

Products and Services

Product (Brand)	Sales ('000 tons)
Naphtha	1022
LPG (Bharat Gas, Bharat Metal Cutting Gas)	2933
Motor Spirit (Speed)	2914
Special Boiling Point Spirit	32
Benzene	87
Toluene	27
Polypropylene Feedstock	62
Regasified - LNG	905
Aviation Turbine Fuel	959
Superior Kerosene Oil	1637
High Speed Diesel (Hi-Speed)	11482
Light Diesel Oil	107
Mineral Turpentine Oil	102
Furnace Oil	1745
Low Sulphur Heavy Stock	600
Bitumen	653
Lubricants (MAK, MAK Ultima)	232
Others	287



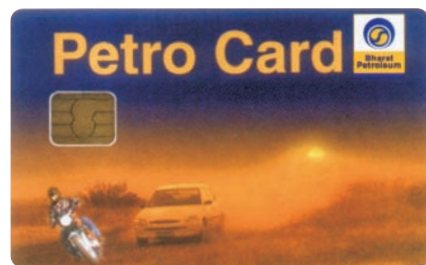
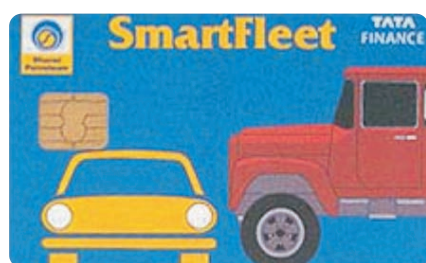
Products and Services\*

Brands and Services	Description	Remarks
Highway Network Assurance Program (Ghar and Highway star Outlets)	Constitutes OSTs GHAR and Highway Star outlets and emphasizes on customer enablement enhancement	Contributed to an impressive 17.6% growth on highways for HSD. 21 Ghar Dhabas in operations with Rs. 23 million sales.
E-commerce	B2B portal enabling customer to place and order online, track the status of order, view dispatch information	
Pure for Sure	Ensuring quantity and quality of all products sold in the Retail Outlet	86% of all fuel volumes sold through PFS outlets, with total of 6226 ROs under the banner
Smart Fleet	Range of benefits for members like cashless transaction., MIS report, credit option, vehicle tracking system.	25,480 heavy vehicles enrolled in 07-08. The sale reached Rs. 63,630 million, 58% higher than last year.
Beyond LPG – Ad d on Service	Value added service to reach product at attractive offers to customers’ doorstep	Turnover has more than doubled to Rs. 3480 million, with about 500 distributors engaging with this business
PetroCard	Loyalty programme for customers	1.682 million PetroCard customers
V-Care	Service stations for maintenance of cars at their Ros	26 stations added this year. The turnover was Rs. 14 million



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In & Out Stores	Customer convenience stores at Retail Outlets	323 In & Out stores with aggregate retailing space of 187,631 sq. ft. Sales grew by 41% to Rs. 1092 million.
Quick Service Retail Outlets	ROs with tie-up with food chains like McDonalds, Pizza Hut, Nirulas etc	Total turnover of Rs. 249 million, a growth of 40%.
Rural marketing vehicles	Spot LPG refueling to reach out to village customers	
E-Charge	Convenience of purchasing recharge cards of the cellular company and denomination of his choice at any point of time	
Customer Relations Centre	LPG consumers' forum for giving feedback and obtaining clarification	The CRCs are in each district
Carnet Card	Identification Card, which allows purchase of fuel at airports and ad hoc locations with convenience This card gives the private operator the convenience of a nationwide accepted card, which is accepted at many non-BPCL locations as well.	
Reticulated LPG system	Supply of LPG through pipeline network from a centralized cylinder bank or bulk installation to the customer's kitchen	





## Awards and Recognition



Mr. Ashok Sinha, C&MD, receiving the Asian CSR Award from the hands of Dr. Noelen Heyzer, Under Secretary General of UN and Executive Secretary of ESCAP.

