

Unit Profile



We, Kirloskar Pneumatics Co. Ltd (KPCL), are part of over 1 billion USD Kirloskar Group, known for the last four decades as the leading manufacturer of wide range of

- Airconditioning and refrigeration equipments,
- Systems/Packages, process Gas packages
- Air compressors and packages
- Transmission products in INDIA.

Kirloskar Pneumatic Co Ltd has vast experience and the latest technology and up to date manufacturing facilities at its modern plant in Hadapsar and Saswad in Pune. The Company has established countrywide sales and service network for upkeep of every product it manufacture.

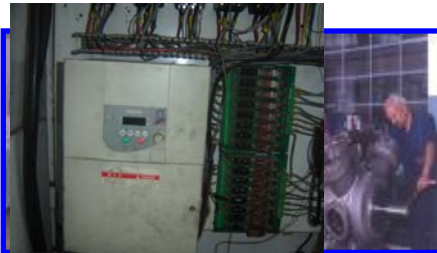
We at KPCL are into the designing, manufacturing, packaging, sales and services of above-mentioned products. Today, we are Global Company with presence in over 30 countries.

KPCL is an ISO 9001-2000 Company, the very first in India in its line of activities. We are preparing for ISO-14001 and OHSAS-18001 certification for maintaining and implementing practices related with Safety, Health and Environment.

The company has intensified its effort to identify niche markets for above products through out the India, especially geographical areas that have similar sales, distribution & marketing. The company is more focused on Environmental aspects like Energy Efficiency improvement initiatives etc.

Kirloskar name itself has always been committed to corporate social responsibility. It has been built on five core values namely Good Corporate Citizenship, Professionalism, Customer first, Quality focus, and dignity of the individual. The company is spreading the message on Energy Conservation by designing new calendar on Energy conservation and distributed to children's in nearby schools. Small group has been formed with facilitator to identify & implement the Energy Efficiency Projects.

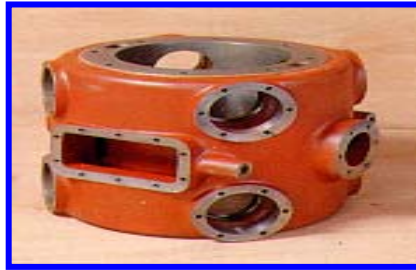
State of Art Manufacturing Facilities Available



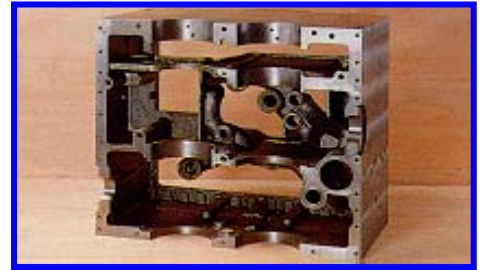
Critical Product Developed By us:



Impeller for Voith



Cylinder of Rotary compressor



Industrial Gear box casing



Howden screw Compressors



Composite Industrial gear box



Screw compressor casing

Our Product Range:
Refrigeration Compressors



- Industrial Refrigeration (open type reciprocating compressors)
- AC & Process Cooling (semi hermetic type screw compressors)

Refrigeration system and packages



- Screw compressor Standard Packages.
- Customized Refrigeration systems / packages.
- Modular containerized concrete cooling system (chilled water and flake ice)

Marine HVAC & Refrigeration
Vapor Absorption Chillers



Gas Compression Packages

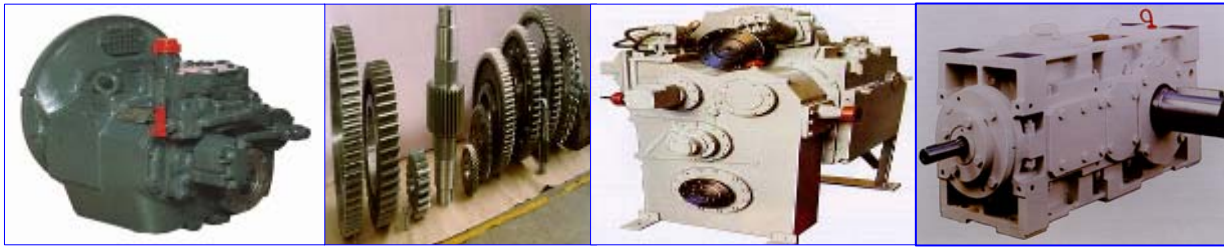


■ Gas Compression Package applications - CNG, Gas gathering station, Gas pipeline, Flare gas recovery, Fuel boosting, Hydrocarbon processing, Refineries

Compressor Division Products



Transmission Division Products



Production and capacity utilization

Most Of the plant and machinery being common for different products manufactured by the Company and installed capacity being dependent on product mix, which in turn is decided by the actual demand for various products from time to time and also on availing of sub contracting facilities, it is not feasible for the company to indicate the exact installed capacity.

Some Proud Moment



H E Dr. A P J Abdul Kalam dedicated KIRLOSKAR Cooling Trolley for SUKHOI Aircraft to the Nation while he was the President of India

Achieved FIRST PRIZE in Energy Conservation Competition among all KIRLOSKAR Group Companies.

We are Proud of our Saswad unit(ACR) which has won Best Energy Efficient industry Award in Small Industry Category among Kirloskar Group of Industries consistently for Two years 2005-06(Third Prize) and 2006-07(First Prize).



Energy Conservation Commitment, Policy and Set Up

ENERGY POLICY

We are committed to utilize the Energy Rationally and Efficiently. We will make our all efforts to enhance the innovative and creative ideas of our employees for energy conservation drive.

