CHAPTER-II

GROWTH OF IOC
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1.1 **PATH OF GROWTH**
As a leading public sector enterprise of India, IOC has successfully combined its corporate social responsibility agenda with its business offerings, meeting the energy needs of millions of people everyday across the length and breadth of the country, traversing a diversity of cultures, difficult terrains and harsh climatic conditions. The Corporation takes pride in its continuous investments in innovative technologies and solutions for sustainable energy flow and economic growth and in developing technoeconomically viable and environment-friendly products & services for the benefit of its consumers.

**Part I- Before 1991**

In 1948, India’s government passes the industrial policy Resolution, which states that, it’s Oil Industry should be state owned and operated.
In 1958, the government forms its own refinery company, Indian refineries Ltd. with Mr. Feroze Gandhi as Chairman.
IOC Company Ltd. was established on 30th June 1959 with Mr. Nijalingappa as the first Chairman.

Agreement for supply of SKO and HSD was signed with the then USSR.

Guwahati Refinery was inaugurated by Pt. Jawaharlal Nehru. Construction of Barauny Refinery was commenced.
In 1963, Foundation was laid for Gujrat Refinery.
IOC Blending Ltd. (50:50 Joint Ventures between IOC and Mobil) was formed.

The first Petroleum Product Pipeline from Guwahati to Siliguri (GSPL) IOC Corporation Ltd. was born on 1st September, 1964 with the merger of Indian Refineries Ltd. with IOC Company. Barauny Refinery was commissioned.

In 1965, Gujrat Refinery was inaugurated by Dr. S. Radhakrishnan, the president of India. Barauni - kanpur Pipeline (BKPL) and Koyali - Ahemdabad Product Pipeline (KAPL) commissioned. IOC people maintained the vital supply of Petroleum Products to Defense in 1965 war. In 1966, the first long-term agreement was signed for harmonious employee relations.

Haldia Baraurii Pipeline (HBPL) was commissioned in 1967. Bitumen and Marine Bunker business began.


IOC undertook the marketing of Madras Refinery products in 1969.

In 1970 IOC acquired 60% majority shares of IBP.

The same was offloaded in favor of the President of India under a Directive in 1972.

Dealership/reservation was extended to war widows, disabled Defense personnel, Freedom Fighters, etc. after 1971 War.
R&D Centre was established at Faridabad in 1972. SERVO, the first indigenous lubricant was launched.

In 1973, Foundation-stone of Mathura Refinery was laid by Mrs. Indira Gandhi, the then Prime of India.
In 1974, IOC Blending Ltd. (IOBL) became the wholly owned subsidiary of IOC.
Marketing Division attained a new watershed with a market participation of 64.2%.
Haldia Refinery was commissioned in 1975.
Multipurpose Distribution Centers were introduced at 132 Retail Outlets pioneering rural convenience.
In 1976, Private petroleum companies nationalized.
Burmah Shell became BPC.
R&D Centre launched Nutan wick stove in 1977.
In 1978, Phase-wise commissioning of Salaya-Mathura Crude Oil Pipeline (SMPL) began.
Barauni Refinery and Bongaigaon Refinery and Petrochemicals Ltd. (BRPL) affected by Assam agitation in 1979.

In 1980, the second Oil Shock was witnessed as a result of Iranian Revolution. Crude Oil price flared to a new high of $32 per barrel.
Digboi Refinery and Assam Oil Company's (AOC) marketing operations were vested in IOC. It became Assam Oil Division (AOD) of IOC. Half of India’s 12 Refineries are operated by IOC in 1981.
In 1982, Mathura Refinery was commissioned.
Mathura - Jalandhar Pipeline (MJPL) was commissioned.
In 1983, Massive augmentation of LPG storage and distribution facilities was undertaken.
Proposal for the 6 MMTPA Refinery at Karnal was submitted at an estimated cost of Rs 1,181 Crore.
In 1984, Taluka Kerosene Depots (TKOs) were commissioned for improved availability of kerosene in rural and hilly areas in addition to Multipurpose Distribution Centres.
Foreshore terminal at Kandla Port was commissioned.
Integrated Corporate Planning -ten year Perspective Plan and five year LRP initiated.
The new office complex for the Registered Office of the Corporation and Head Office of Marketing Division with a total area of 23,110 square metres was completed in 1985.
Additional Coking Unit at Barauni Refinery commissioned.
A new Foreshore Terminal at Madras commissioned in 1986.
Test marketing of 5 kg. LPG cylinders began in 1986-87 in Garo Hills and Kumaon.
In 1988, DFR of Karnal (Panipat) Refinery was submitted to the Government of India.
In 1989, Salaya-Mathura Pipeline (SMPL) was suitably modified for handling Bombay High Crude during winter.
Kandla-Bhatinda Pipeline (KBPL) project was approved in 1990.
The first LPG Bottling Plant of Assam Oil DiVision (AOD) at Silcher was commissioned.
Digboi Refinery Modernization project was initiated.
Bunkering facility at Paradip was completed in 1991.
Part II-After 1991

Revamp of Vacuum Distillation Unit at Mathura Refinery was completed.
Two of the IOC Table Tennis players represented the nation at Barcelona Olympic Games 1992.
In 1993, new era of Micro-processor based Distributed Digital Control System (DDCS) replacing the pneumatic instrumentations began in Refineries, in phased manner.
In 1994, India's First Hydro cracker Unit was commissioned at Gujarat Refinery.
Vision-2000, the Retail Visual Identity programme was launched to upgrade facilities at Retail Outlets.
1,443 km. long Kandla -Bhatinda Pipeline (KBPL) was commissioned at Sanganer in 1995.
1 million metric tone per annum (MMTPA) new CDU at Haldia Refinery was executed with in-house supervision in 1996.
The first batch of one year International MBA (IMBA) programme was successfully conducted by IOC Institute of Petroleum Management (IIPM).
In 1997, Commercial production of SERVOIII Titex Grease commenced at the world's first Titex Plant at Vashi, Bombay.
Business Development received new thrust.
IOC entered into LNG business through Petronet LNG -a JV company.
Panipat Refinery was commissioned in 1998.
Haldia, Barauni Crude Oil Pipeline (HBCPL) was completed.
The Administrative Pricing Mechanism (APM) was withdrawn from the Refining Sector effective 1" April 1998. Phase-wise dismantling of APM began.
IOC Board was reconstituted under the Navaratna concept, with the induction of five part-time non-official independent Directors.

In 1999, Indian Hydrocarbon Vision -2025" was announced at PETROTECH-99, organized by IOC on behalf of the oil Industry.

India attained self-sufficiency in Refining.

Diesel Hydro-desulphurization Units commissioned at Gujarat, Panipat, Mathura and Haldia Refineries. Manthan -- the IT re-engineering project was launched.

In the year 2000, IOC crossed the turnover of the magical mark of Rs 1,00,000 Crore -- the first Corporate in India to do so.

The IOC Foundation -- a non-profit trust -- the first of its kind in Corporate India, was unveiled to protect, preserve and promote the country's heritage.

Y2K compatibility achieved.

JNPT Terminal was commissioned.

The Lube Blending Plant at Asoti and the Once through Hydro cracker Unit at Mathura refinery were commissioned.

IOC entered into Exploration & Production (E&P) with the award of two exploration blocks to IOC and ONGC consortium under NELP-I.

Digboi Refinery completed 100 years of continuous operation in 2001.

Chennai Petroleum Corporation Ltd. (CPCL) and Bongaigaon Refinery and Petrochemicals Ltd. (BRPL) were acquired.

Fluidized Catalytic Cracker Unit at Haldia Refinery was commissioned.

Augmentation of Kandla- Bhatinda Pipeline (KBPL) to 8.8 MMTPA completed.

Eight Exploration blocks awarded to the IOCad consortium under NELP-II.