- **Golden Peacock Environment Management Gold Award 2008** to Mumbai Refinery by World Environment Foundation, UK, under the large manufacturing category
- **Safety Innovation Award 2007** to Kochi Refinery by the Institution of Engineers (India)
- **Gold Award** in Petroleum refinery sector to Kochi Refinery by the Greentech Foundation for outstanding achievement in safety management
- **Environment Management Gold Award 2007** to Mumbai Refinery by the Greentech Foundation
- **Best Performance of Safety Committee Award 2007** to Kochi Refinery by the National Safety Council, Kerala Chapter
- **Environment Management Award 2007** to Cherlapally LPG plant by Foundation for Advancement of Science and Technology (FAST)
- **Punjab State Safety Award** to Lalru LPG plant by Labor Department, Punjab, for largest reduction in frequency rate of accident in chemical industry
- **Kerala State Pollution Control Excellence Award** to Kochi Refinery for making substantial and sustained effort in pollution control among large scale industries.
- **Oil Industry Safety Award** Second prize to Numaligarh Refinery in Refinery Sector
- **National Energy Conservation Award 2007 Silver Award** to Numaligarh Refinery by the Bureau of Energy Efficiency under the Ministry of Power, India.

- **TERI Corporate Environmental Excellence Award for 2007 and 2008** to Numaligarh Refinery for consecutive years.
- **All India National Safety Council Award** to Manmad and Borkhedi Retail units
- **British Safety Council Award** to Piyala LPG and Tondiarpet Lubes installation under the International Safety Scheme
- **Ramakrishna Bajaj National Quality Special Award 2007** to Mumbai Refinery for highest recognition in the manufacturing category
- **Petrofed Oil and Gas Marketing Company of the Year Award** to BPCL for excellence in enhancing performance and customer base while being responsible with stringent of health, safety and environment norms.
- **Excellent Water Efficient Unit Award-Beyond the Fence Award 2007** to BPCL at National Awards for Excellence in Water Management, conducted by Confederation of Indian industries.
- **Quest for Excellence Award** in the large manufacturing category in the World Class Winners of the International Asia Pacific Quality Awards 2008. BPCL is the first Indian oil company to win this award.
- **Asian Corporate Social Responsibility Award 2008** to BPCL for 'Boond-III' project in the Environmental Excellence Category by Asian Institute of Management with Intel.



Mr. G.S. Baveja, GM (HSE), receiving the award for Excellent Water Efficient Unit Award 2007, awarded by CII

