



IndianOil - the Energy of India

IndianOil is India's largest commercial Organisation. It is highest ranked Indian company in the latest *Fortune* 'Global 500' listings, ranked at 98th position, this year. IndianOil's vision is driven by a group of dynamic leaders who have made it a name to reckon with. With over 34,000 strong work force, a Maharatna Company, IndianOil has been helping to meet India's energy demands and reaching petroleum products to every part of India for over five decades. Since inception as Indian Oil Company Limited on 30th June 1959, we have grown exponentially and upon merger of Indian Refineries Ltd, it was renamed Indian Oil Corporation Limited, on 1st September 1964. Rising from the status of merely a petroleum marketing company in the year 1959, today business interests of IndianOil has outreached global energy points towards fulfilment of our vision to be the Energy of India.

The increasing energy requirements together with a slow increase in domestic crude production is leading to higher import bill as the country's oil imports is more than

75 percent of total oil consumption. It is estimated that coal import which was negligible in the past is also likely to touch around 30% of the total coal requirement in the next few years. The competition for acquiring energy resources is intensified globally. It is causing a serious concern as the Indian economy will require to intermingle with an ever expanding global fuel market. We are determined to achieve the growth path in an environmentally responsible manner in line with national target to cut the emissions intensity of GDP by 20-25% by 2020 compared to the 2005 level.

Our operations spans from refining, transportation of Crude, fuels through cross country pipelines, marketing of petroleum products, natural gas and petrochemicals, exploration and production of crude and gas. These operations are carried out through our strategically integrated Divisions—Refineries Division, Pipelines Division, Marketing Division, Planning & Business Development and R&D Centre. In addition, we are deriving group synergy through merger of Chennai Petroleum Corporation Ltd.



(CPCL), Bongaigaon Refinery & Petrochemicals Ltd. (BRPL), IBP Co. Limited, through our three overseas subsidiaries – Lanka IOC Ltd. in Sri Lanka, IndianOil (Mauritius) Ltd. in Mauritius and IOC Middle East FZE in the United Arab Emirates and eight joint ventures with Indian and overseas partners, we secure strategically advantageous position in our efforts to garner accelerated growth as reflected by our physical performance. IndianOil and its subsidiary (CPCL) account for over 48% petroleum products market share, 34.8% national refining capacity and 71% downstream sector pipelines capacity in India.

The IndianOil Group of companies owns and operates 10 of India's 21 refineries with a combined refining capacity of 65.7 million metric tonnes per annum (MMTPA, i.e. 1.30 million barrels per day approx.). IndianOil's cross-country network of crude oil and product pipelines, spanning 10,899 km with a capacity of 75.26 MMTPA, is the largest in the country. With a throughput of 68.5 million tonnes, it meets the vital energy needs of the consumers in an efficient, economical and environment-friendly manner.

It has a portfolio of powerful and most-preferred energy brands that includes Indane LPGas, SERVO lubricants, XtraPremium petrol, XtraMile diesel, etc. Validating the trust of 56.8 million households, Indane has earned the coveted status of 'Superbrand' along with SERVO, our lubricant brand.

IndianOil's ISO-9002 certified Aviation Service commands an enviable 63% market share in aviation fuel business, successfully servicing the demands of domestic and international flag carriers, private airlines and the Indian Defence Services. The Corporation also enjoys a 65% share of the bulk consumer, industrial, agricultural and marine sectors.

As a leading energy corporate in a rapidly growing emerging economy, challenges & opportunities are plentiful for the Corporation. With domestic demand projected to grow at a higher rate over the long term, the Corporation has laid out strategic plans to meet the future demand for petroleum products in India. The biggest opportunity is on the infrastructure front with an unprecedented array of projects lined up for implementation, like new highways, ports, airports and power projects. The automobile and manufacturing sectors are also notching up good growth

rates. We are on the cusp of perhaps one of the biggest opportunities of our lifetime.