Two Coal Bed Methane (CBM) blocks awarded to the consortium of IOC and ONGC under CBM-I.
The investment proposal for Integrated PX/PfA project at Panipat was approved.
IBP Co. Ltd. was acquired with management control.
Barauni Refinery expansion project completed.
New generation auto fuels IOC Premium and Diesel Super introduced.
Retail operations began in Sri Lanka. IOC became the first Indian Petroleum Company to begin downstream marketing operations in overseas market.
Lanka IOC became an independent oil company in Sri Lanka Gasahol, 5% ethanol blended petrol, was introduced in select states.
INDMAX unit at Guwahati Refinery commissioned.
IOC Technologies Ltd. for marketing intellectual properties of R&D centre was launched.
Foundation Stone of Panipat Refinery Expansion and PX/PTA projects laid.
Maiden LPG supplies to Port Blair KVSPL (Product) Pipeline commissioned.
Concept of XTRA, covering Retail Outlets and customer service, launched
SERVO became a Super Brand.
IOC named as nodal agency by MoP&NG to undertake research in the areas of production, storage, distribution and utilization of hydrogen gas as an alternative fuel.
The foundation stone of IOC's Panipat Refinery expansion (6 to 12 MMTPA) project and PX/PTA plant (553 TMTPA) project laid at Panipat.
IOC pays the highest-ever dividend of 20% (for fiscal 2003), amounting to Rs 2453 crore, to shareholders.
IOC signs MoU with IIM (Ahmedabad) to offer one-year Post Graduate Programmes in Management (Energy) to be conducted at IIPM, Gurgaon.

IOC signs MoU with Haryana government to set up the Rs 6300 crore Naptha Cracker & Polymer Complex at Panipat.

R & D Centre bags the prestigious National Technology Award for successful commercialization of INDMAX technology for conversion of low value heavy petroleum residues into high value LPG.

IOC moves up by two places to the 189th position in the Fortune 'Global 500' ranking based on fiscal 2003 performance.

IOC's Rs 1248 crore LAB (Linear Alkyl Benzene) plant, the world's largest single train kerosene-to-LAB unit, was commissioned at Gujarat, thus signalling IOC's entry into petrochemicals business.

IOC signs Memorandum of Collaboration (MoC) with Mahindra & Mahindra to roll out the country's first hydrogen vehicle in the next two years.

IOC's 60 km-long Rs. 76 crore Panipat Rewari Product Pipeline commissioned.

IOC signs MoU with Nepal Oil Corporation Limited to lay a product pipeline between Raxaul (India) and Amlekhganj (Nepal).

The year marked IOC’s entry into gas business. As co-promoter of Petronet LNG Limited, complete quantity of gas (2.52 MMSCMD) allotted to IOC was sold out and commercial supplies commenced April 2004 onwards.

IOC was voted as the most trusted petrol pump brand in the country in a survey of India's most trusted brands conducted by the Economic Times Brand Equity.
LIOC (Lanka IOC), IOC's subsidiary, created history on the Colombo stock exchange as the biggest ever equity issue. LIOC's IPO offering 25% stake was oversubscribed 11.6 times on the first day itself.

In 2005, the year marked IOC's big ticket entry into the high stakes business of E&P. The IOC and Oil India consortium signed its Exploration and Production Sharing Agreement (EPSA) with the National Oil Corporation of Libya for Block No. 86, in the Sirte basin of Libya.

IOC's Mathura Refinery was the first refinery in India to attain the capability of producing entire quantity of Euro-III compliant diesel by commissioning the Rs 1046 crore DHDT (Diesel hydrotreating unit). Mathura Refineries also commissioned India's first MS quantity upgradation unit to produce Euro-III compliant petrol.

IOC becomes the top oil trading company amongst national oil companies in the Asia Pacific region for the second consecutive year.

IOC signs a Supply Purchase Agreement (SPA) to procure 1.75 MMTPA LNG to be received by the last quarter of 2009 at Petronet LNG Limited Dahej terminal.

IOC breached the Rs 150,000 crore mark in sales turnover by clocking Rs 150,677 in turnover in fiscal 2004.

IOC signed a JV agreement with GAIL to enter the city gas distribution projects in Agra and Lucknow.

IOC allowed by Government of India to charter crude oil ships on its own instead of going through Transchart, the chartering wing of the Ministry of Shipping.
1.2- **OVERVIEW**

IOC is Indian public-sector Petroleum Company. It is India’s largest commercial enterprise, ranking 105th on the Fortune Global 500 list in 2009. IOC and its subsidiaries account for a 47% share in the petroleum products market, 40% share in refining capacity and 67% downstream sector pipelines capacity in India. The IOC Group of Companies owns and operates 10 of India's 19 refineries with a combined refining capacity of 60.2 million metric tons per year.

IOC operates the largest and the widest network of fuel stations in the country, numbering about 17606 (15557 regular ROs and 2049 kissan sewa Kendra). It has also started Auto LPG Dispensing stations (ALDS). It reaches Indane cooking gas to over 47.5 million households through a network of 4990 Indane distributors. As the flagship national oil company in the downstream sector, IOC, together reaches precious Petroleum Products to million of people everyday through a countrywide network of over 30000 sales points. They are backed for supplies by 183 bulk storage terminals and depots, 97 aviation fuel stations and 88 Indane LPG Bottling plants.

IOC’s ISO-2002 certified Aviation service commands a 64% market share in Aviation fuel business, meeting the fuel needs of domestic and international flag carriers, private airlines and the Indane defence services. IOC also enjoys a dominant share of the bulk consumer business, including that of railways, state transport undertakings, industrial, agricultural and marine sectors.

In addition, IOC’s Research and Development Centre (R&D) at Faridabad supports, develops and provides the necessary technologies solutions to the operating divisions of the corporation and its customers within the country and abroad.
Subsequently, IOC Technologies Limited- A wholly owned subsidiary, was set up in 2003, with a vision to market the technologies developed at IOC’s Research and Development Centre. It has been modeled on the R&D marketing arms of Royal Dutch Shell and British Petroleum.

1.3- PRODUCTS
Bench marking Quality, Quantity and services world class Standards is a philosophy that IOC adheres to so as to ensure that consumers get a truly global experience in India. Its combined emphasis is on providing fuel management solutions to customers who can then benefit from their expertise in efficient sourcing and least cost supplies keeping in mind their usage patterns and inventory management.

“Customer should be at First priority”
Evidence indicates that satisfied customers defect at a high rate in many industries. Because satisfaction alone does not translate linearly in to outcomes such as loyalty in terms of purchase, business must strive for 100 percent, or total, customer satisfaction and even delight to achieve the kind of loyalty they desire. At IOC, customers always get the first priority. In any business, leadership is a timeless possession. Behind the No. 1 position is the Power and glory of customer choice. IOC was ranked the most trusted fuel pumps brand in the country in the prestigious Economic Times Brand Equity survey of India’s most trusted fuel pump brands. This, together with IOC’s No. 1 ranking in the various business magazines, is what can be truly considered as earning from customers.
In today’s dynamic environment, customers have access to information and, therefore, not only have a wide range of choices but also very high expectations. IOC is not only the largest commercial enterprise in the
country it is flagship corporate of the Indian nation. Besides having a
dominant market share, IOC is widely recognized as India’s dominant
energy brand and customer perceive IOC as a reliable symbol for high
quality products and services. IOC aims at constant restructuring of internal
processes so as to present a warm and friendly face to customers. Its winning
edge comes from there frontline brands that connect to customers at more
than one level.

IOC is a heritage and iconic brand at one level and a contemporary, global
brand at another level. While quality, reliability and service remains the core
benefits to their customers, their stringent checks are built in to operating
systems, at every level ensuring the Trust of over a billion Indians over the
last four decades.

IOC’s product range covers Petrol, Diesel, LPG, Aviation turbine fuel,
lubricants, Naptha, Bitumen, Paraffin, Kerosine etc.

Xtra premium branded petrol , Xtramile high speed Diesel, Servo
Lubricants, Indane LPG, Autogas LPG. IOC aviation are some of its
prominent brands.

Recently IOC has also introduced a new business line of supplying LNG
(Liquefied natural gas) by the Cryogenic transportation. The branding called
“LNG at Doorstep.” LNG headquarters are located in Scope Complex,
Lodhi road Delhi.