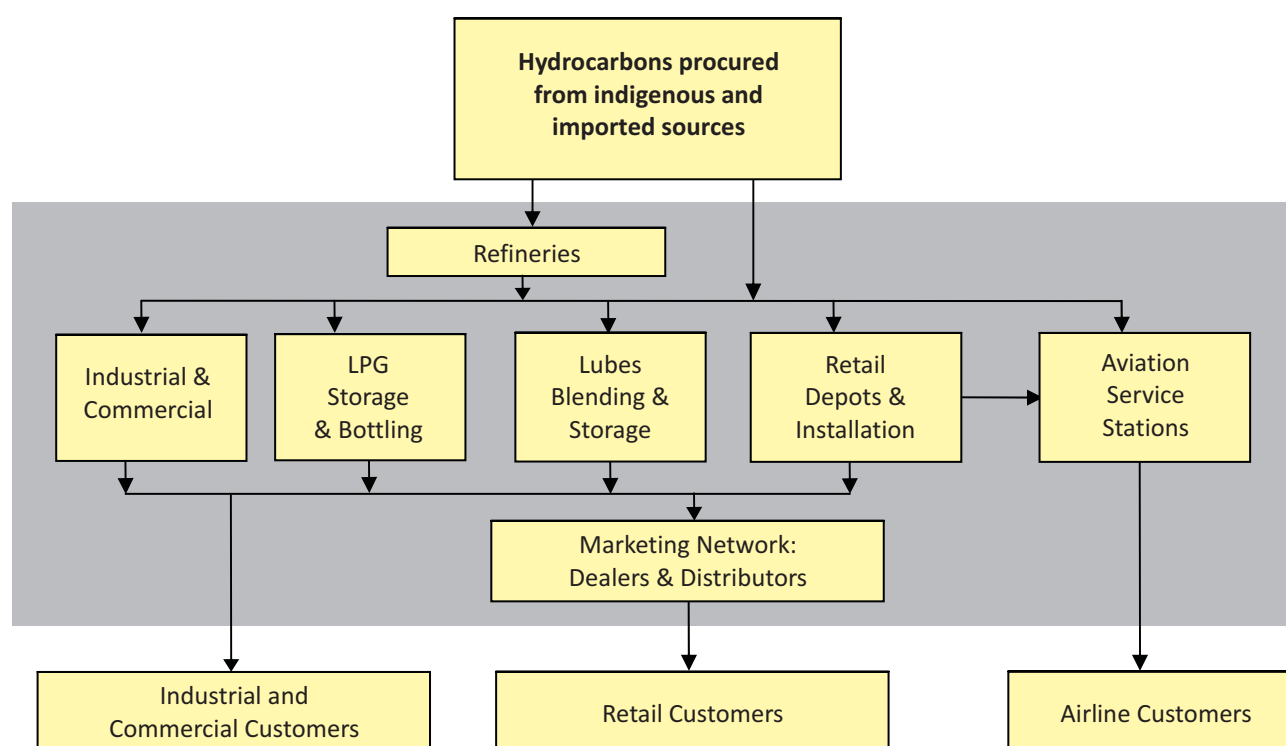


Mr. George Paul, GM (Brand and ARB) and Mr. Irfan Khan, TM (Retail) Delhi, receiving the Readers' Digest Most Trusted Brand Award 2008 for BPCL's premium brands and loyalty programs.