We shall achieve this goal by closely monitoring Specific consumption with following ways.

- ❖ Training and Creating awareness among all our employees and Stakeholders.
- ❖ Eliminate wastage of energy
- ❖ Use of energy efficient products, process, in our Business and operations.
- ❖ Always keeping this aspect in the mind while designing or modifying our products and layout.
- ❖ Usage of Renewable source of energy wherever possible.
- ❖ Use of expertise from outside sources

..... Because we have faith in "Save Energy means Generate Energy"

H.R.MUSTIKAR
MANAGING DIRECTOR

Date :- 1st January 2005

Revalidated on: 1st June 2007

Our Management takes efforts towards revising our energy policy from time to time

OUR BELIFE: 'Energy Saved is Energy Generated'.

At Kirloskar Pneumatic Co Ltd we targets all sources of energy like Electricity, Water, Air System, LDO & High Speed Diesel for conservation and efficiency improvement projects. The main objective is to reduce specific energy consumption with less environmental effect.

Senior Management actively participates in Energy Efficiency projects by providing budgetary support, motivating the employees for ingenious thinking & also by Facilitating. Energy Conservation Poster, Slogan and Suggestion Competition is also conducted every year and the winners of the competition are awarded.

Company is having an Energy Conservation Cell that includes executives from all areas like production, Maintenance, Engineering Materials. Various small groups have been formed in the company that specifically works on Ingenious Projects. Manager of respective section leads the group.

The employees of the company are sponsored to attend Energy Conservation Seminars, exhibitions organized by CII, MSEB, NPC and other organizations. In April 2007, 07 managers appeared for Energy Auditor Exams conducted by NPC (BEE), – Chennai. The Energy Managers of the company have shared the best practices at different forums. Energy Management policy is well accepted by all the employees. The policy has been displayed in each section of the plant. Energy Conservation awareness has been created among vendors too.

We have got our Detailed Energy Audit Done by CII, Ahmedabad (EC Cell). Compressed Air Energy Audited by SavAir, Mumbai and Pumping audit done by Kirloskar Brothers Ltd, Devas.

ENERGY MEASUREMENT AND ACCOUNTING

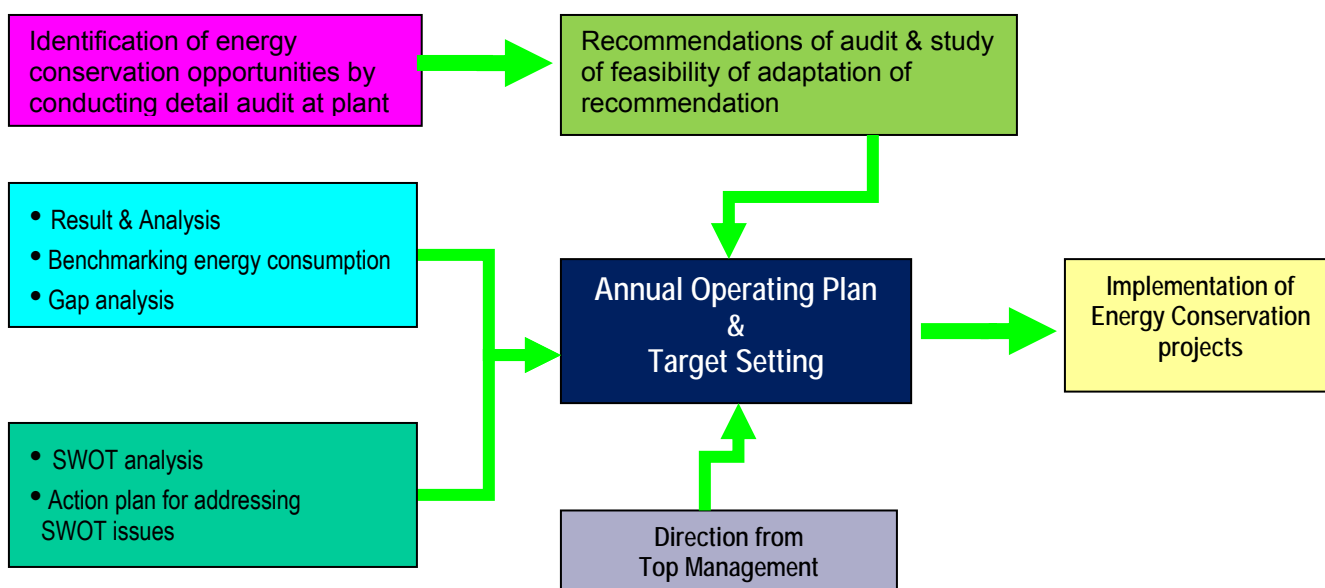
It is important to understand the energy consumption for the control so, section wise accounting of energy consumption was promoted and 65 energy meters were installed. Proper digital metering & recording consumption helped us in monitoring & relating it with the production output of each division. New layout changes made last year, machines were re-organized with Cellular set up so that it become more easy to measure the consumption of each cell. Most of the meters are replaced with Digital Meters & remaining are planned for this year. "Krykard" make Load managers are installed at our power house for efficient monitoring and control.