1.4- **MARKETING SERVICES**

IOC provides a wide range of marketing services and consultancy in fuel
handling, distribution, storage and fuel/lube technical services. With a
formidable bank of technical and engineering talent, IOC is fully equipped
to handle small to large-scale infrastructural projects in the petroleum
downstream sector anywhere in the country. Its project teams have independently or jointly as a consortium, have set up depots, terminals, pipelines, aviation fuel stations, filling plants, LPG bottling plants, amongst others. IOC's fuel management system to bulk customers offer customized solutions that deliver least cost supplies keeping in mind usage patterns and inventory levels. A wide network of lubricant and fuel testing laboratories are available at major installations which is further backed by sector-wise expertise in the core sectors of power, steel, fertilizer, gas plants, textile mills, etc. Cutting edge systems and processes are designed around one simple belief-to provide valuable customers with an unbeatable edge in their business. IOC's supply and distribution network is strategically located across the country linked through a customized supply chain system backed by front offices located in conceivably every single town of consequences. The wide network of services offered by IOC, Marketing Division is illustrated in this section, which includes; commercial/reticulated LPG; total fuel management/ consumer pumps; IOC Aviation Service; LPG Business (non-fuel alliances); loyalty programs; retail business (non-fuel alliances) and SERVO technical services.

1.5- **REFINERIES**

After going through a long spell of over-capacity, the refining industry worldwide has seen a turnaround in the recent years. Capacity utilization levels have been increasing in the face of strong petroleum product demand as well as inadequate refining capacity additions due to uncertainty about future investment returns. IOC refineries were operated as two distinct refining systems – one in the North-East/Eastern sector, which includes Guwahati, Digboi, Barauni and the associate company refinery at
Bongaigaon, and the second in the North –West/Western sector, Which includes Panipat, Mathura and Gujrat refineries.

**Digboi Refinery**, in Upper Assam, is India's oldest refinery and was commissioned in 1901. Originally a part of Assam Oil Company, it became part of IOC in 1981. Its original refining capacity had been 0.5 MMTPA since 1901. Modernization project of this refinery has been completed and the refinery now has an increased capacity of 0.65 MMTPA.

**Guwahati Refinery**, the first public sector refinery of the country, was built with Romanian collaboration and was inaugurated by Late Pt. **Jawaharlal Nehru**, the first Prime Minister of India, on 1 January 1962.

**Barauni Refinery**, in Bihar, was built in collaboration with Russia and Romania. It was commissioned in 1964 with a capacity of 1 MMTPA. Its capacity today is 6 MMTPA.

**Gujarat Refinery**, at Koyali in Gujarat in Western India, is IOC’s largest refinery. The refinery was commissioned in 1965. It also houses the first hydro cracking unit of the country. Its present capacity is 13.70 MMTPA.

**Haldia Refinery** is the only coastal refinery of the Corporation, situated 136 km downstream of Kolkata in the Purba Medinipur (East Midnapore) district. It was commissioned in 1975 with a capacity of 2.5 MMTPA, which has since been increased to 5.8 MMTPA.

**Mathura Refinery** was commissioned in 1982 as the sixth refinery in the fold of IOC and with an original capacity of 6.0 MMTPA. Located strategically between the historic cities of Delhi and Agra, the capacity of Mathura refinery was increased to 7.5 MMTPA.

**Panipat Refinery** is the seventh refinery of IOC. The original refinery with 6 MMTPA capacity was built and commissioned in 1998. Panipat Refinery
has doubled its refining capacity from 6 MMT/yr to 12 MMTPA with the commissioning of its Expansion Project.

Subsidiary refineries — Bongaigaon Refinery (2.95 MMTPA), Chennai Petroleum (9.5 MMTPA)

Stream-sharing between group refineries ensured better optimization, capacity utilization, value addition and enhanced gross refining margins. In a significant measure towards capacity building and upgradation, new projects worth almost Rs. 32,000 crore were approved during the year 2008-09. These include a state-of-the-art refinery at Paradip (Rs. 29,777 crore), and Motor Spirit Quality Improvement projects at Barauni (Rs. 1492 crore), Guwahati (Rs. 372 crore) and Digboi (Rs. 356 crore) refineries.

To widen the crude oil basket, several new grades were procured from Angola, Malaysia, Gabon, Congo, Nigeria, Libya and Egypt. Continuing with direct chartering of ships for petroleum imports, IOC imported a record quantity of 47.8 million tones of crude oil in 2008-09 as against 46.11 million tones in 2007-08. IOC entered into term contracts with Angola and Brunei for import of low sulphur crude oil and over 95% of the LPG imports were finalized through term contracts.

1.6- PIPELINES

Cross country pipeline networks, preferred as a cost-effective, energy – efficient, safe and environment friendly mode for transportation of crude oil and petroleum products, have been playing a vital role in meeting India’s energy demand. They are now a key constituent of the country’s infrastructure, transporting crude oil from import terminal as well as domestic sources to inland refineries, and finished products from refineries to major consumption centers.
In India’s infrastructure, the petroleum pipelines form a crucial part enabling sustained availability of petroleum products in all parts of the country for economic growth. India being a vast country, a wide network of pipelines becomes the paramount requirement of transporting petroleum products to interiors from refineries and crude oil to the land locked refineries. It is an established fact that pipelines are preferred as a cost effective, energy efficient, safe and environment friendly method of transportation for petroleum products and crude oil and are playing a leading role in meeting the demand for petroleum products in India. Economic growth and expansion of infrastructure in India offer opportunities to better utilize the existing pipeline network in addition to expand by constructing new pipelines.

IOC, the pioneer in cross-country petroleum product pipeline in the Indian sub-continent constructed and commissioned its first petroleum product pipeline, Guwahati-Siliguri Pipeline in the year 1964. Since then IOC has mastered the art and technology of pipeline engineering. Over the last four decades the pipeline network of IOC has grown to 9273 km with a capacity of about 62 million metric tones per year. Commissioning of new projects worth about Rs. 2,300 crore including LPG and R-LNG pipelines will reach the capacity to 75 million metric tones per annum with a network of over 10000 km. IOC’s sustained pursuit and implementation of proven safety and environmental management systems have brought rich results. All operating pipeline units have been accredited with ISO 9000 and ISO 14001 certificates.

Various initiatives in the field of project management, operations and maintenance including training in countries like Oman, Ethiopia, Kuwait and Sudan have been undertaken.
Today IOC is well placed to provide seamless services in the entire spectrum of petroleum pipelines covering techno-economic feasibility studies, design and detailed engineering, project execution, operations and maintenance, consultancy services in augmentation and modernization etc. supervisory Control and Data Acquisition (SCADA) and application software expertise are available from project implementation to commissioning including field services, maintenance and operational support. Tanker handling, petroleum product and crude oil accounting, quality control, ocean loss control, pigging procedure development and analysis of pigging data, selection, testing and evaluation of drag reducers, operations and maintenance of tank farm and pump stations are other areas of expertise available with IOC’s Pipelines Division.

1.7- IOC’S MAJOR PROJECTS

<table>
<thead>
<tr>
<th>Projects</th>
<th>Project cost (in crore)</th>
</tr>
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<tbody>
<tr>
<td>Paradip refinery</td>
<td>29,777</td>
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<tr>
<td>Panipat refinery</td>
<td>1007,83</td>
</tr>
<tr>
<td>MS quality improvement project at Panipat</td>
<td>1,131</td>
</tr>
<tr>
<td>Barauni</td>
<td>1,492</td>
</tr>
<tr>
<td>Guwahati</td>
<td>372</td>
</tr>
<tr>
<td>Digboi</td>
<td>356</td>
</tr>
<tr>
<td>Mathura</td>
<td>348</td>
</tr>
<tr>
<td>Gujrat refinery</td>
<td>5,882</td>
</tr>
</tbody>
</table>
IOC is implementing projects of over Rs. 60,000 crore currently. Major ones among them are: a 15 MMTPA refinery at Paradip (Rs. 29,777 crore); capacity augmentation of Panipat refinery (from 12 to 15 MMTPA, Rs. 1007.83 crore); MS quality improvement projects at Panipat (Rs. 1,131 crore), Barauni (Rs.1,492 crore), Guwahati (Rs. 372 crore), Digboi (Rs.356 crore) and Mathura (Rs. 348 crore) refineries; residue upgradation and MS/HD quality improvement project at Gujarat refinery (Rs. 5,882 crore); Diesel quality improvement & capacity expansion at Haldia Refinery (from 6 to 7.5 MMTPA, Rs. 2,869 crore); a Naptha Cracker and Polymer complex at Panipat (Rs.14,439 crore); and new product pipelines from Chennai to Bangalore (290 km, Rs. 273 crore), from Dadri to Panipat (130 km, Rs. 298 crore) and Branch pipeline from KSPL, Viramgam to Kandla (217 km, Rs. 349 crore).