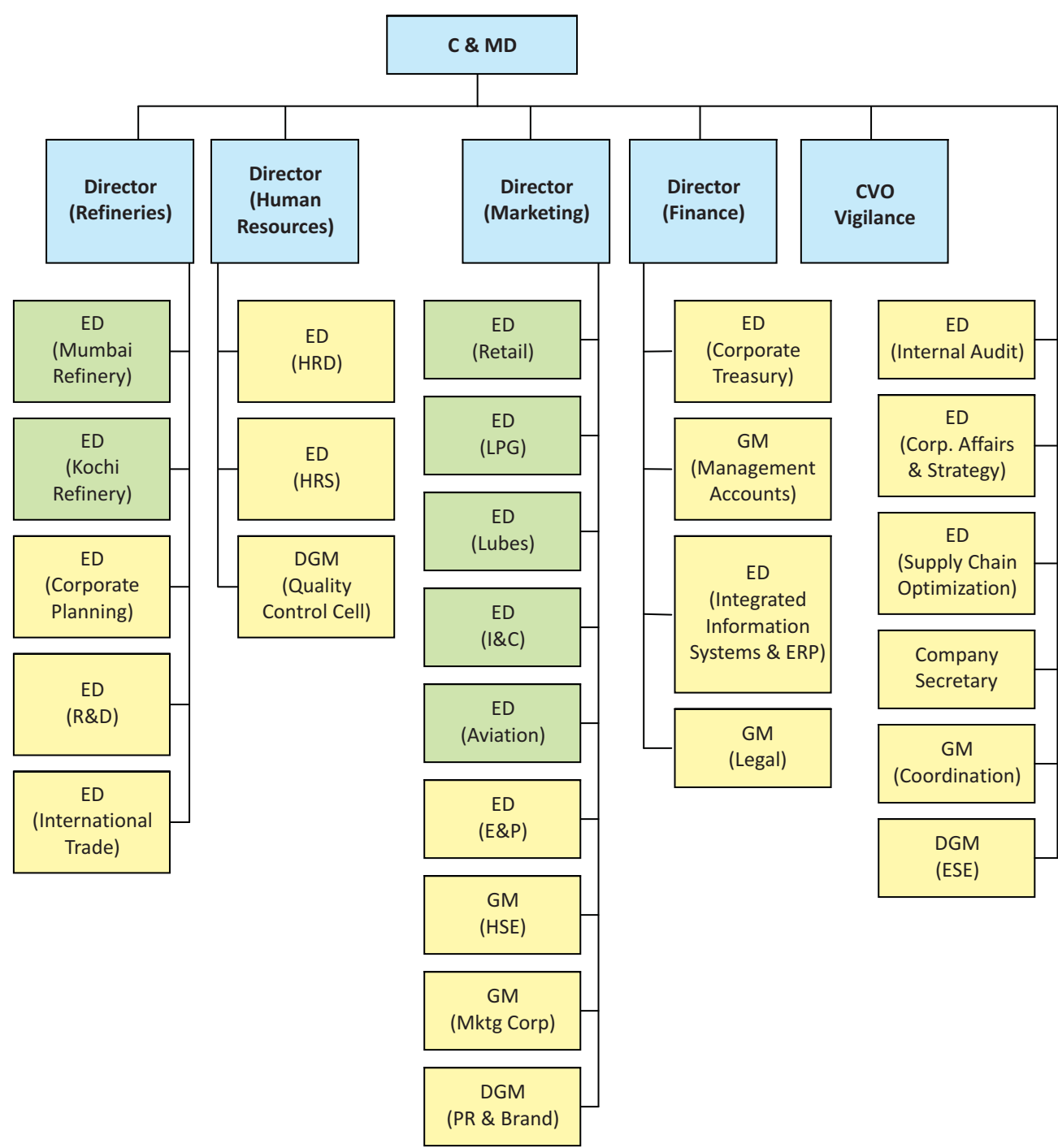
### BPCL at a glance

- Erstwhile Burmah Shell in India was taken over by the Government of India on 24<sup>th</sup> January 1976 and was rechristened as Bharat Petroleum Corporation Limited (BPCL).
- Ours was the first company to process the newly found indigenous crude at Bombay High.
- We are India's second largest oil company, ranked 287th among the Global Fortune 500 companies.
- We are proud employers of 14025 individuals and also provide employment to thousands of contract workers across the nation.
- We have two refineries at Mahul and Kochi with an annual refining capacity of 12 MMT and 7.5 MMT, respectively. Our subsidiary at Numaligarh, has a capacity of 3 MMT per annum.
- We have a nationwide network of 12 installations, 126 depots, 48 LPG bottling plants, 22 aircraft filling stations, 8251 retail outlets (ROs) and 2137 LPG distributors. NRL has 108 retail outlets of its own.

