



HINDUSTAN PETROLEUM CORPORATION LTD

Secunderabad Terminal, Ghatkesar, Hyderabad

Overview of the Organization

Hindustan Petroleum Corporation Ltd, with above 16% market share, is one of the major players in Indian downstream oil sector. The Company is ranked 336 in the Fortune 500 of 2007. Total turnover of the Company in 2006-07 was Rs.91, 448.03 crores. Profit after tax was Rs.1, 571.17 crores as against Rs.405.63 crores in 2005-06.



Unit Profile

Secunderabad Terminal (major storage and distribution point for petroleum products) is located at Ankushapur Village, Ghatkesar Mandal, Ranga Reddy District, which is 30 Kms away from the Hyderabad/Secunderabad. The Terminal is engaged in receipt, storage and distribution of Petroleum Products to surrounding eight districts of Andhra Pradesh including twin cities of Hyderabad and Secunderabad. The Terminal is catering to Industry (Indian Oil Corporation Ltd and Bharat Petroleum Corporation Ltd.). The terminal receives the products through pipeline from Visakhapatnam Refinery. The Terminal has the distinction of loading (filling) the highest number of Tank Trucks per day in the country for HPCL locations.



As part of the MOP&NG directives, Blending of Petrol with 5% Ethanol is mandatory. Secunderabad Terminal, Ghatkesar is ensuring 5% mandatory Ethanol Blending in EURO III and BS II Petrol thus, contributing to the conservation of precious Hydrocarbon resources of the nation to the tune of 12000 KL/PA of Petrol costing Rs. 60.0 crores/PA resulting in a saving of Rs.30.0 crores (approx) in 2007-08. The blending with Petrol is done online with the help of the state-of-the-art Ethanol blending automation system.

The main facilities provided at Secunderabad Terminal are given below:

Bird's eye view of Secunderabad Terminal, Ghatkesar

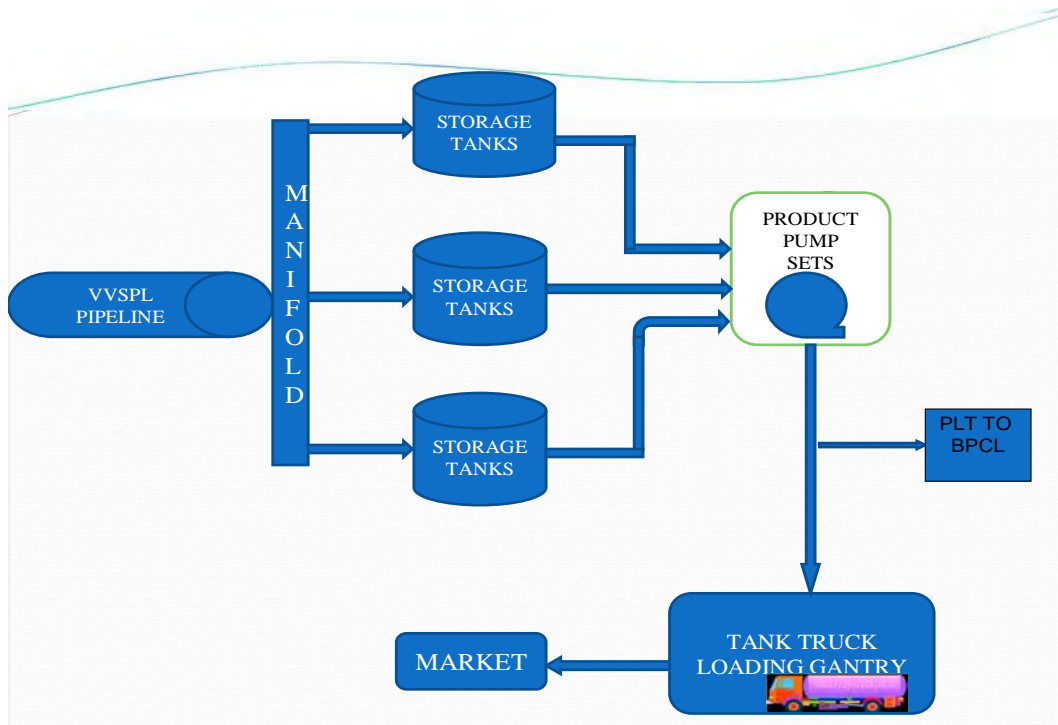




View of Tank Truck Filling Gantry



Schematic Diagram:





1. Commissioned with Terminal Automation System in 2002 : 167000 Kilo Litres capacity
2. ISO 9001-2000 certified : Valid up to 2010
3. No. of Retail Outlets (Petrol Pumps) fed : 178 in 8 districts
4. No. of Consumers fed (Industrial & Commercial) : 54
5. No. of Products : 11 *
6. Manpower : 39 (Officers, Clerks, General Work Men)
7. Tank Trucks : 104 (46-Dealer Owner; 54-PCVOs and 4 Co. Owned)
8. Average Loading per day : 300 Tank Trucks in 2006-07
: 325 Tank Trucks in Q1 & Q2 2007-08
9. Hospitality to IOC/BPC : Industry Terminal Thru put among highest in HPCL.