Employee's participation and involvement in EC Activities

- Energy Conservation Poster, Slogan and Suggestion Competition is conducted. The winners of the competition are awarded
- Company is having an Energy Conservation Cell which includes executives from all areas like Finance, Production, Plant Engineering, Materials and R&D.
- During Vijaya Dashami celebrations, In-house Exhibition cum Demonstration are organized where Energy Efficient Products and Appliances like Electronics Ballast, CFL, and Electronic Fan Regulator etc were displayed and benefits shown on DIGITAL ENERGY METERS.
- Our In-House Magazine regularly publishes articles and achievements on Energy Conservation and helps create awareness among the people.
- Employees and Workmen are felicitated by our Managing Director, in presence of all the employees, for their contributions towards Energy Conservation.



Our Energy Management System



ENERGY PROFILE OF KPCL (Hadapsar + Saswad)

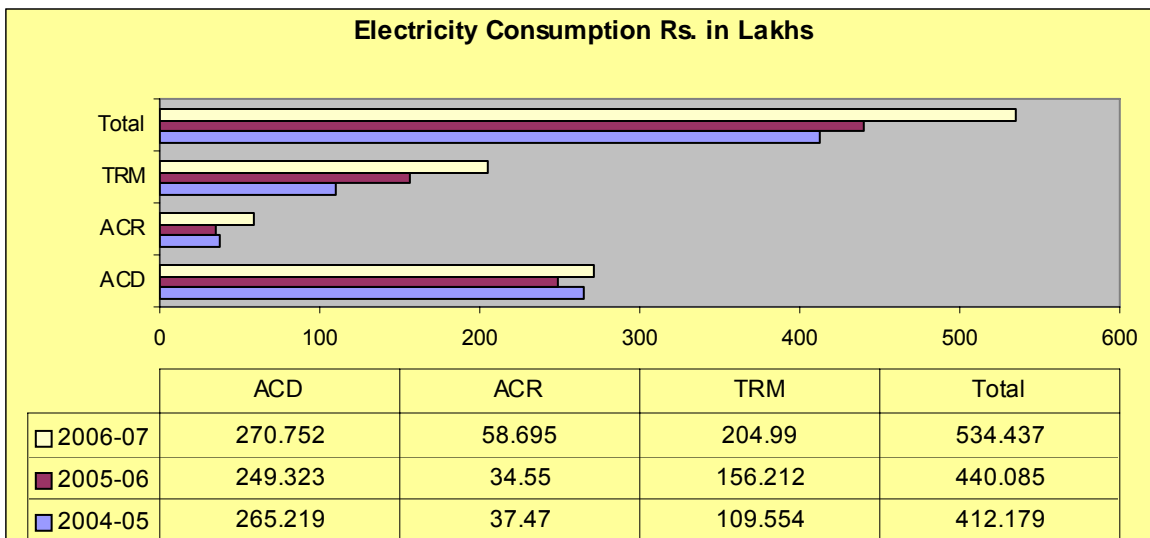
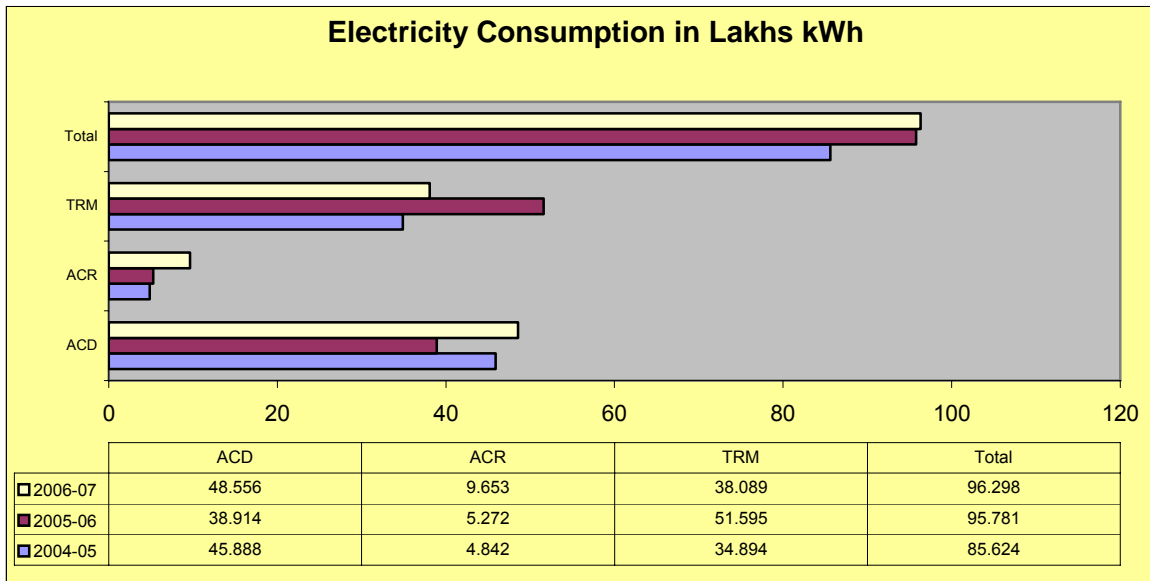
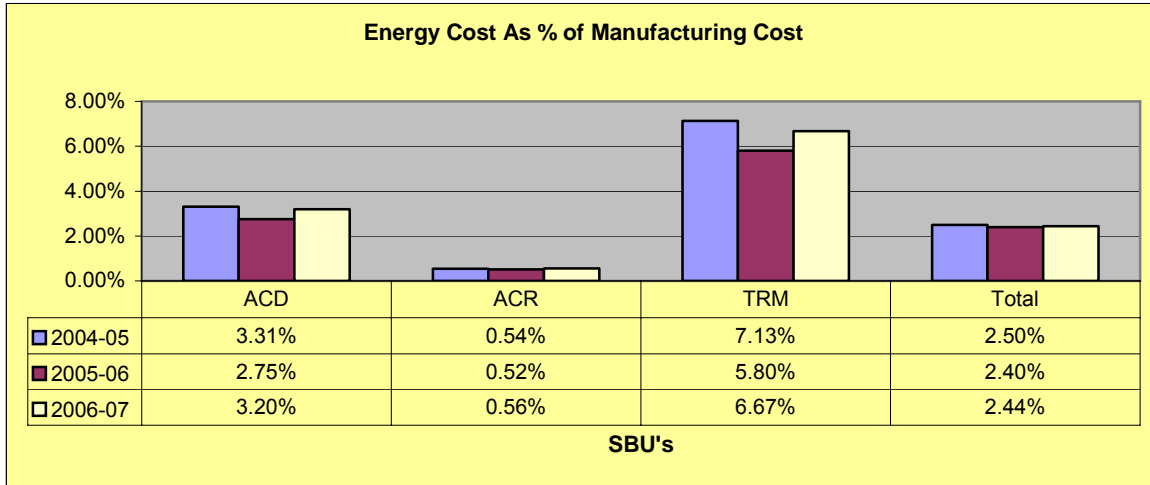
➤ Total Utility Connection	3 Nos. (Main Plant + Foundry + ACR)
➤ Total Connected Load	14288 KW
➤ Sanctioned Demand	4489 KVA
➤ Total no. of Transformer	14
➤ Total Transformer Capacity	11465 KVA
➤ Average Power Factor recorded	1
➤ Total Energy Consumption in units in	96.298 Lakhs kWh

