery.

During the XII Plan period (2012-17), the Corporation is investing Rs. 56,200 crore in a host of projects that include augmentation of refining capacity, expansion of petrochemicals infrastructure, and building the E&P portfolio.

Cutting-edge R&D

IndianOil's sprawling R&D Centre at Faridabad near Delhi is one of Asia's finest, and plays a key role in supporting the Corporation's, business interests by developing economical, environment friendly technology solutions. It has won recognition for four decades of pioneering work in lubricants formulation, refinery processes, pipeline transportation and alternative fuels, and holds 454 active patents, of which 270 are international patents.



The vibrant research undertaken by the Centre in tribology is showcased by IndianOil's SERVO® productline, with over 4,000 lubricant & grease formulations to suit all conceivable applications. The Centre has also developed several in-house refinery process technologies and catalysts to suit Indian conditions. Its alternative energy programmes include bio-energy, solar energy, Hydrogen energy, H-CNG blends, synthetic fuels and shale oil. The Centre is also focussed on cutting-edge research in the areas of nanotechnology, petrochemicals & polymers, coal gasification/ liquefaction, and gas-to-liquid technologies.

A 4.17 million tonnes per annum INDMAX unit, based on IndianOil's flagship process technology, has been commissioned at Paradip Refinery. INDMAX enables direct conversion of petroleum hydrocarbon streams into more valuable light distillates and petrochemical feedstock. Besides INDMAX unit at Paradip Refinery and the ongoing incorporation of IndianOil's OCTAMAX technology at Mathura Refinery, the INDAdaptG technology is being deployed currently to produce BS-IV compliant gasoline from INDMAX gasoline stream at Guwahati Refinery. Indane Nanocut, a hi-therm LPG-based metal cutting gas developed by IndianOil, has been launched and is being distributed from 28 locations in India.

New Businesses

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IndianOil made its big-ticket entry into petrochemicals with the commissioning of the country's largest LAB (Linear Alkyl Benzene, used in the production of detergents) plant at its Koyali Refinery in August 2004. An integrated PX/PTA (Paraxylene/Purified Terephthalic Acid) complex came up at Panipat in Haryana in 2006. The PTA plant is the single largest unit in India, with a world-scale capacity of 5,53,000 MTPA, and produces polyester intermediates. A world-class Naphtha Cracker with downstream polymer units, set up at Panipat in 2010, is the largest operating cracker capacity in India producing polymer (plastics) intermediates.

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As part of its [Exploration & Production](#) portfolio, IndianOil is actively engaged in exploration activities in 8 domestic blocks (including 2 coal-bed methane blocks) and 7 overseas blocks, with working interest in each ranging from 3.5% to 100%. The seven overseas blocks are located in Libya, Gabon, Nigeria, Yemen, Venezuela, USA and Canada. The consortium of IndianOil and Delonex Energy UK Ltd. has also secured the Palmeira Block under the fifth Mozambique licencing round, and the formal allotment



is awaited. Of the 15 oil & gas blocks in IndianOil's portfolio, three are under production (all overseas), six under discovery (three overseas and three domestic), four under exploration (one overseas and three domestic) and two domestic blocks under development phase.

IndianOil, along with Oil India Ltd. (OIL) and Bharat PetroResources Ltd. (BPRL), has signed agreements to acquire participatory shares in the LLC of Taas-Yuryah Neftegazobodobycha (TYNGD) from Rosneft Oil Company, the national oil company of Russia. TYNGD is currently producing 20,000 bopd and is expected to have a peak production of 100,000 bopd by the year 2021, which will enhance IndianOil's share of production by 0.5 MTPA and its share of 2P reserves by 164.6 Million Barrel of oil equipment (MMboe).

Another agreement has been signed with Rosneft for evaluation of acquisition of stake in the CJSC Vankorneft. Vankor is Russia's second largest field by production and accounts for 4% of Russian production and is currently producing oil at a peak level of approximately 440,000 bopd, which will enhance IndianOil's share of production by 1.76 MTPA and its share of 2P reserves by 218.95 MMboe.

Both these acquisitions in Russia would provide an additional 85.6% increase in IndianOil's share of 2P reserves from 447.73 to 831.28 MMboe and the Corporation's share of production by 452% from 0.5 MTPA to 2.76 MTPA.

In addition, an MoU was also signed between Rosneft and the Indian consortium for joint evaluation of certain other assets of Rosneft in Russia. This will add considerable 2P reserves/equity oil to IndianOil.