* EURO III Ethanol Blended Petrol; BS II Ethanol Blended Petrol; EURO III Ethanol Blended Power Petrol; BS II Ethanol Blended Power Petrol; EURO III Diesel; BS II Diesel; EURO III Turbojet Diesel; BS II Turbojet Diesel; Kerosene; Mineral Turpentine Oil and Hexane

Energy Consumption

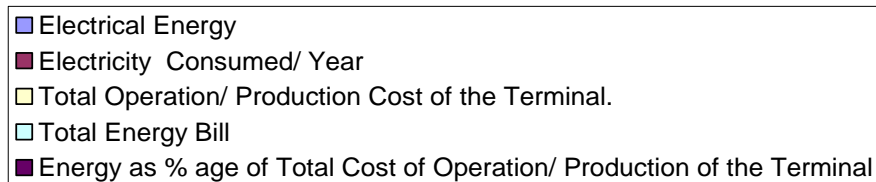
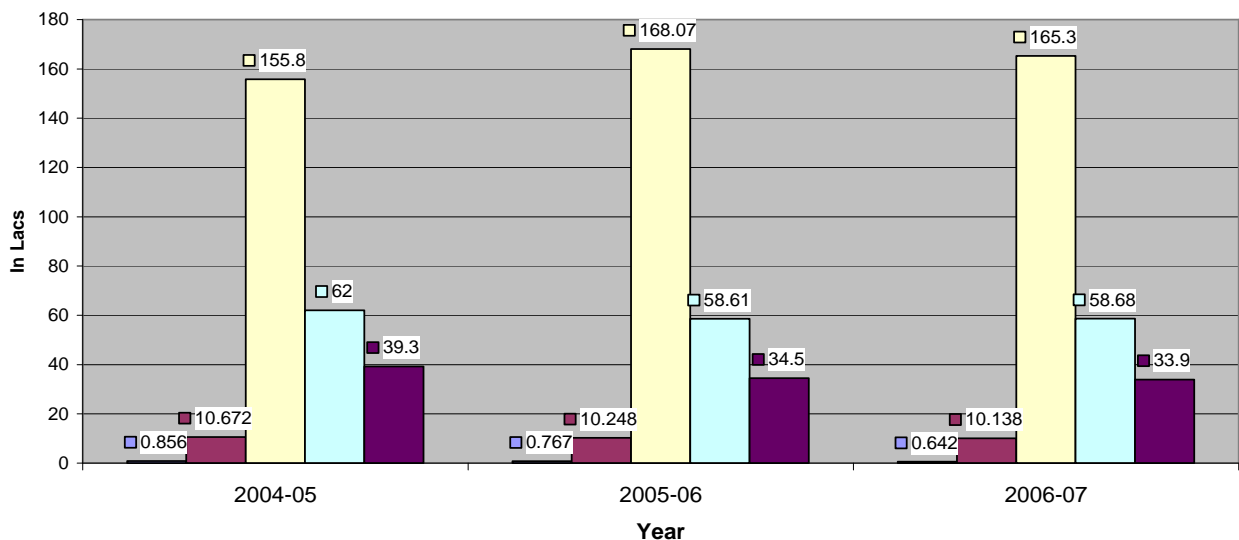
With the implementation of various energy conservation measures as an ongoing practice, there is a steady decline of specific energy consumption. The last three years energy consumption figures, which are given below, indicate continual reduction in energy consumption due to our sustained efforts to conserve with the implementation of “Variable Frequency Drives (VFD)” installed on 923 KW motor loads. Continual reduction in Energy is also achieved due to involvement of employees and adopting best operating methods. Continuous reduction in energy consumption is achieved despite operational growth in thru put (total loading of Tank trucks of HPCL and IOCL) and pipe line transfers to BPCL.