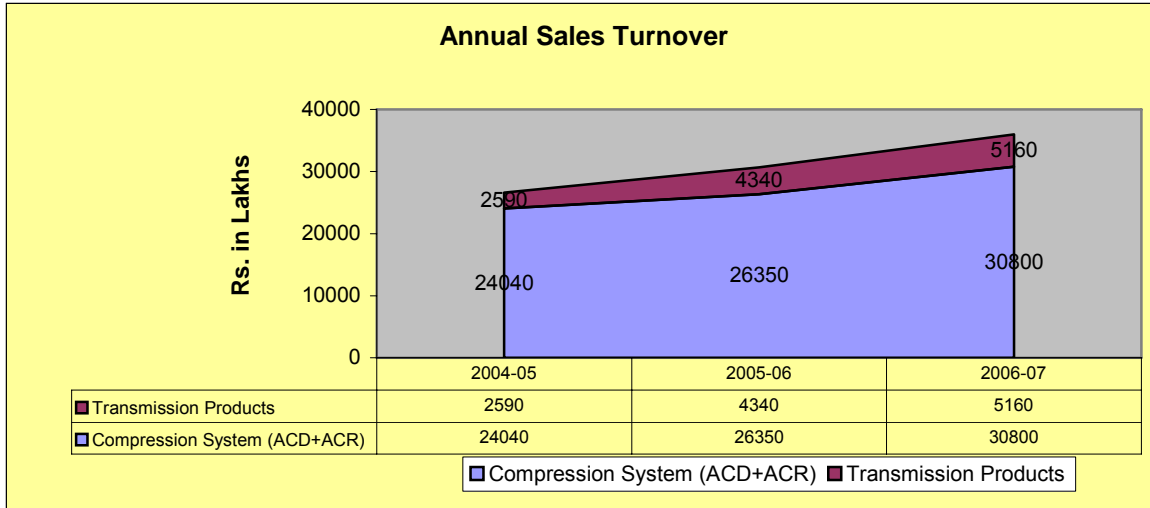
Energy Consumption Overview

Our Company has two major business segments viz. Compression Systems and Transmission Products (TRM). Compression Segment Consists of Air Compressor Division (ACD) and Air Conditioning and Refrigeration (ACR) Division. Our company is having three utility connections in three plants two at Hadapsar and one at Saswad in Pune. Main Plant Consist of ACD and TRM having common utility connection (Contract Demand 2700kVA and Connected Load 10873kW) and common foundry with separate utility connection (Contract Demand 1290kVA Connected Load 1499kW) and Saswad unit(ACR) is having separate utility connection (Contract Demand 499kVA and