IOC set up the nation’s first commercial Hydrogen-CNG dispensing stations at Dwarka, Delhi as part of the Corporation’s efforts to promote Hydrogen as an alternative fuel. Over the past three decades, IOC R&D center has developed thousands of formulations of lubricating oils and greases responding to the needs of Indian industry and consuming sectors like Defense, Railways, Public utilities and Transportation. The center has also

<table>
<thead>
<tr>
<th>Project Description</th>
<th>Cost (Cr)</th>
</tr>
</thead>
<tbody>
<tr>
<td>Haldia refinery</td>
<td>2,896</td>
</tr>
<tr>
<td>Naptha cracker and polymer complex at Panipat</td>
<td>14,439</td>
</tr>
<tr>
<td>Chennai-Banglore product pipeline</td>
<td>273</td>
</tr>
<tr>
<td>Dadri to Panipat</td>
<td>298</td>
</tr>
<tr>
<td>Branch pipeline for KSPL, Viramgam to Kandla</td>
<td>349</td>
</tr>
</tbody>
</table>
developed and introduced many new lubricants products to the Indian market like multi-grade railroad oils.

1.8- RESEARCH AND DEVELOPMENTS

IOC set up the nation's first commercial Hydrogen-CNG dispensing station at Dwarka, Delhi as part of the Corporation's efforts to promote Hydrogen as an alternative fuel.

186 lubricant formulations were developed during the year, of which 153 were commercialized. 47 approvals were also received from OEMs (Original Equipment Manufacturers).17 new patents were filed, of which 10 were approved. This takes the total number of patents to 214, including 113 international patents.

IOC has tied up with National Renewable Energy Laboratory (NREL), US, for a pilot project to produce second-generation bio-fuel from cellulosic biomass or degradable agricultural waste or wood. In order to explore sources of production of bio-fuels, research programmes were taken up during the year on bio-Hydrogen, algal fuels and lignocelluloses ethanol.

1.9- SUBSIDIARY COMPANIES-

1. Lanka IOC PLC

2. IndianOil (Mauritius) Ltd.

3. IOC Middle East FZE

4. IndianOil Technologies Ltd.
5. **Chennai Petroleum Corporation Ltd. (CPCL)**

IOC Technologies Ltd: IOC Technologies Ltd. is the marketing arm for the entire range of technologies developed at the R&D Centre of IOC Corporation Limited. These technologies are tailor made and meant to provide competitive advantage. IOC Technologies Ltd. headquarters are located at IOC R&D Centre, Faridabad.

**Lanka IOC Ltd.**

Lanka IOC, IOC’s subsidiary in Sri Lanka, is the only private oil company other than the state-owned Ceylon Petroleum Corporation (CPC) that operates retail petrol / diesel stations in Sri Lanka.

It has been incorporated to carry out retail marketing of petroleum products, bulk supply to industrial consumers, building and operating storage facilities at the Trincomalee Tank farm, etc., thereby not only providing energy security and supply stability for Sri Lanka but also upgrading the overall standards of service, particularly in the retail sector in the nation.

Lanka IOC is making phased investments to the tune of about INR 450 crore to provide world-class quality petroleum products and services at the most competitive prices to the Sri Lankan customers. It took over 100 CPC-owned petrol/diesel stations in February 2003 and commenced retailing products to customers. Subsequently, it took over 59 dealer-owned franchisee retail outlets.
The outlets are being refurbished with world-class, state-of-the-art facilities and services at par with international standards. Lanka IOC, through its retail chain, is also making available non-fuel facilities like convenience stores, 24-hour ATMs, automatic carwash, food marts, etc. This will not only give value-for-money to the motorists but would give altogether a new refueling experience. The refurbished stations of Lanka IOC have brought praise from all sections of the Sri Lankan society.

Lanka IOC has also acquired the China Bay Tankfarm of World War II vintage, which is of historic and strategic significance, being the largest tankfarm located between the Middle East and Singapore. The tankfarm connects to the Trincomalee harbour, which is the 5th largest all-weather, non-tidal natural harbour in the world, with a 56 km shoreline, making this tankfarm most effective for fuel receipt, storage and supply. The tankfarm, formerly owned and operated by CPC, has a total of 99 tanks, each with a capacity of 12000 kilolitres. Currently, only 15 of these tanks are operational. Lanka IOC intends to develop the tankage on need basis, as the volume of its downstream marketing operations in Sri Lanka grows.

There is also an 18,000 tonnes state-of-the-art lube blending plant at Trincomalee Tankfarm. Lanka IOC is also constantly looking for opportunities to introduce Auto LPG (Autogas), Aviation Fuel and INDANE LPGas in Sri Lanka, besides its world-class lubricants SERVO, which is already an established brand there.

IOC’s entry into Sri Lanka is in line with its Corporate Vision of becoming a transnational energy major. While expanding its market base to convert the surplus avails of petroleum products into more wealth for stakeholders, IOC
is also committed to being a good strategic partner to Sri Lanka. IOC’s vast experience in downstream petroleum operations in India will help create a healthy and competitive petroleum industry in Sri Lanka for the larger benefit of the island nation.

At present, the Sri Lankan petroleum market has a demand of 3.5 million metric tonnes per annum (MMTPA) and a refining capacity of 2.2 MMTPA. CPC, the other important player in the petroleum sector has about 1,070 retail outlets in Sri Lanka.

The surplus refining capacity in India will be used to bridge the existing gap between demand and supply in Sri Lanka. Lanka IOC intends to harness the advantages of geographical proximity between India and Sri Lanka, resulting in low freight rates in transportation and IOC’s superior R&D capabilities, to provide petroleum products at the most competitive price to the Sri Lankan market. A term contract valued at US$ 120 million between CPC and IOC is already in place for supply of 0.5 MMT products to CPC and supplies have commenced since September 2002. In addition, Lanka IOC’s retail volumes are also being replenished by IOC from Indian refineries, the first such supply having commenced in March 2003.

**IndianOil (Mauritius) Ltd.**

IOC (Mauritius) Ltd (IOML), a wholly subsidiary company of IOC Corporation Ltd, was registered in Mauritius on 24th Oct 2001. After creating an infrastructure and terminal in Port Louis area, the North West of the Island, IOML started its marketing operations in January 2004. In a short span, IOC stands tall at 18th position in terms of turnover among the Top 100 companies of Mauritius and a name to reckon with. It holds 16% of the
market share and compete with other multi national companies, i.e. Shell, Total and Caltex - Chevron who are present here for more than five decades. The presence in Mauritius is a gateway for IOC's strategy to penetrate and explore the marketing opportunity in the African countries and nearby islands.

IOML has a range of products - Automotive fuels, Aviation fuel, Marine fuels, SERVO Lubricants.

A comprehensive retail network has been established in Mauritius with the commissioning of several modern filling stations. IOML proposes to commission 25 filling stations by December 2008.

IOML is an important player holding maximum share in the Aviation Fuel business of Mauritius supplying Jet fuel to many renowned airlines. It also has 25% equity in the new petroleum terminal at the Sir Seewoosagar Ramgoolam International Airport, created by oil consortium with an investment of USD 16 million and which was commissioned in April 2007.