### Operational overview



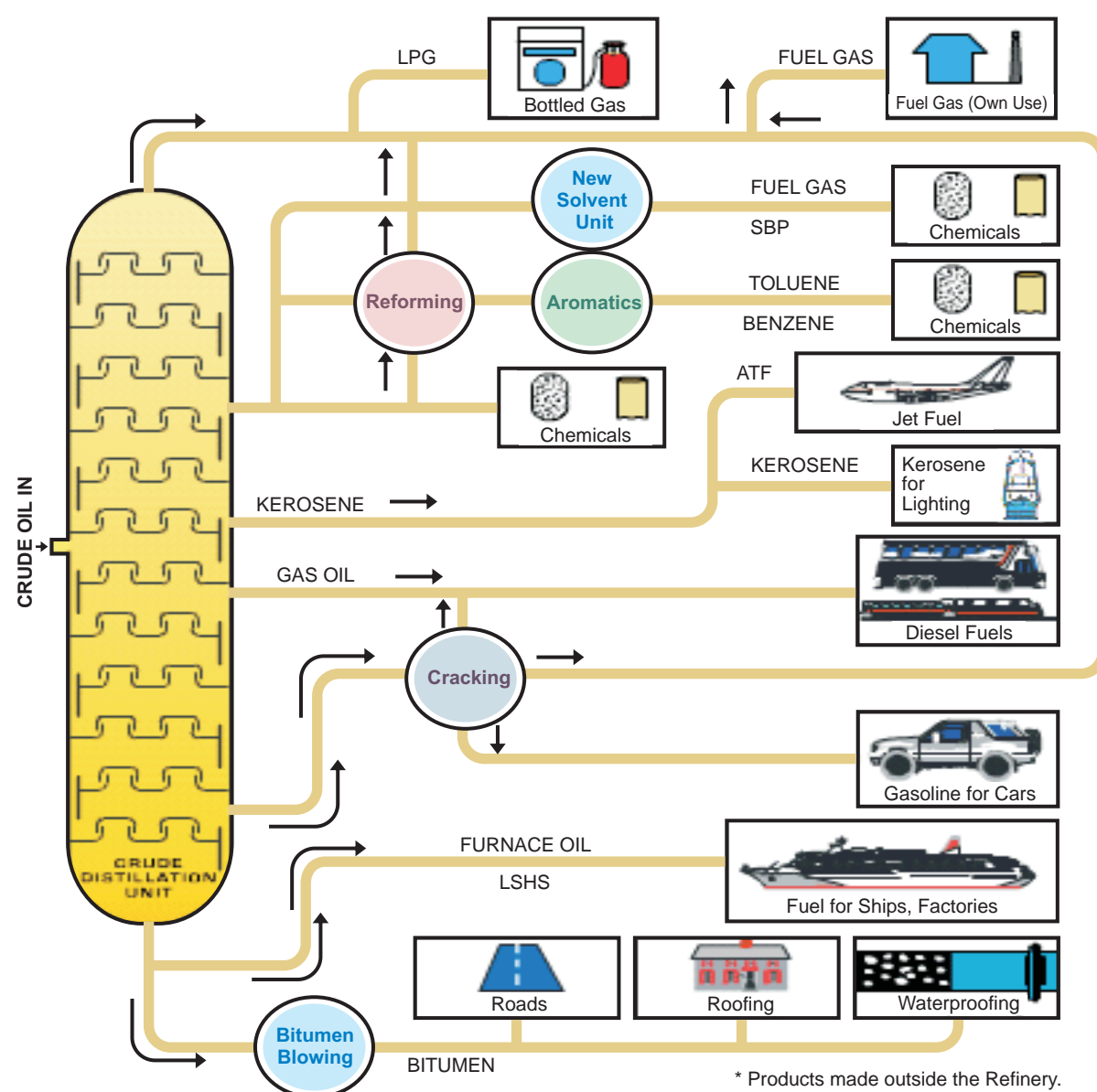
Organization Structure



In line with our Vision\* to maximize competitive advantage and to broaden our business footprint the organization has been structured around six Strategic Business Units (SBUs). Entities play a vital role in facilitating, synchronizing and coordinating business activities.

\*Please visit our corporate website for our Vision statements at [http://www.bharatpetroleum.com/corporate/corporate\\_vision.asp](http://www.bharatpetroleum.com/corporate/corporate_vision.asp)

## Product Profile



## Products from BPCL and their uses

- Major products from our refineries are Motor Spirit (Euro II, III), LPG, ATF, raw petroleum coke, calcined petroleum coke and naphtha, Sulphur, SKO, Diesel (Euro II,III), aromatics (Benzene and Toluene)
- Our other products are Bitumen, 380 cst Fuel Oil, and BMCG and Furnace oil
- We have over 300 grades of lubricants available over 500 different packaging formats catering to the needs of our industrial and automotive customers



**Mr. S. Radhakrishnan**  
Director – Marketing



The customer is a focal stakeholder who can determine the sustainability of the organization. We at BPCL are aware of this and the customer, therefore, is central to our business strategy.

Our business is closely associated with *energizing lives* through marketing of fuels to customers. However, since the nature of fuels we market is so diverse, we need to understand a variety of customers, which include truck drivers, car owners, domestic households, aviation companies and industries. Further, India is on the path of development and through this journey, we anticipate that the needs of our customers will, but naturally evolve. It is thus imperative that we evolve with them.

Our customers are sensitive to the efforts made by us in the domains of their health & safety and environmental protection. One of the major initiatives taken up is the provision of health checks at an increasing number of retail outlets for our truck drivers. More than one lakh truck drivers have been covered by this initiative, which stems from our concern for the health of the customers that we serve. It is also synergistic with our business goals, by creating a deeper association between our customers and the business. Rainwater harvesting is being taken up at new big format retail outlets. There has been a concerted effort to reduce emissions from storage tanks, a step that will reduce losses and lead to an environmental and commercial benefit, while simultaneously reducing associated health risks to our customers and employees. Multipurpose retail GHAR outlets were conceived and started in order to provide our customers a one stop shop for all their needs on their commutes, which has been highly appreciated by the targeted customers. We are also diversifying our product and services portfolio – an exercise in which our R&D centre is intensively involved. One of the most significant outcomes of this effort is the development of a new product, Bharat Metal Cutting Gas, which we believe is a breakthrough in metal cutting processes and is also environmentally more efficient. Many industrial customers, in domestic as well as international markets, have evinced interest in such new products.