Total plant connected Load: 1283 KW
Contract Maximum Demand: 600 KVA



Description	Unit	2004-05	2005-06	2006-07
Electrical Energy	KWh/KL Delivered	0.856	0.767	0.642
Electricity Consumed/ Year	KWh in Lacs	10.672	10.248	10.138
Total Operation/ Production Cost of the Terminal.	Rs. In Lacs	155.8	168.07	165.3
Total Energy Bill	Rs. In Lacs	62.0	58.61	58.68
Energy as % age of Total Cost of Operation/ Production of the Terminal	%	39.3	34.5	33.9

Specific Power Consumption



Energy Conservation Commitment, Policy and Set up

HPCL has visualized importance of energy conservation during the year 2003-04 and identified some of the high consuming units throughout India and arranged Variable Frequency Drives (VFD) for the pump sets. The core team is led by General Manager - Operations & Distribution (O&D), HQO with a team of 4 officers to monitor high energy consuming units and to provide necessary support to operating locations in implementing Energy Conservation Measures (ECM). Some of the officers of our



organization have received certificates from BEE as ‘Energy Managers’ and ‘Energy Auditors’.

Accordingly for our location 4 Numbers of ‘Variable Frequency Drives’ (VFD) have been provided with inter-locking panels to connect all the pump sets. During the current i.e., 2007-08 we have procured two numbers of additional VFDs to connect the remaining high consuming pumps. Also, we are procuring three numbers Microprocessor based Energy Saving Devices for the Flood Light Towers and Yard Lights.

Photos in clockwise: 1(left hand side top)-Sub Station; 2) (Right hand side top)-VFDs; 3) (left hand side bottom) - VFDs and 4) (Right hand side bottom) - Pump House





**HINDUSTAN PETROLEUM CORPORATION LIMITED
SECUNDERABAD TERMINAL, GHATKESAR, HYDERABAD**

ENERGY MANAGEMENT POLICY

Hindustan Petroleum Corporation Limited, Secunderabad Terminal, Ghatkesar is committed for continuous improvement in reduction of Energy consumption by:

- Monitoring and control consumption of Electricity through effective energy Management system and periodic energy audits
- Continuous up gradation of energy efficient equipments and providing Energy Saving Equipments to optimize the energy cost
- Maintaining safe environment in and around the terminal
- Benchmarking our performance with the world's best and endeavoring for continuous operational excellence with energy conservation
- Explore and implement sustainable energy alternatives

**(M P Eshwar)
Chief Installation Manager**

Date: June 5, 2007



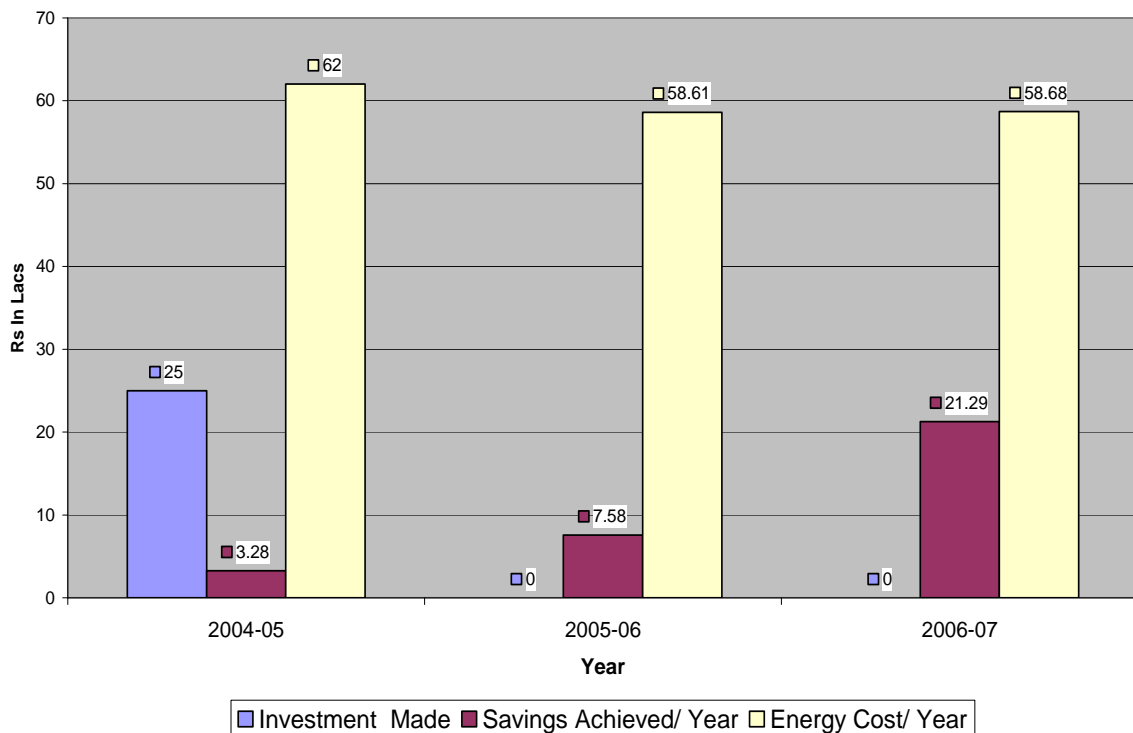
ENERGY CONSERVATION ACHIEVEMENTS:

Basis the Energy Audit conducted within the organization/location, 4 Nos VFDs have been installed on the pump sets during Dec 2004. The approximate investment for the procurement of VFDs is Rs. 25 Lakhs. Within a span of two years, we had achieved a net saving of Rs 32.15 Lakhs.

A) Investment Made & Savings Achieved(All Figs In Rs Lakhs)

Year	Measure implemented	Investment Made	Savings Achieved/ Year	Energy Cost/ Year	% of Savings
2004-05	VFDs on Pump Sets	25.0	3.28	62.0	5.29
2005-06	VFDs on Pump Sets	0	7.58	58.61	12.93
2006-07	VFDs on Pump Sets	0	21.29	58.68	36.28

Investments made & Savings Achieved

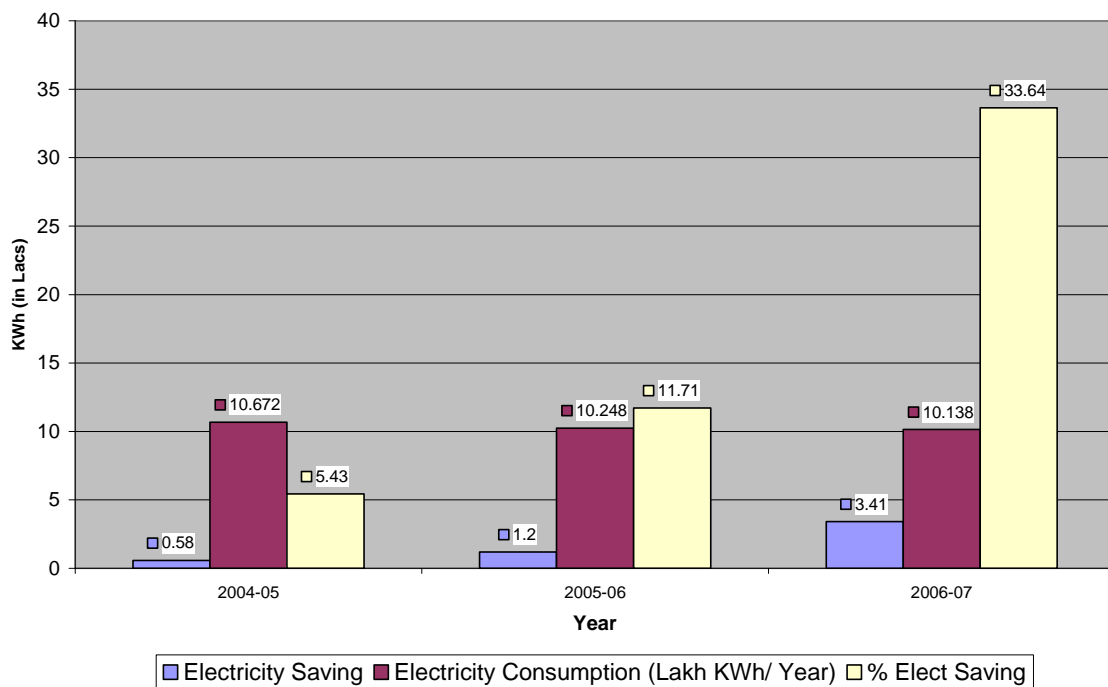




B) Energy Savings (Absolute Savings) All figs in Lakhs

Year	Electricity Saving	Electricity Consumption (Lakh KWh/ Year)	% Elect Saving
2004-05	0.58	10.672	5.43
2005-06	1.20	10.248	11.71
2006-07	3.41	10.138	33.64

Energy Savings (Absolute Savings)