IOML has significant presence in the marine bunker business in Mauritius. It's in process of enhancing its infrastructure at Port quays to meet the future growth needs of this bunkering port.

IOML has a major presence in the Industrial and Commercial market sectors supplying the energy requirements of many leading companies. IOML provides petroleum products in bulk to various local business sectors such as the transport industry, building and construction contractors, manufacturing sector (textile, steel, bakery)& hotels among others.
IOC markets competitive grades of Lubricants under the brand name "SERVO". The product is available through network of our Filling Stations, spare parts shops and on the shelves of supermarkets. Appointed distributor covers the supply to unorganized sector, i.e. workshops, garages and service stations, etc. SERVO has its successful presence in many African countries too.

IOML has set up a modern State-of-the-Art storage facility of 24,000 Metric Ton (MT) capacity at Mer Rouge in Port Louis by means of 8 tanks of various capacities for different products. The terminal has some of the most modern facilities for handling and delivery of the petroleum products including loading bays and tank gauging systems, which are all micro-processor controlled. It is also the first of its kind in Mauritius.

A comprehensive petroleum laboratory for testing all fuels and lubricants is already commissioned since March 2007. The laboratory is the first full-fledge petroleum products’ testing laboratory in Mauritius and has already gained international accreditations such as ISO 9001-2000 and successfully participating in ASTM inter-laboratory proficiency program.

**IOC Middle East FZE**

IOC Middle East FZE is IOC's subsidiary in the Middle East. It oversees expansion of business in this region and is mainly into blending and marketing of SERVO lubricants and marketing of petroleum products in Middle East, Africa and CIS countries. The company is also marketing Group 1 and Group 2 base oils in Bulk and Flexis.

It is IOC's subsidiary in the Middle East and is mainly into blending and marketing of SERVO lubricants and marketing of petroleum products in the
Middle East, Africa and CIS countries. During 2008-09, 107 flexi tanks of base oil were supplied as compared to 25 in the previous year. Finished lubes were exported to Oman, Qatar, Yemen, Bahrain, UAE and Nepal. IOME achieved financial break-even in the year 2008-09.

**IndianOil Technologies Limited (ITL)**

IOC Technologies Limited (ITL) is a wholly owned subsidiary of IOC Corporation Limited. ITL is the technology-marketing arm for the entire range of technologies developed at IOC’s R&D Centre at Faridabad. The Centre, which was set up over three decades ago, has developed several technologies and technical expertise both in refining and lubricant sector.

IOC has nurtured technology by nurturing human talent. This approach has worked well since the hydrocarbon sector is both technology and knowledge intensive. As a result, the Corporation is now in a position to offer a bouquet of technologies, products, processes and solutions that are aimed at improving performance and profitability.

The R&D activities in refining technology are targeted in the areas of fluid catalytic cracking (FCC), hydro processing, catalysis, residue upgradation, distillation, simulation and modeling, lube processing, crude oil evaluation, process optimisation, material failure analysis, remaining life assessment and other technical services.

ITL also offers state-of-the-art sludge disposal technology based on biotechnology which is widely accepted in the hydrocarbon sector. ITL also markets the R&D developed lubricants technology, which possesses USPs, established through wide market acceptance.

ITL also conducts / imparts training in the areas of FCC, Hyroprocessing, Catalytic Reforming, Delayed coking, Simulation and Modeling, Bio-remediation, Crude Assay, Material Failure Analysis, Remaining Life
Assessment, Analytical techniques, Lubricants&grease etc. covering the basics, plant trouble shooting and technical solutions. In the recent past ITL carried out such trainings in Kuwait, Iran etc.

**Chennai Petroleum Corporation Limited (CPCL)**

Chennai Petroleum Corporation Limited (CPCL) is a world class Refining Company with dominant presence in South India. CPCL, formerly known as Madras Refineries Limited (MRL), was formed in 1965 as a joint venture between the Government of India (GOI), AMOCO and National Iranian Oil Company (NIOC). Subsequent to AMOCO’s and GOI’s disinvestment in 1985 and 2001 respectively, CPCL became a group company of IOC Corporation Limited (IOCL).

In 1969, CPCL set up its first Refinery in Manali, Chennai with an installed capacity of 2.5 MMTPA in a record time of 27 months. CPCL now has two refineries with a combined refining capacity of 10.5 MMTPA. The Manali Refinery has progressively increased its refining capacity to the current level of 9.5 MMTPA and is one of the most complex refineries in India and produces Fuels, Lubes, Wax and Petrochemical feed stocks. CPCL’s second Refinery is located at Cauvery Basin in Nagapattinam. This unit was initially set up with a capacity of 0.5 MMTPA in 1993 and later enhanced to 1.0 MMTPA with its own captive Jetty. The turnover of CPCL for the year 2008-09 was Rs. 36,490 crore.

CPCL plays the role of a Mother Industry supplying feed stocks to the neighbouring industries in Manali. CPCL’s products are marketed through IOCL. CPCL’s products are mostly consumed domestically except Naphtha, Fuel Oil and Lubes which are partly exported.
CPCL has also made pioneering efforts in the field of Energy and Water Conservation by setting up a Wind Farm and Sewage Reclamation and Sea Water Desalination Plants.

1.10 - RANKING IN NATIONAL AND INTERNATIONAL LEVEL

IOC is an Indian public-sector petroleum company. It is India’s largest commercial enterprise; ranking 105th on the Fortune Global 500 list in 2009. It is also the 18th largest petroleum company in the world and the number one petroleum trading company among the National Oil Companies in the Asia-Pacific region. IOCL was featured on the 2008 Forbes Global 2000 at position 303. It is also the 21st largest petroleum company in the world.
IOC is among the ‘top five’ of Business India’s Super 100 rankings yet again for the year 2009. Despite the financial turmoil in the oil & gas sector especially during the last year, it is a matter of pride that IOC is the topmost downstream petroleum company in the prestigious listing placed at the 3rd position. Such distinctions speak volumes of the company’s resilience and management skills and abundantly depicts that PSUs are highly regarded in the markets. IOC has also topped the listing on the basis of net sales rankings, maintaining its 2008 position.
The Business India Super 100 rankings are an annual feature and this is the 20th year of the listing. This year the sample size was 580. The process of selecting the Super 100, this year, involved ratings on four comprehensive parameters - Sales (excluding other income and excise), Net Fixed Assets (net block including capital work-in-progress), Net Profit (adjusted profit) and Market Capitalization (as on November 24, 2009). Each parameter is assigned a weightage to create the rankings in addition to normalizing them. The sales-to-net-fixed-assets-ratio has been stressed upon as it gives a good insight into the strength and weakness of a company as well as the industry segments and the return of capital employed throw light on how well managers have deployed resources at their disposal.

IOC features among the top ten on the basis of Net Fixed Assets rankings (4th position) and EBIDTA rankings (7th position).
IOC among India's 'Top Valuable Companies in BT 500 Listing'

IOC is among India's 'Top Valuable Companies in BT 500 Listing'. It stands as the topmost petroleum downstream company in the recently declared 15th Edition of Business Today's BT500 listing of India's 'Most Valuable Companies'. It has garnered the 6th position with a market cap of Rs 50,324 crores amongst the listing of public sector companies of India which includes public sector banks and financial institutions.