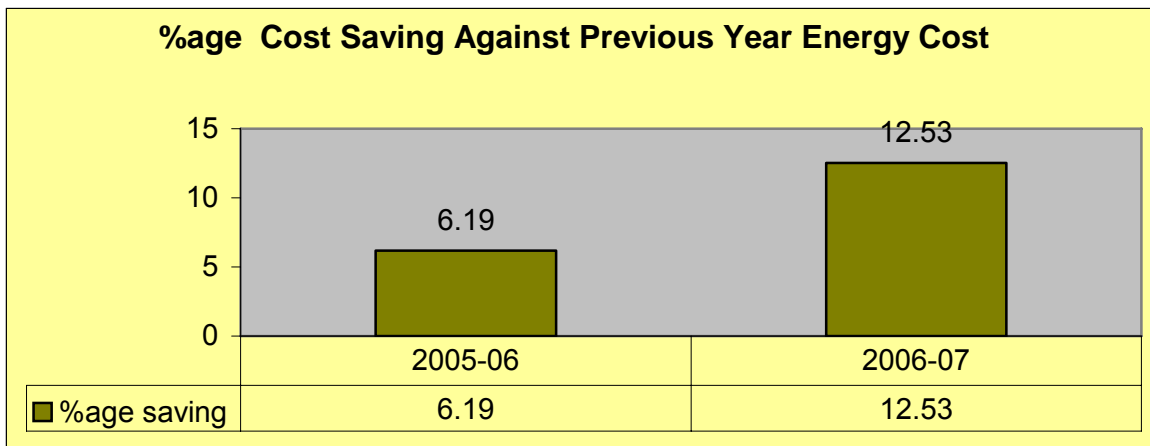
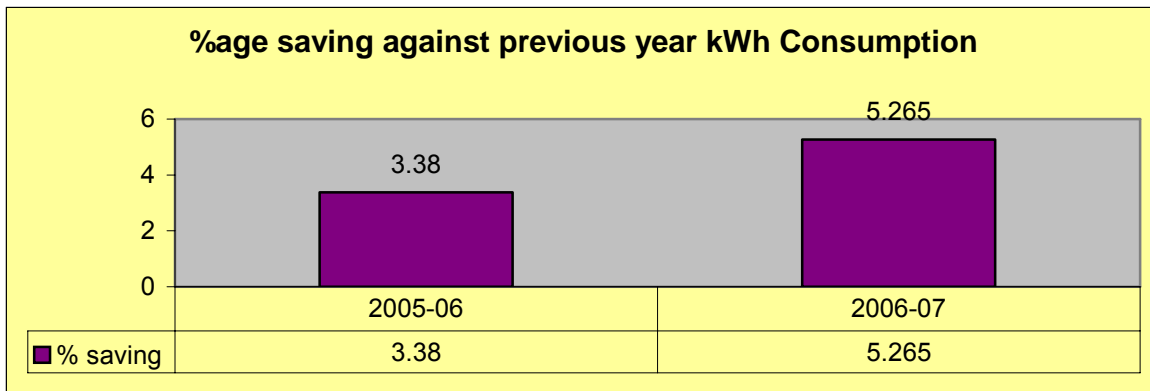
Connected Load 1916kW). We are having excellent Sub metering system which helps us in distributing the Utility bill and utility consumption monitoring of each SBU's Separately.

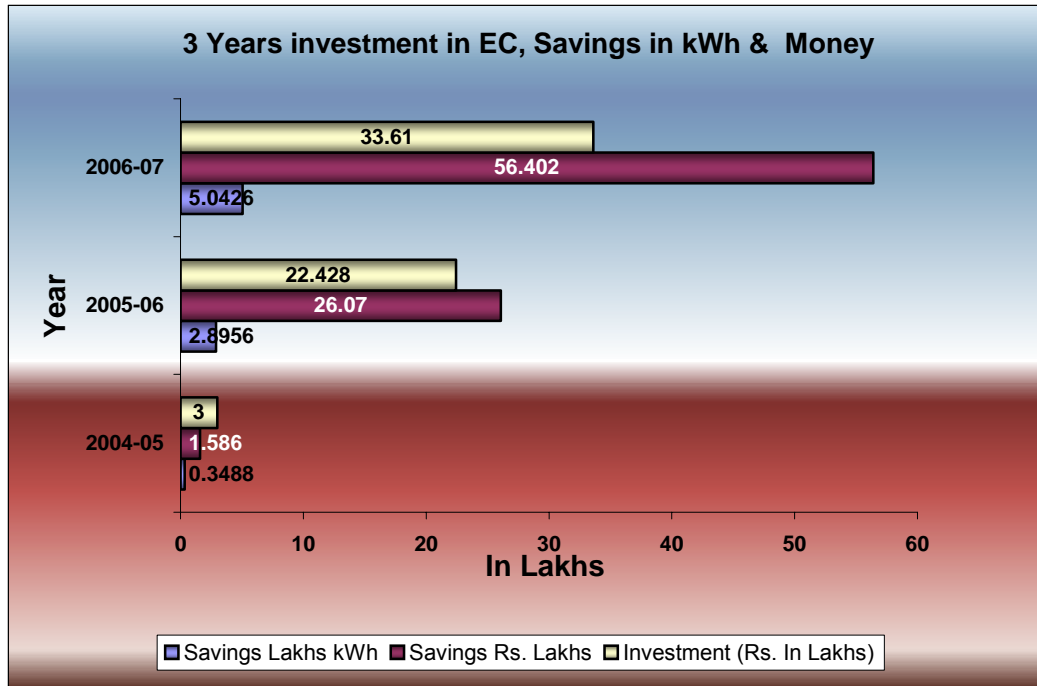




Energy Savings Achievements

At KPCL, we believe in consistent improvement, it reflects in our energy savings performance. We have consistently improved our energy efficiency. Our Top Management Commitment to energy conservation not only reflects from our energy policy but also from the investments provided for energy conservation projects, which is consistently improving along with our energy efficiency.