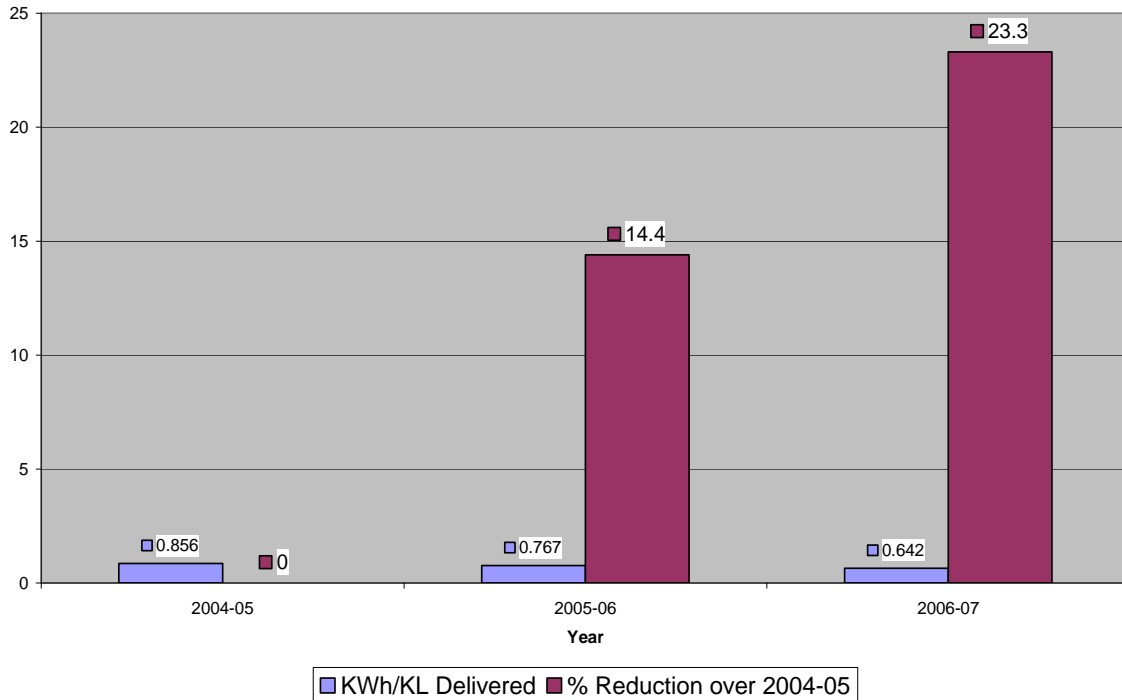


C) Specific Energy Consumption (SEC) Reduction

Year	Product Delivery	KWh/KL Delivered	% Reduction over 2004-05
2004-05	Petroleum Products	0.856	--
2005-06	Petroleum Products	0.767	14.4
2006-07	Petroleum Products	0.642	23.3



Specific Energy Consumption (SEC) Reduction



D) Energy Conservation Plans & Targets

Year	Description of the Measure	Anticipated Saving in Lakhs -Rs	Investment in Lakhs (Rs)
2007-08	Additional VFDs	3.0	8.0
	Microprocessor based, Energy Saving devices for Flood light towers and Yard lights	5.0	8.0
	Best operating practices of Pump sets and Lighting load	2.0	--
2008-09	Solar Energy System for Flood Lights	2.0	10.0
	Replacement of existing light fittings and fixtures with energy efficient/eco-friendly technology	2.0	5.0



Environment and Safety:

Secunderabad Terminal, Ghatkesar is ISO 9001-2000 certified location having the state-of-the-art Terminal Automation System (TAS), which ensures safe, accurate and efficient and environment friendly operations. As part of our continuous quest for safe and environment friendly operations we have plans to upgrade the TAS with the latest software and hardware.

In addition, we are in the process of obtaining ISO 14001 - 18001 (OHSAS), ISRS (International Safety Rating System) by March 2008. We have made a proposal for “Carbon Trading” project in 50 Acres of vacant land within the Terminal premises. Carbon Trading or CDM (Clean Development Mechanism) is the need of the hour for reducing emission of harmful Green House Gases (GHG) and making the environment pollution free as per Kyoto Protocol Treaty. Our Top Management is actively considering this project on all India basis in marketing locations where huge extent of land is available.

The product sludge, which gets generated in the Terminal is disposed of through Bio-remediation process as recommended by TERI (Tata Energy Research Institute), New Delhi and approved by Central Pollution Control Board/State Pollution Control Board.

Further, our Terminal is being standardized for Visual Identity in order to make it a world class and safe operating location and this project is expected to be completed by March 2008.