Chart II.3

The Corporation is ranked as number one company in 'combined top 10 by sales' (Rs 2,55,764 crore), which includes both private and public sector units. It is in the top slot also amongst 'top 15 companies by revenue' (Rs 2,55,764 crores) and ranked at second position amongst 'top 15 by profit' (Rs 7,498 crores) amongst the public sector units of India.
Chart II.4

TOP 15 BY REVENUE

1. INDIAN OIL CORP. 2,55,764 (REVENUES* IN RS-CRORE)

2. BPCL 1,09,461

3. HPCL 99,358

4. ONGC 59,687

5. SBI 45,946

6. SAIL 41,289

7. MRPL 33,441

8. NTPC 32,838

9. BALCO 31,125

10. INDCH 30,647

11. IOCL 29,854

12. HCL 28,105

13. TISCO 27,518

14. SBIL 26,777

15. NALCO 26,604

Chart II.5

TOP 15 BY PROFIT

1. ONGC 15,643 (PROFIT* IN RS-CRORE)

2. IOC 7,498

3. NTPC 6,664

4. SAIL 6,202

5. SBI 4,541

6. BHIL 2,414

7. SAIL 2,384

8. NALCO 2,381

9. BALCO 2,367

10. INDCH 2,359

11. IOCL 2,334

12. TISCO 2,230

13. HCL 2,193

14. SBIL 2,182

15. NALCO 2,172
The deciding metric in the ranking of the top 500 companies is their average market capitalization on the Bombay Stock Exchange (BSE) for the first half of the current financial year – that is the period between April 1 and September 30, 2007. Variables such as total assets, return on total assets, sales, net profits and return on capital employed have been taken into account along with the average market cap. The reason for choosing the average market value is that a company's market value is universally recognized as a variable that factors in not just present performance, but also future prospects.

IOC is India's largest commercial enterprise, and is also the highest ranked Indian company in the prestigious Fortune, `Global 500' listing with 135th position based on fiscal 2006 performance. It is also the 20th largest petroleum company in the world.

IOC and its subsidiaries account for 47% petroleum products market share, 34% refining capacity and 67% downstream sector pipelines capacity in India.

The IOC Group of companies owns and operates 10 of India's 20 refineries with a combined refining capacity of 60.2 million metric tonnes per annum. These include two refineries of subsidiary Chennai Petroleum Corporation Ltd. (CPCL) and one of Bongaigaon Refinery and Petrochemicals Limited (BRPL).

The Corporation's cross-country crude oil and product pipeline network spanning about 9,300 km, the largest in the country, meets the vital energy needs of the consumers in an efficient manner.

Having commissioned projects valued at over Rs 10,000 crore in 2006-7, IOC is investing Rs 43,250 crore more during the XI Plan period (2007-12) in augmentation of refining and pipeline capacities expansion of marketing
infrastructure and product quality upgradation as well as in integration and diversification projects.

(Updated on May 05, 2009)

**Table II.2**

**Distinctions of IOC**

<table>
<thead>
<tr>
<th>Distinctions</th>
<th>Date</th>
</tr>
</thead>
<tbody>
<tr>
<td>Reigning on the pinnacle of success</td>
<td>25.02.2010</td>
</tr>
<tr>
<td>IOC among 'Best Companies To Work For'</td>
<td>25.01.2010</td>
</tr>
<tr>
<td>IOC in top five in Business India’s Super 100 ranking</td>
<td>07.12.2009</td>
</tr>
<tr>
<td>IOC tops ET 500 ranking</td>
<td>25.11.2009</td>
</tr>
<tr>
<td>IOC in Platts ranking 2009</td>
<td>19.11.2009</td>
</tr>
<tr>
<td>IOC No.1 in BW 500 Ranking</td>
<td>27.10.2009</td>
</tr>
<tr>
<td>IOC leads India Inc. in Fortune's 'Global 500' listing for 2009</td>
<td>10.07.2009</td>
</tr>
<tr>
<td>IOC — the only PSU among India’s 25 best employers</td>
<td>16.04.2009</td>
</tr>
<tr>
<td>IOC frontrunner in Oil &amp; Gas category in <em>FE-500</em> listing of India's top corporate</td>
<td>31.03.2009</td>
</tr>
<tr>
<td>IOC tops Business Standard’s 'BS 1000' again</td>
<td>13.03.2009</td>
</tr>
<tr>
<td>IOC among India's 'Top 10' in Business India's Super 100 Listing</td>
<td>19.12.2008</td>
</tr>
<tr>
<td>Event</td>
<td>Date</td>
</tr>
<tr>
<td>----------------------------------------------------------------------</td>
<td>------------</td>
</tr>
<tr>
<td>IOC tops 'ET 500' rankings once again</td>
<td>21.10.2008</td>
</tr>
<tr>
<td>IOC tops Business world’s ‘BW Real 500’ rankings again</td>
<td>20.10.2008</td>
</tr>
<tr>
<td>IOC third most valuable (company) brand in India: ET-brand finance survey</td>
<td>02.09.2008</td>
</tr>
<tr>
<td>IOC leads India Inc. in Fortune's 'Global 500' listing for 2008</td>
<td>11.07.2008</td>
</tr>
<tr>
<td>'The Most Trusted Brand' in ET's Brand Equity annual survey-2008</td>
<td>12.06.2008</td>
</tr>
<tr>
<td>IOC the 'Top Oil &amp; Gas Company' in Financial Express's 'FE 500' listing</td>
<td>23.05.2008</td>
</tr>
<tr>
<td>IOC Tops Business Standard's 'BS 1000' listing</td>
<td>15.02.2008</td>
</tr>
<tr>
<td>'Top Ten' in Business India's Super 100 Listing</td>
<td>13.12.2007</td>
</tr>
<tr>
<td>IOC among India's 'Top Valuable Companies in BT 500 Listing'</td>
<td>30.11.2007</td>
</tr>
<tr>
<td>IOC ranked 2nd amongst India’s Top 50 Most Valuable Brands</td>
<td>31.07.2007</td>
</tr>
<tr>
<td>IOC gets a top slot in ET500 listing</td>
<td>22.03.2007</td>
</tr>
<tr>
<td>IOC tops 'BS 1000' companies in Sales again</td>
<td>03.01.2007</td>
</tr>
</tbody>
</table>