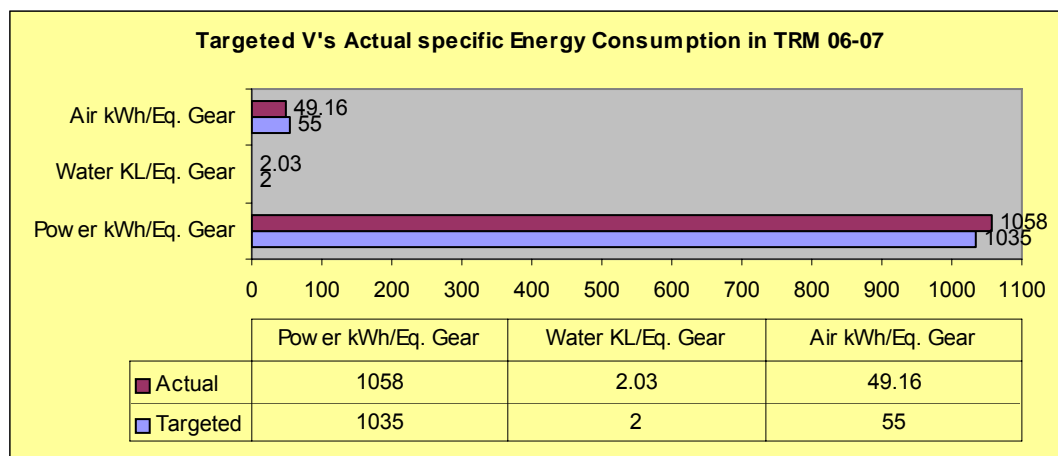
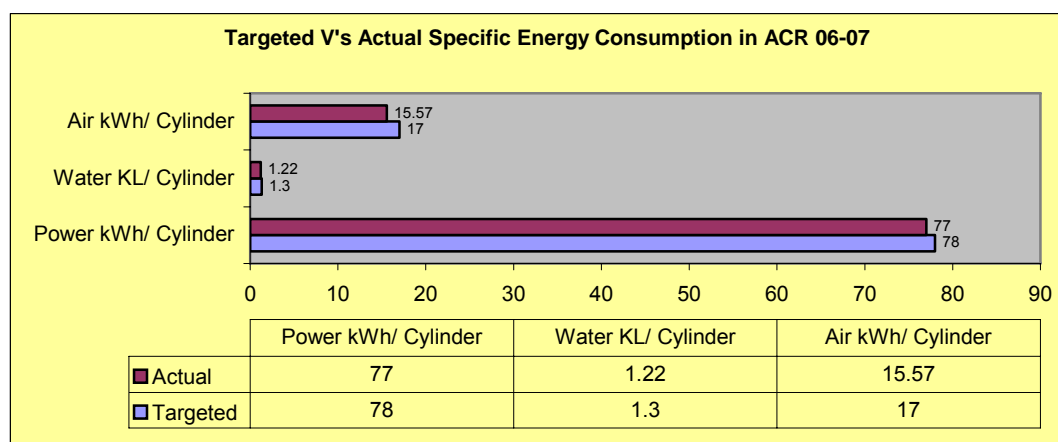
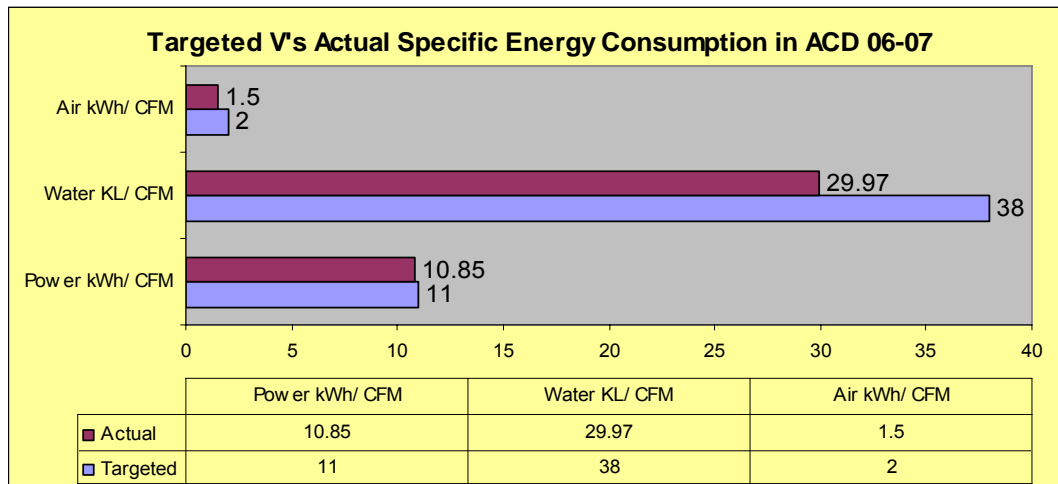
Energy Savings Targets

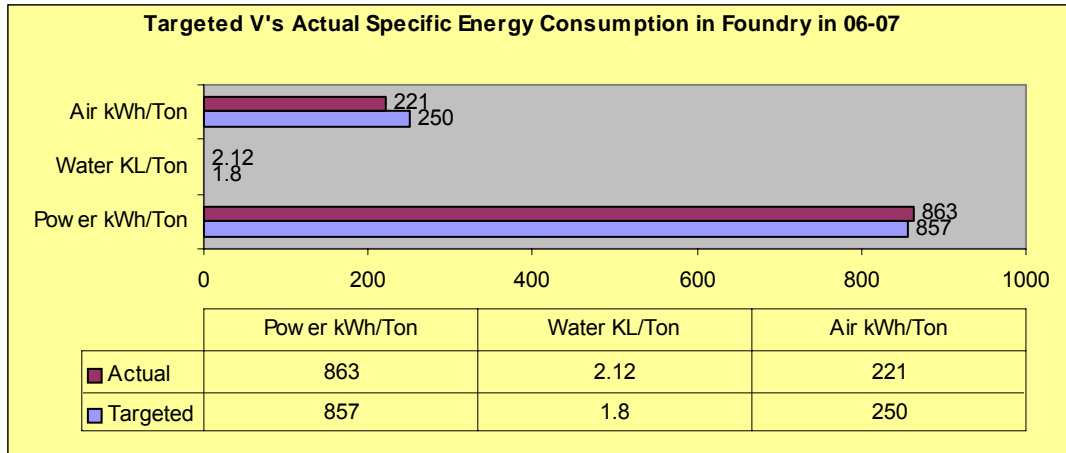
At KPCL we set targets for energy Savings in discussion with all, which helps us in achieving targets and involvements of everybody for energy Conservation. Energy Conservation Targets are set and monitored SBU wise for Electricity, Water and Compressed Air. In 2006-07 we have implemented 17 measures involving Rs. 33.61 Lakhs.