Besides efforts in offering new products and associated services, our attention to the quality of products that we provide and the accuracy of the quantity that is provided, along with an emphasis on courteous, fast and efficient service, is unwavering. This quality is delivered through all our outlets in addition to our 'Pure for Sure' certified retail networks. By nurturing this sense of trust, in terms of quality and reliability, we are simply strengthening bonds with our customers, bonds that will only make our business more sustainable.

## Innovation

BPCL's primary market, India, has diverse needs. These needs, in times of rapid economic growth, are changing, and the changes are reflective of the rural-urban divide. A large section of Indian society, typically in rural areas, has seen few changes in their basic needs. On the other hand, there is a smaller, increasingly urban, burgeoning section whose needs have seen a sea change over the past decade. Our role as an OMC is to serve the needs of the people that fit both sections. For the former rural section, we see it as our responsibility to bring to them products and services that will help them benefit from the economic growth story that is unfolding in India. Whereas for the latter, we are tasked with the responsibility to swiftly meet and stay in tune with the rapidly changing demands of society. This calls for innovation, particularly in product development and positioning.

Apart from the challenges set by the changing demands of society, we cannot lose sight of certain constraints within which we operate. Two key constraints are:

- India's high and anticipated increasing dependence on imported sources of oil and gas to meet the growing needs of the Indian population and,
- Serious environmental concerns, in terms of climate change, natural resource depletion, waste generation, pollution, etc.

To successfully overcome these challenges calls for innovation.

BPCL is no stranger to innovation - be it in terms of business strategy, marketing, operations or technology development. Initiatives such as setting up of multiplex cinemas, *dhabas* and other customer attractions at strategically located ROs, tying up with garages across the country for the use of our MAK lubricants, and the Beyond LPG initiative are examples of how we are exploring new ways to maximize business potential and bring quality products and services to our customers.

### MAK Garages

Mechanics play an important role in the upkeep and maintenance of vehicles thereby acting as an agent for keeping pollution under check and minimizing vehicular impact on the environment.

With an objective to support independent garage owners to improve their skill, competency and infrastructure and help make them credible professionals, we rolled out the concept of MAK Garages. BPCL's MOU with MAK Garage ensures the provision of owners with our support in the supply of MAK lubes as required by the garages. This has been an out of the box initiative that has proven to be of mutual benefit to garage owners and workers and us.

At the end of the year we had 626 MAK Garage partners who have benefitted from our support while we enjoyed their loyalty to our products and brand.



MAK Garage employees with BPCL officials

In the aviation business, time is a premium. Flotation suction failures in the airport hydrant system can severely affect flight schedules. In order to detect a potential problem in the system, our Delhi AFS team developed an online floating suction monitoring system to reduce delays. This innovation was patented by us in January 2008.

In terms of the research, development and deployment of environmentally sound solutions and technologies, significant progress has been made recently. Individual business units and the R&D unit have worked on developing new technologies. BPCL spent Rs. 256.4 million on Research and Development in 2007-08. Some of the highlights include the development of Bharat Metal Cutting Gas, development of a Mercaptan reduction catalyst and demonstration of the use of Wind based hydrogen fuel cell yard lighting. Further, along with the Indian Institute of Science (IISc), Bangalore, we are conducting research on Copper, Iridium, Gallium and Selenium (CIGS) photovoltaics that do not use silicon and that have higher energy efficiencies. We are also looking at means of using crude oil efficiently by developing new products from crude.

### ***Bharat Metal Cutting Gas***

World over, cutting of metal has traditionally been done using an Oxy-Acetylene mixture. Acetylene is expensive and not easily available. In response to this situation, after painstakingly studying and testing for alternatives, we came up with Bharat Metal Cutting Gas (BMCG) as an ideal substitute for Acetylene. BMCG offers unmatched economy. It cuts faster while consuming less oxygen compared to LPG and Acetylene, which means significantly reduced overall cost per unit length of cutting surface.