(Updated on February 25, 2010)
Table II.3

Awards & Accreditations

<table>
<thead>
<tr>
<th>Awards &amp; Accreditations</th>
<th>Date</th>
</tr>
</thead>
<tbody>
<tr>
<td>IOC tops Business Standard’s 'BS 1000' ranking</td>
<td>16.02.2010</td>
</tr>
<tr>
<td>IOC bags four OISD Awards</td>
<td>20.10.2009</td>
</tr>
<tr>
<td>Chairman receives ‘SCOPE Award for Excellence’</td>
<td>15.10.2009</td>
</tr>
<tr>
<td>IOC receives the MoU Excellence Award 2007-08</td>
<td>15.10.2009</td>
</tr>
<tr>
<td>IOC receives ‘Award for Global Impact by an Indian PSU’</td>
<td>10.10.2009</td>
</tr>
<tr>
<td>IOC wins Oil &amp; Gas Supply Chain Excellence Award</td>
<td>21.09.2009</td>
</tr>
<tr>
<td>IOC’s Director (HR) receives 'Pride of HR Profession Award'</td>
<td>19.09.2009</td>
</tr>
<tr>
<td>Lanka IOC bags Business Today Top 10 Award for 2007-08</td>
<td>21.08.2009</td>
</tr>
<tr>
<td>Bongaigaon Refinery bestowed Indira Gandhi Paryavaran Puraskar 2006</td>
<td>05.06.2009</td>
</tr>
<tr>
<td>IOC wins Reader's Digest Award for most trusted petrol station brand</td>
<td>01.06.2009</td>
</tr>
<tr>
<td>IOC sweeps five PetroFed Oil &amp; Gas Industry Awards (For the year 2008)</td>
<td>16.04.2009</td>
</tr>
<tr>
<td>IOC wins Retailer of the Year - 'Rural Impact Award'</td>
<td>17.02.2009</td>
</tr>
<tr>
<td>Award Description</td>
<td>Date</td>
</tr>
<tr>
<td>----------------------------------------------------------------------------------</td>
<td>------------</td>
</tr>
<tr>
<td>Golden Peacock Award for IOC-R&amp;D for the fourth time</td>
<td>02.01.2009</td>
</tr>
<tr>
<td>IOC wins six awards at PRSI annual meet</td>
<td>16.12.2008</td>
</tr>
<tr>
<td>IOC wins SCOPE Meritorious Awards for Environmental Excellence &amp; Sustainable Development and Good Corporate Governance</td>
<td>24.11.2008</td>
</tr>
<tr>
<td>IOC presented the 'Indian Express Uptime Champion Award'</td>
<td>08.10.2008</td>
</tr>
<tr>
<td>'Oil &amp; Gas Supply Chain Excellence' Award for IOC</td>
<td>22.09.2008</td>
</tr>
<tr>
<td>IOC bags 'Most Admired Retailer – Rural' Award 2007</td>
<td>22.09.2008</td>
</tr>
<tr>
<td>Safety Innovation Award for IOC for fourth consecutive year</td>
<td>11.09.2008</td>
</tr>
<tr>
<td>‘CIO-100’ award for IOC for the third time</td>
<td>09.09.2008</td>
</tr>
<tr>
<td>IOC conferred ‘Business Super brand 2008’</td>
<td>05.09.2008</td>
</tr>
<tr>
<td>IOC's &quot;Car in a Tank&quot; sales promotion scheme wins Stevie Award</td>
<td>07.07.2008</td>
</tr>
<tr>
<td>IOC wins the World Petroleum Congress Excellence Award 2008 for technical development</td>
<td>01.07.2008</td>
</tr>
<tr>
<td>IOC's XtraPower wins Loyalty Summit Award</td>
<td>25.01.2008</td>
</tr>
<tr>
<td>Event Description</td>
<td>Date</td>
</tr>
<tr>
<td>----------------------------------------------------------------------------------</td>
<td>------------</td>
</tr>
<tr>
<td>IOC Finance Director S.V. Narasimhan bags Excellence in Finance Award</td>
<td>22.01.2008</td>
</tr>
<tr>
<td>IOC wins Retailer of the Year - Rural Impact Award</td>
<td>15.01.2008</td>
</tr>
<tr>
<td>IOC- R&amp;D Centre Awarded the coveted WIPO GOLD MEDAL</td>
<td>18.10.2007</td>
</tr>
<tr>
<td>IOC wins Oil Industry Safety Directorate Awards</td>
<td>04.10.2007</td>
</tr>
<tr>
<td>SERVO acquires prestigious MAN Global approvals</td>
<td>24.09.2007</td>
</tr>
<tr>
<td>IOC bags the 'Most Admired Retailer of the Year' award</td>
<td>10.09.2007</td>
</tr>
<tr>
<td>IOC honored with 'CIO 100 Award 2007'</td>
<td>10.09.2007</td>
</tr>
<tr>
<td>IOC bags SCOPE Gold Trophy for Best Practices in Human Resources Management 2005-06</td>
<td>06.09.2007</td>
</tr>
<tr>
<td>SAP ACE – Awards for Customer Excellence for IOC</td>
<td>24.08.2007</td>
</tr>
<tr>
<td>IOC’s R&amp;D Centre gets special recognition for Bioremediation</td>
<td>24.08.2007</td>
</tr>
<tr>
<td>SERVO secures entry into NSF White Book - H1 Category</td>
<td>23.08.2007</td>
</tr>
<tr>
<td>IOC, the only petroleum company as `The Most Trusted Brand' in ET's Brand Equity's annual survey</td>
<td>01.06.2007</td>
</tr>
</tbody>
</table>
1.11- BUSINESS DEVELOPMENTS

Considering the rising demand for energy to fuel the country’s growing economy, IOC is implementing ambitious projects envisaging investments over Rs. 500000 crore currently. It plans to take the group refining capacity from 60.2 to 80 million tones per annum by the year 2011-12. Similarly, IOC will add about 4000 km. of new Pipelines by the year 2012. In this, we see gas Pipelines as a grow area.

Major Projects under Execution are: Capacity augmentation at Panipat Refinery from 12 to 15 million tones per annum, and at Haldia Refined from 6 to 7.5 million tones per annum; Petrol quality improvement Projects at Gujrat Refinery; Naptha cracker at Panipat and, a 15 million tones per annum grassroots Refinery at Paradip to Haldia and new Product Pipelines from Koyali to Ratnam and Chennai to Banglore, and LPG Pipeline from Panipat to Jalandhar and a natural gas Pipeline from Dadri to Panipat.

1.12- NEW GROWTH AREAS

New businesses besides consolidation in core areas, IOC took big strides in new businesses. Its new business assume great significance for its growth plans for the future with its current marketing margins taking a hit on account of soaring prices of crude oil in the international market and incomplete pass-through of product prices to the customers. IOC currently building its Petrochemicals business as a major driver of growth. It is also pursuing opportunities in all facets of the gas value chain, that is, sourcing, setting up of LNG terminals, city gas distribution, and cross country Pipelines. IOC’s business plan for entry in to the bio-diesel value chain was finalized during the year 2007-08. Unlike diversion of food crops in to bio-fuel production, which has come under criticism across the globe, IOC’s
business model for bio-diesel is based on cultivation of non edible plans such as Jatropha and Pangamia on arid/wastelands. IOC is exploring the possibility of including alternative energy sources like wind and solar in its business model.

IOC’s R&D efforts in the coming years shall focus on furistic technology in Petrochemicals, Polymers, bio-fuels and nanotechnology; additives for enhanced fuel and engine efficiency; eco-friendly long drain lubricants etc. Besides consolidation in core areas, IOC took big strides in new businesses during the year 2008-09.

**Exploration & Production (E&P)**

IOC was awarded 100% participating interest and operatorship of two Type-S blocks in- Cambay Basin in the seventh round of NELP. This was in addition to the deepwater block in the KG basin awarded to the consortium of IOC (20% participating interest), ONGC and GSPC. Expanding its E&P portfolio, IOC also entered into a farm-in agreement with Reliance E&P DMCC for 12.5% participating interest in the deepwater Block-K in Timor-Leste. Among overseas oil & gas blocks, IOC signed Production Sharing Agreements for Blocks 82 & 83 in Yemen (awarded earlier) that were approved by the Yemeni Parliament. IOC holds 15% participating interest in each block along with other partners, viz., Medco Energi, Kuwait Energy and OIL.

In Libya, an Exploration & Production Sharing Agreement was signed for onland exploration of Areas 95-96 in Libya (awarded earlier) and ratified by the General People's Committee of Libya. IOC holds 25% participating interest in the block along with other partners, viz., Sonatrach and OIL. During the year, the National Iranian Oil Company conveyed its acceptance of commerciality of the gas discovery in Farsi block (awarded earlier) in
which IOC holds 40% participating interest along with other partners, viz., OVL and OIL.

**Petrochemicals**

During the year, IOC consolidated its LAB business as a major supplier to key national and international players in the detergent industry. Despite market downturn and shortage of raw material, sale of 126000 tones (domestic and exports) of IOCLAB was registered during the year. The PTA business was also expanded to cater to all major domestic customers and clocked a sales volume of 4,08,000 tones. For the year 2008-09, the petrochemicals business turned in Rs. 2760 crore in revenue.

Work on IOC's biggest petrochemicals investment - the over Rs. 14,000 crore Naphtha Cracker and downstream polymer units - is underway at Panipat for commissioning by the year end. The Naphtha Cracker has a capacity of 8,57,000 tones per annum (TPA) of Ethylene and 6,00,000 TPA of Propylene. In addition to 3,25,000 TPA of Mono Ethylene Glycol and 1,40,000 TPA of Butadiene, the unit can also produce 6,50,000 TPA of Polyethylene and 6,00,000 TPA of Polypropylene.

**Diversification Initiatives**

**Gas**

IOC sold 1.7 million tones of R-LNG during 2008-09, thus generating a turnover of Rs. 2,425 crore (growth of 16.1% over previous year). During the year, the Corporation has tied up for sourcing of additional quantity of gas and renewed gas sales agreements with existing customers. To consolidate the city gas distribution (CGD) business, the Corporation has signed MoUs with several players, which include Adani Energy, Reliance Gas Corporation, OIL and ONGC.
IOC has also entered into franchise agreements with CGD players such as Indraprastha Gas Ltd., Mahanagar Gas Ltd., Adani Energy Limited, GEECL, SITI Energy and GSPC Gas Ltd. to sell CNG through its retail outlets.