IndianOil took up natural gas marketing in 2004. Since then, the Corporation has expanded its customer base significantly by leveraging its inherent strengths and countrywide reach. Its innovative 'LNG at the doorstep' initiative has benefited bulk users located away from gas pipelines.

IndianOil is co-promoter of PLL (Petronet LNG Ltd.), which has set up LNG (Liquefied Natural Gas) import terminals at Dahej & Kochi, and has marketing rights for 30% of the LNG procured by PLL. It is also in the process of sourcing more quantities of LNG directly to meet the increasing domestic requirements, and is setting up a 5-MMTPA terminal at Ennore near Chennai for LNG imports.

IndianOil has 1.2 million tonnes per annum of LNG in the Pacific NorthWest LNG project on FOB basis for at least 20 years, and the deliveries are expected to commence in the year 2020. The Corporation is also working on capacity booking and equity participation in various upcoming LNG projects in the country, including in Gujarat and Odisha.

IndianOil currently operates city gas distribution networks in Agra and Lucknow through Green Gas Ltd., its joint venture with GAIL (India) Ltd. Similar networks are coming up at Allahabad and Chandigarh, to be followed by Ernakulam, Daman and Panipat. Furthermore, in consortium with GSPC, HPCL and BPCL, IndianOil has won bids for laying gas pipelines from Mallavaram to Bhilwara and Vijaypur via Bhopal, from Mehsana to Bhatinda, and from Bhatinda to Jammu and Srinagar. IndianOil's joint venture with Adani Gas Ltd. has won authorisation from PNGRB to operate city gas distribution projects in five new geographies – Panipat, Daman, Ernakulam, Udham Singh Nagar and Dharwad.

Green energy initiatives

IndianOil has ambitious plans to broaden its energy basket with alternative energy options such as wind, solar, bio-fuels and nuclear power. The Corporation envisages setting up 260 MW of renewable energy (wind and solar) over the next five years. Wind power systems to the tune of 69.3 MW have been installed in the States of Gujarat and Andhra Pradesh. A 5-MW grid-connected solar power plant at Rawra, Rajasthan, is operational since 2012. Solar PV systems of about 1.3 MW have also been installed at various IndianOil refineries, installations and offices across the country. Steps are underway to set up an additional 200 MW of wind power and 60 MW of solar power systems.

As a major initiative in reducing carbon emissions, the Corporation has so far converted over 4,200 fuel stations to operate on solar energy with a cumulative installed capacity of 15 MW from these solar photo-voltaic power systems. IndianOil's extensive retail network in rural areas was leveraged to sell over 3.60 lakh rechargeable solar lanterns to help replace the traditional kerosene wick lamps in rural households which are not yet connected to grid power.

To serve as carbon sinks, IndianOil has developed green belts with a tree cover numbering 2 million at its various installations. IndianOil has 505 rain-water systems with an annual harvesting capacity of about 2.9 billion litres, covering a combined catchment area of 950 hectares.

A comprehensive policy has been formulated for implementation of LED lighting in place of conventional lighting across all refineries, office buildings, townships, installations & fuel stations by the year 2017.

IndianOil has the largest captive plantation – covering 8,000 hectares – for bio-fuel production in India in the States of Chhattisgarh, Madhya Pradesh and Uttar Pradesh. To straddle the complete bio-fuel value chain, IndianOil has formed two joint ventures, IndianOil CREDA Biofuels Ltd. and IndianOil Ruchi Biofuels LLP. Currently, ethanol production from lignocellulosic sources such as rice straw, cotton stalk, bamboo, etc., is also being actively explored.

Partnering communities



As the flagship public sector enterprise of India, IndianOil has successfully combined its corporate social responsibility agenda with its business offerings, meeting the energy needs of millions of people every day, across the country - from Kashmir in the north to Kanya Kumari in the south, from Kutch in the west to Kohima in the east.

Besides, the Corporation partners communities in which it operates by supporting innumerable initiatives connected with health, family welfare, education, environment protection, provision of potable water, sanitation, and empowerment of women and socially & economically backward groups, education and employment-enhancing vocational skills, environment sustainability, protection of national heritage and promotion of art & culture, and rural development.

IndianOil has always been in the forefront in times of national emergencies, and IndianOilPeople have time and again rallied to help victims of natural calamities by maintaining uninterrupted supply of petroleum products, and contributing to relief and rehabilitation measures in cash and kind.

Details available at www.iocl.com