Our projected investments of over ₹ 47,000 crore in new and additional refining capacity, enhanced pipeline network and marketing touch-points ensure that our nation will always have a secure and reliable energy resource for development. The Corporation's 15 MMTPA Paradip Refinery Project on the east coast is also a significant addition to the nation's refining infrastructure and opens up significant export opportunities. In the recent years, while the rapid growth in the Indian economy has increased its appetite for petrochemicals, the per capita consumption still continues to be way below the world average. The demand for petrochemicals in the domestic segment in India is very strong and slowly, we are seeing the established markets move to specialty polymers while much of India and China are focusing on commodity polymers.

Case Study: Innovative technical support is the key for success:

IndianOil has a sprawling world-class R&D Centre. It has pioneered several lubricants formulation, refinery processes, improvements in pipeline transportation and alternative fuels, and is also the nodal agency of the Indian hydrocarbon sector for ushering in Hydrogen fuel economy in the country. The Centre holds 212 active patents, with over 100 international patents. Some of the in-house technologies and catalysts developed by IndianOil include the INDMAX technology (for maximising LPGas yield), Oilivorous-S bio-remediation technology (extended to marine applications too), Diesel Hydro DeSulphurisation (DHDS) catalyst, a special catalyst for Bharat Stage-IV compliant Diesel, IndVi catalyst for improved distillate yield and FCC throughput, and adsorbent based deep desulphurisation process for gasoline and diesel streams.

During the year 2010-11, we have recorded a turnover of ₹ 3,28,744 crore and profit of ₹ 7445.48 crore. Our refineries operated at 102% capacity with a throughput of 52.96 MMT and continued to improve their distillate yield performance. Our pipelines network has registered an all-time high crude throughput of 42.47 MMT during the year. The product pipeline throughput was at 25.37 MMT. We have notched up a higher share of about 49.5% in the



sale of petroleum products. Our Petrochemical group has achieved sales at 910 TMT during the year in comparison to 650 TMT last year. In Petrochemicals, IndianOil offers a full slate of products including Linear Alkyl Benzene (LAB), Purified Terephthalic Acid (PTA) and an extensive range of polymers. IndianOil holds a significant market share of LAB in India and exports to 19 countries. It is also one of the largest suppliers of Mono-Ethylene Glycol (MEG) in the domestic market clocking a sales volume of 151 TMT during 2010-11. Execution of a state-of-the-art 120,000 tonnes per annum Styrene Butadiene Rubber (SBR) unit is underway at Panipat. The SBR unit is expected to further strengthen IndianOil's presence in the speciality petrochemicals sector.

Energising a greener tomorrow

IndianOil's commitment to achieve sustainable development and its vision to be the 'Energy of India' have motivated



its initiatives into the renewable energy such as Bio-fuels, Wind and Solar. Moreover, with the return of high crude oil prices, the attractiveness of investment in these energy sources has increased considerably. Besides, a conducive policy environment, as being put in place under the Government's National Action Plan on Climate Change is seen as a major catalyst in making renewable energy investment attractive and rewarding. From the near future onwards, renewable energy sources will provide the most versatile solution to the energy and environmental related issues. IndianOil is working on various ambitious projects in alternative energy vistas such as biofuels, solar energy, wind energy and Nuclear energy, besides Biomass, Biogas

and Hydrogen fuels are also under active consideration. Our technology initiatives and business strategies provide us a unique competitive advantage in handling the entire hydrocarbon value chain and a diversified portfolio of products, brands and services. Today, the guiding principle in the race to develop and adopt the best technologies is reduction of carbon footprint, waste generation and water consumption in various operations.

Solar Energy

India is endowed with enormous solar energy potential across its complete geographical span and to tap this



renewable energy potential, IndianOil is progressing steadfast. Our initiatives in garnering solar energy are as under :

A 5 MW Solar-PV power plant in Rajasthan is expected to commence power generation by January 2012. This is being developed with technical assistance from BHEL.