**Bio-fuels**

To straddle the complete bio-fuel value chain, IOC formed a joint venture with the Chhattisgarh Renewable Development Authority (CREDA). IOC and CREDA hold 74% and 26% equity in IOC CREDA Biofuels Ltd. that was formed for carrying out farming, cultivating, manufacturing, production and sale of biomass, bio-fuels and allied products and services. A pilot project of jatropha plantation on 600 hectares of revenue wasteland is underway in Jhabua district in Madhya Pradesh to ascertain the feasibility of revenue land-based commercial biodiesel units and to develop benchmarks for plantation costs and output. IOC has also signed an MoU with M/s Ruchi Soya Industries Ltd. to take up contract farming on one lakh hectare of private and panchayat wasteland in the state of Uttar Pradesh.

**Other Diversification Initiatives**

IOC has forayed into wind energy business with the commissioning of a Rs. 130 crore, 21 MW wind power project in the Kutch district of Gujarat. The cumulative power generation from the 14 wind turbine generators has crossed 159 lakh KW since commissioning in January 2009. IOC has also commissioned two pilot solar lantern charging stations at its Kisan Seva Kendras at Sathla near Meerut and Chokoni near Bareilly.

1.13 - **OVERALL GROWTH**

According to Mr. Sarthak behuria, the chairman of the company-

“India’s growth in the last few decades has been swift. Till the economy was opened up, allowing in the free winds of change, economic growth was a
meager 3.5 per cent. Climbing to 6 per cent in the post-liberalization period, the economy accelerated to over 8 per cent in the last few years. Today, India is emerging from the shadows of the past and looking the future in the eye. Certainly, this is not accidental but the product of vibrant economic reforms. And it clearly reflects the coming of age of India.

Today, India consumes over 112 million tones of petroleum products annually. The rate at which consumption is growing every year requires creation of one new refinery the size of the Mathura refinery every two years, and a matching distribution infrastructure to reach these products to the consumers! Call it providence, if you will, but India has moved onto the path of higher growth at a time when energy-related issues have become more complex than ever before. Energy, today, is scarcer, costlier and much more strategic.

Not only are energy markets worldwide constrained by a low and depleting resource base, they are also limited by huge investments. Driven by geopolitical uncertainties and supply volatilities, escalating crude oil prices, which have wreaked havoc on economies worldwide, are the signal of the tougher times ahead. It is becoming increasingly difficult to get oil. In addition, there is a shortage of equipment and skilled personnel in the energy sector. To top it all are the overriding climate change concerns, pointed out by voices that are getting shriller by the day.

As India moves ahead to become the world’s most populous nation in the year 2040 and a multi-trillion economy much sooner, it is estimated that its energy infrastructure needs a colossal investment of $1.25 trillion over the 25-year period till 2030 to sustain its economic growth. The big question is: Where will the money come from? In a highly subsidized energy market such as India, resource generation for these investments by energy suppliers
seems a difficult proposition, especially in the face of regressive pricing policies. Take, for instance, the oil and gas sector. India’s over 70 per cent dependence on imported crude oil exposes it to the volatilities and uncertainties that shroud the global oil markets today. It is estimated that India needs to invest over Rs 50,000 crore annually in its oil and gas sector alone to meet the current and projected demand levels. Most of the oil and gas infrastructure is in the public sector, which is reeling under the burden of under-recoveries to the tune of over Rs 2,00,000 crore on sales of petrol, diesel, domestic LPG and kerosene. In the face of such a severe resource crunch, India’s oil and gas sector possibly cannot generate the required resources for such huge investments. Although investments have been forthcoming from the private sector, if the current price regime continues, such investments would only be for the export markets.

As a nation, we have to attain higher rates of GDP and, more importantly, the prosperity should cascade down to the last level, to the proverbial ‘bottom of the pyramid’. To sustain and raise the growth rate of our burgeoning trillion-dollar economy, we need many things to click together. For instance, good infrastructure - ports, airports, roads; cheap labour, equipped with adequate skills, enough storage and irrigation facilities for agriculture, high volumes of FDI and savings, high level of labour discipline and productivity and, above all, a secure supply of clean, affordable energy to power all sectors of economy. The structural transformation that has been adopted by the government in recent times has reduced growth constraints and contributed greatly to the country’s overall growth and prosperity. Several studies predict rapid economic growth, at a double-digit rate in the decades to come, in India, consequent to which the economy stands a good
chance of overtaking the likes of the US. But can one take these projections and optimism for granted? Even ignoring, for the moment, the entire gamut of issues that point in this direction and just focusing on energy, it is apparent that ensuring a secure, supply of clean and affordable energy will be a binding constraint on India’s growth.”

**IOC RECORDS 6.17 % AVERAGE GROWTH IN SALES VOLUME IN LAST THREE YEARS**

**Table II.4**

<table>
<thead>
<tr>
<th>Year</th>
<th>Sales (million tones)</th>
<th>Growth (%)</th>
</tr>
</thead>
<tbody>
<tr>
<td>2008-09</td>
<td>62.6</td>
<td>5.6</td>
</tr>
<tr>
<td>2007-08</td>
<td>59.30</td>
<td>7.7</td>
</tr>
<tr>
<td>2006-07</td>
<td>54.84</td>
<td>5.23</td>
</tr>
<tr>
<td>2005-06</td>
<td>49.61</td>
<td>-----</td>
</tr>
</tbody>
</table>

\[
(5.23+7.7+5.6) / 3 = 6.17 \%
\]

The Domestic sales during the year 2008-09 grew by 5.6% from 59.30 million tones in 2007-08 to 62.6 million tones in the 2008-09; the growth was 7.7% and 5.23% in the FY 2007-08 and 2006-07 respectively. By interpreting above table we analyze that there was rapid growth in 2007-08 and it decreased by 2.1% in 2008-09, the average growth in last three years is 6.17%.
IOC Signs MoU with Government of India for 2009-10

To commission projects worth Rs. 30,000 crore in next fiscal

As a step towards ensuring the energy security and sustained economic growth of the nation, IOC has set for itself a tough and challenging agenda in its growth-oriented Memorandum of Understanding (MoU) with the Government of India for the year 2009-10.

The MoU was signed here today by Mr. RS Pandey, Secretary, Ministry of Petroleum and Natural Gas, on behalf of the Government of India, and Mr. Sarthak Behuria, Chairman, on behalf of IOC. Mr Pandey, while complimenting IOC on its remarkable organizational structure, and wide reach across every nook & corner of India, was of the view that the public sector units in the oil & gas sector must aim to achieve 100 % customer satisfaction in all aspects. Mr Behuria said, “We continue to see high growth in demand of petroleum and diesel products and our endeavor remains to meet the total requirement. He added, that despite the downturn in the economy, IOC continues with its planned projects on schedule, which will help to boost the Indian economy.

To ensure optimum utilization of resources and increased operational efficiency in both Refineries and Marketing divisions, substantial cost reduction at the operational level is a major thrust area of MoU. IOC's efforts to usher in cleaner fuels continue to remain in sharp focus with major ongoing projects like the residue upgradation project at Koyali Refinery in Gujarat and petrol quality upgradation projects at Panipat, Mathura, Barauni, Guwahati and Digboi refineries. The MOU also lays due emphasis on physical parameters like crude oil throughput, energy factor, project milestones, etc. IOC will commission projects worth Rs. 30,000 crore during the year 2009-10, including the Naphtha Cracker at Panipat; residue
upgradation project at Koyali Refinery; once-through Hydrocracker at Haldia; and Panipat Refinery additional expansion project (12 to 15 MMTPA). An interesting case-specific life-cycle assessment study of Jatropha bio-diesel has been assigned to IOC's R&D Centre, which would help compare the impact of Jatropha bio-diesel on the environment vis-à-vis petro diesel for various transportation modes. New parameters included in the MoU relate to Corporate Social Responsibility (CSR) initiatives, e-procurement and setting up of a network and infrastructure for polymer marketing. The Corporation also plans to commission more than 200 Kisan Seva Kendra (special format retail outlets) as one-stop shops for rural customers.

The MoU also gives due weightage to the performance of IOC's refining subsidiary, Chennai Petroleum Corporation Ltd.

(New Delhi, March 28, 2009- business line)
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