These 17 measures includes no cost or low cost investments proposals like Replacement of incandescent lamps/tube-lights with compact fluorescent lamps , Replacement of damaged/leaking compressed air pipe lines, Voltage optimization and LED indicator for over head Cranes and electrical panels. Modernisation of old and inefficient existing equipment and systems options like Replacement of inefficient Pneumatic grinders with efficient electrical one, Replacement of Inefficient cooling tower with efficient fan less cooling tower, Installation of Energy savers for welding machines, Installation of VFD for 200 & 350 CFM compressor, Installation of movement Sensors in toilets, Installation of APFC and Revamping of Compressed air distribution system. Process Monitoring and Controls proposals like providing foot switch for VTL machine, Conversion of star to delta for under loaded motors and Star delta converter for Turret Lathe.



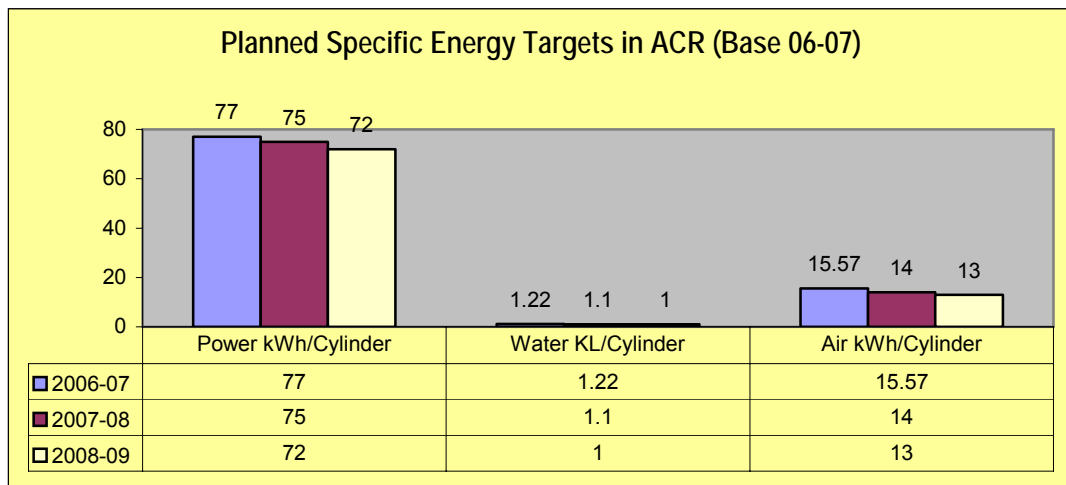
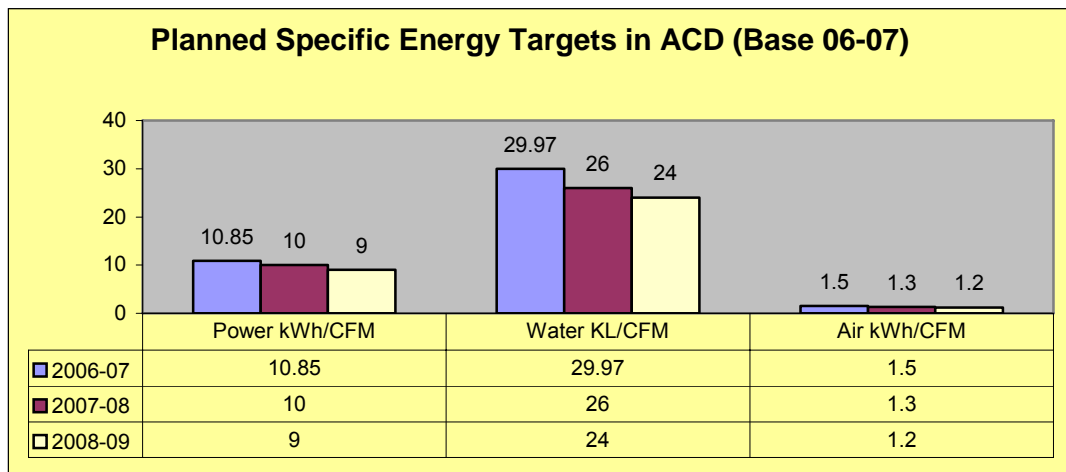
HRD initiatives like sponsoring 7 managers for “Energy Auditors Exam” of BEE & participated in training at “Institute of Engineers, Pune”. Fuel switching and renewable energy proposals like, Substitution of electricity and LPG use in canteen by Biogas installed on canteen waste and Natural wind ventilators at compressor room was also under taken.