IndianOil has large network of Retail Outlets (ROs) spread all over India. We propose to have off-grid solar power systems and wind-solar hybrid systems at these ROs to meet their energy need. This will not only ensure the

un-interrupted power supply but also reduce the carbon footprint of those ROs.

Our Solar Lanterns are gaining popularity in the rural market due its superior illumination quality. About 30,500 users of our Solar lanterns find the same as an appropriate appliance to their quest for a superior illumination and smoke-free environs. Further efforts for cost reduction of our solar lantern is already underway. Solar Lantern testing facility has been created in R&D Centre.

A number of initiatives on Solar PV lighting, Solar-LED Street light at various Refineries, Installations, terminals and LPG Bottling Plants and administrative offices across the organization have been initiated to harness solar energy and reduce the carbon footprint, as well.

Wind energy

Our first wind power unit (21 MW) is operating in Kutch, Gujarat and since its commissioning in Jan 2009, it has generated 8.5 crore units equivalent to a revenue of ₹ 39.5 crore till 31.03.2011. It is also generating about



34,000 CERs annually. Additional wind power capacity of 48.3 MW is proposed to be added during 2011-12.

Biofuels

On 12 September 2008, the Government of India announced its 'National Biofuel Policy'. It aims to meet 20% of India's diesel demand with fuel derived from plants.

IndianOil has the largest captive energy crop assets as we have completed Jatropha plantation



in 6081 hectares of Government wasteland in the States of Chhattisgarh, Madhya Pradesh and Uttar Pradesh. To straddle the complete bio-fuel value chain, IndianOil has formed a joint venture with the Chhattisgarh Renewable Development Authority. IndianOil CREDA Biofuels Ltd. to carry out farming, cultivating, manufacturing, production and sale of biomass, bio-fuels and allied products and services in Chhattisgarh. In Uttar Pradesh, IndianOil is establishing a model value chain for the production of bio-diesel in partnership with Ruchi Soya. A MoU for collaborating on commercial production of

Case Study : Jatropha plantation Sites – A headway in Carbon Sinking and CSR activities.

IndianOil-CREDA Biofuels Ltd. (ICBL) at Chhattisgarh organized Health Care Camps for villagers at Bhamu and Newra, Bilaspur district, Chhattisgarh in association with Helpage India– a leading NGO in the field of health care. Over 500 people in Newra and Bhamu village availed the services. They were offered free medicines and a routine check-up for malaria which was endemic in the area. A series of climate awareness programmes has been conducted in association with The Institute of Applied Systems and Rural Development (IASRD), Delhi, in Chhattisgarh, creating awareness on climate change.



bio-diesel from algae has also been signed with PA LLC. Our Jatropha Plantation drive has generated about 3.33 lakh man days of rural employment having a CO₂ sequestration potential of 22.7 tCO₂ per month. The company envisages Jatropha plantation in 80,000 hectares in Chhattisgarh & Uttar Pradesh in coming years.

Second Generation Bio Fuels

We have planned setting up an advanced bio-energy research facility in collaboration with Department of Bio technology, Government of India. Its main focus area will be technology development and deployment of second generation bio fuels produced from a variety

of feed stock, including waste material like ethanol from lingo cellulosic fermentation, algae based bio-fuels.

Nuclear Energy

A JV company NPCIL-IndianOil Nuclear Energy Corp. Ltd. with Nuclear Power Corporation of India Limited has been formed to meet our ambitious plans for putting Nuclear Power Plants. JV is putting up Nuclear Power Plants at Rawatbhata, Rajasthan (2X700 mw) with Pressurised Heavy Water Based Reactor (PHWR) technology future participation in other planned project is being examined. Upon opening up of the sector, we have plans for independently developing nuclear portfolio and make IndianOil a nuclear energy major. Accordingly, developing human capital is a thrust area.