Further, the consumption of BMCG is lower per unit cut in comparison with acetylene, with indirect CO<sub>2</sub> emission reductions.

BMCG is also a safer substitute to Acetylene. It is non-toxic, non-injurious and has no torch backfire or dangerous by-products. Since its flame is less luminous, it is less harmful to the eyes. With better surface finish and operator friendliness, BMCG has quickly become the preferred choice for various industries in India and abroad for sheet metal cutting, brazing, pre-heating, post weld treatment, case hardening and glass moulding.



### ***Mercaptan Reduction Catalyst***

Pollutants such as mercaptans and sulphur containing compounds are invariably present in refinery fuel gas, LPG, naphtha, gasoline, kerosene and ATF. In response to the possibility of more stringent environmental regulations, Indian Institute of Petroleum (IIP) and BPCL jointly developed the Thoxcat ES catalyst to reduce mercaptan content in the LPG stream. The LPG Merox plant at Mumbai refinery processes LPG at an average rate of 450 MT/day. This is equivalent to extraction of approx. 260 kg mercaptan per day.



Customized formats of retail outlets are being opened across the country that are designed to serve local needs of customers. The adjacent image is of an RO specially designed to cater to the needs of truckers on the highway and provides various services such as eateries, rest areas, etc.

## Product Responsibility

BPCL strives to provide its customers with the best products and services. Distillates of crude oil and lubricants are our major product categories. We are aware that usage of these products result in large scale green house gas emissions which result in global warming. Though we are yet to conduct studies to assess the environmental impacts of our products and services through its entire life cycle, we ensure that there is no compromise in terms of the quality of products and services that we provide. In fact, many our cylinders go through random-selection based rigorous checks for deviations in quality and component standards at our laboratories, many of which, including all three of our refinery laboratories, are ISO 17025 certified by the National Accreditation Board for Testing and Standards (NABL). Wherever product manufacturing or packaging is outsourced to third party vendors, we ensure through rigorous testing and vendor visits that there is no deviation in quality standards.

Through our 2137 distributors, we provide 25 million LPG cylinders to households across the country. Special care is taken to ensure that our LPG cylinders are rigorously checked and tested for safe use. Thorough checks are carried out for our lorries used for product distribution which include the most basic verification of valid drivers' licenses, validity of mandatory OISD 154 driver training, availability of fire extinguishers, legible and conspicuous emergency information on truck bodies, tyre conditions, etc. For our retail operations, in co-ordination with other Indian oil and gas PSUs, we maintain an operational fleet of Emergency Rescue Vehicles (ERV) to minimize potential damage caused in case of tank lorry accidents.



LPG Cylinder checking

### **Product Assurance – LPG Cylinders**

New cylinders are received from manufacturers that have been approved by the office of the Chief Controller of Explosives, Nagpur. These cylinders are inspected and certified by certification agencies according to standards prescribed by the BIS (Bureau of Indian Standards) at the manufacturers' premises. The manufacturer then supplies cylinders directly to our various plants along with the certificate issued by BIS.

On receipt of the new cylinders at the LPG bottling plant, they are subjected to checks as per our in-house quality assurance plan. After passing these tests, cylinders are sent for filling, after which a number of thorough checks are conducted prior to dispatch to the distributor or customer. The checks include quality, quantity and body leaks checks.

**Quantity Check :** Cylinders are weighed on automated machines. If a cylinder is found to be incorrectly filled it is sent for product evacuation and refilling.

**Quality Check:** Cylinder valves and O-rings are checked for quality standards. In case of a defective valve, the product is evacuated and the cylinder segregated. The valve is replaced with a new valve, and then sent for refilling. In case of a defective O-ring, it is replaced with a new one.

**Body leaks :** Cylinders are inspected for body leaks by passing the cylinders through a water bath. Leaky cylinders are crushed and disposed off as scrap.

Only after the cylinders quantity and quality checks are they sealed and dispatched to our distributors. Additionally, nearly 2% of the checked cylinders are rechecked on a random basis before dispatch.



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