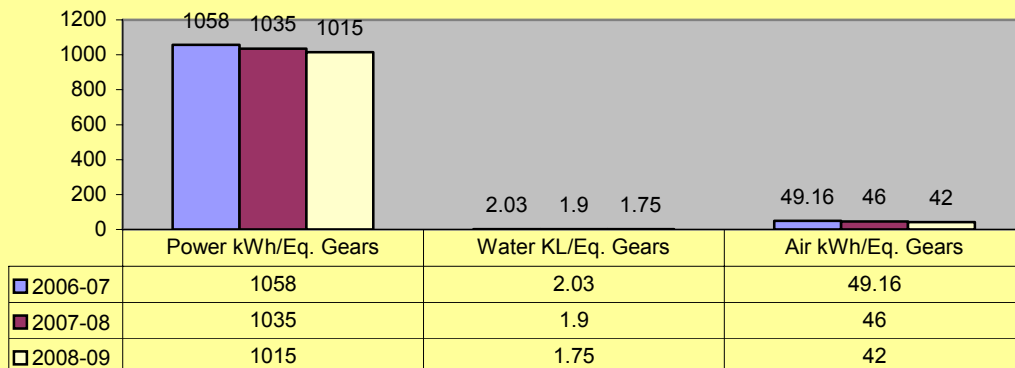


Future plans for energy Conservation

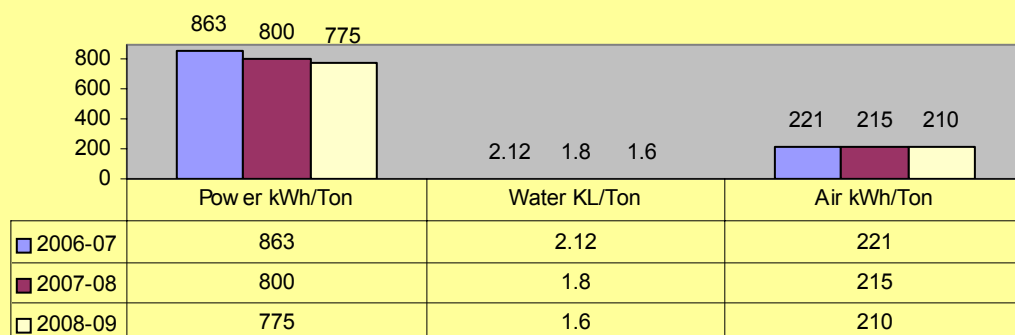
For 2007-08 we have planned 26 Energy Conservation Activities involving investment of Rs. 85.937 Lakhs and expected saving of Rs. 67.836 Lakhs And accordingly targets are planned after discussion we all stakeholders for 2007-08 and 2008-09.



Planned specific Energy Targets in TRM (Base 06-07)



Planned Specific Energy Targets in Foundry (Base 06-07)



Sr	Future Projects Energy Conservation	2007-2008	
		Approx. Cost Rs. In Lakhs	Implementation Month/Yr
1	Remote System for MD Controller for switching off non critical load during Peak Demand in Power house	0.75	April -07'
2	Over head Air grid lines with separate high pressure & low pressure grid for WR + Foundry Reduction in the Air Compressor power by decentralizing	0.65	July-07'
3	Installing Screw Compressor with VFD for Low Pressure & High Pressure Air line at Main Plant	3.50	June-07'
4	Leak Test in Compressed Air System at every Quarter	Nil	Quarterly
5	LED Solar Lamps For Garden lighting	0.427	June-07'
6	Revamping Aluminum Melting Furnace in foundry to over come heat loss thro shell	4.0	April-07'
7	TRM, R & D Office renovation are to be equipped with Energy savers CFL lamps & Electronics Ballast	4.50	June-07'
8	Modification of 10Ton OH Crane	1.25	June-07'
9	Separate Transformer for lighting load	Nil	May-07'



10	VFD arrangement for Compressor testing Test bed	1.5	April -07'
11	FRP light weight fans instead of Al Metal Fans of Air Circulators & Exhaust Fans	0.50	Aug-07'
12	Filtration of Hydraulic oil of m/c tool & assembly	1.50	May-07'
13	Low Cost Automation of Milling m/c to hydraulic & PLC conversation	1.2	June-07'
14	Slip Ring Motor Soft Starters (02 nos) for PF improvement & MD Controlling	4.50	Nov-07'
15	VTL to VTC machine Retrofitment to CNC m/c with Less Power requirement	22	Nov-07'
16	Renewable Solar Steam Cooking System for canteen	15.60	Oct-07'
17	Old Furnace Heat Resistant Coating on inner lining of new HT shop to over come heat loss thro outside shell	0.40	Nov-07'
18	Pump house renovation with Energy Efficient Pumps	4.00	Oct-07'
19	VFD arrangement for 300kW Gear box testing	13.00	Oct -07'
20	Fan less Cooing Tower for HT furnaces & ISD Building	0.18	Oct-07'
21	Electrical Energy Audit thro Maratha Chamber	0.05	Nov-07'
22	Energy Efficient motors for Paint Booth Blowers - 03 nos.	1.50	Oct-07'
23	VFD arrangement in 10 ton crane	3.7	Oct-07
24	Rain Water harvesting in Company premises	0.5	Nov- 07
25	All Lamps with Electronics Chokes & with Fan Regulators	0.7	Feb-08'
26	Energy saver for street lights with auto on/off during day & night time from Common Transformer	0.03	Oct-07'
Total Investment		85.937	

Note: Activities Mentioned Till September 2007 are completed and Activities from Oct 07 are under process.

Some Slogans from our employee's for Energy Conservation

- "One unit saved is one unit Generated, Number one makes big difference"
- "Less you Burn , More you Earn"
- "Consuming Electricity Is my Right, Saving it is my Duty, Job of any Kind, Do with Safety and EC in Mind"
- "Late is better than Never, Renewable Energy saving is for ever"
- "Today's wastage – Tomorrow's shortage"
- "Energy & Water are Precious, Prevent Leakages, Save Water and Energy, It is Life"

And Our Energy Conservation Efforts Continues....