

LG ELECTRONICS INDIA PRIVATE LIMITED

Pune (Maharashtra)

Unit Profile

LG Electronics India Pvt. Ltd., a wholly owned subsidiary of LG Electronics, South Korea was established in January, 1997 after clearance from the Foreign Investment Promotion Board (FIPB).

The trend of beating industry norms started with the fastest ever-nationwide launch by LG in a period of 4 and 1/2 months with the commencement of operations in May 1997. LG set up a state-of-the art manufacturing facility at Greater Noida, near Delhi, in 1998, with an investment of Rs 500 Crores. This facility manufactured Colour Televisions, Washing Machines, Air-Conditioners and Microwave Ovens. During the year 2001, LG also commenced the home production for its eco-friendly Refrigerators and established its assembly line for its PC Monitors at its Greater Noida manufacturing unit.

In 2004, LGEIL also up its second manufacturing unit in Pune, Maharashtra that started its operations in Jun 2004 with an investment of Rs 250 Crores. Covering over 50 acres, the facility manufactures Color Televisions, Air Conditioners, Refrigerators, Washing Machines, LCD TV sets, Optical storage devices and GSM phones. The Pune manufacturing unit line has been designed with the latest technologies at par with international standards at Korea & LG Noida and is one of the best unit amongst all LG manufacturing plants in the world.

LG Electronics India is the fastest growing company in the consumer electronics, home appliances and computer peripherals industry today. LG Electronics is continually providing superior technology premium products & value for money. The company has achieved a turnover of Rs 7895 crore in 2006-07.

Energy Consumption

By Continuous innovation and implementation, the unit has been able to reduce its energy consumption drastically.

Description	Units	2004-05	2005-06	2006-07
Total Electricity Consumption	Lakhs Kwh	36	47	81
Annual Prod Quantity	Lakhs	5.65	12.34	48.9
Specific Energy Consumption - Electrical	kWh/prd	6.37	3.8	1.66
Total Thermal Energy	M Kcal	962	1173	1390
Specific Energy Consumption - Thermal	M Kcal/prd	0.006	0.0074	0.0034

Year	Electrical		Thermal		Remark
	Specific Energy Consumption-Electrical	% reduction Over 2004-05	Specific Energy Consumption - Thermal	% Reduction Over 2004-05	
2004-05	6.29	-----	0.006	-----	
2005-06	3.78	40%	0.0074	-23%	
2006-07	1.66	73%	0.0034	43%	

Energy Conservation Policy and Set up

LG Electronics has maintained a steady growth in terms of turnover, profits as well as its march towards becoming the number one consumer durable company in the country. A good part of the profits is dedicated to the cause of energy conservation.

The top management commitment is shown through various activities like EESH Award, Six sigma , FRP award, weekly best suggestion , innovation award are made to ensure its success.

Energy conservation is a salient pillar in the forums like WE-10 (Waste Elimination), Fi-10 (10 pillars of Factory Innovation), CI review (Cost Innovation i.e. savings) which are reviewed by the management along with the middle management every month.

Further, every department Team Leader has energy conservation as their performance evaluation criteria. The management insists on audit by external experts as well as overseas energy audit teams. Their recommendations are used as guidelines for further improvements.

The commitment for energy saving is regularly demonstrated by each & every employee by not only giving suggestions but also rigorously following the norms set from time to time. Induction for new joiners has a special feature on Energy Conservation and the norms to be followed. This is supported by visuals all over the factory and sets trend from the first day. This is also carried forward by the routine internal audits by managers, especially at night for auditing equipment / air leaks while the machines are idle etc.

Energy Conservation Achievements

LG Electronics has been actively pursuing the process of energy conservation since its inception. Over the period between 2004 ~2007, the Pune Plant has aggressively implemented major as well as minor projects like stating of project with energy efficiency equipments, bench marking LG Noida for Energy conservation. There are many proposals, workmen's innovations, overseas benchmarking exercise, BEE guidelines, Benchmarking other major institutes through common platform provided by CII energy audit, etc resulting into total saving of over Rs 50 lakhs with an investment of Rs 38 lakhs. This has resulted in a reduction of 30% in specific electrical energy consumption and 43% in specific thermal energy consumption over the period.

1) Energy Savings Projects

a) Conserve Air for Energy Conservation

Before Status: No control for Air pressure and setting is high at 8.2 Bar to maintain Pr of 6.0 bar at user end. So frequent Loading /Unloading & power consumption is high

After Status: Compressor Power Consumption reduction by using Control Air to stabilize the supply of Constant air pressure and reduction and optimization of supply air at 6.5 Bar.

Investment: Appx Rs .: **6.43 Lacs**

Savings /Annum: Appx Rs 6.85 Lacs



b) VFD for Hot water Generator Circulation Pump

Before Status: Excess pressure due to use of High Head pump in Hot water circulation

After Status: Control of Pump speed & pressure of Circulation Pump with a VFD for Pump motor

Investment: Appx Rs.: 1.46 Lacs

Savings /Annum: Appx Rs.:2.22 Lacs



c) VFD panel for Cooling tower Pumps

Before Status : Excess pressure due to use of High Head pump in water circulation & no control for temp feedback

After Status: Provided temp feedback Pump and Fan operation optimization for cooling tower pumps and fans

Investment: Appx. Rs.: 5.52 Lacs

Savings / Month: Appx. Rs.:2.22 Lacs



Energy Conservation Plans and Targets

Energy Conservation Measures Planned	Anticipated Approx Investment – Rs Lakhs	Savings Approx per annum- Rs Lakhs	Commencement & Completion year
Operation of Hot water Generator in Dual Fuel - conversion from HSD to LPG	25	10	Yr 2008
Lighting Control transformer for B building Lighting Load with ES-25	3.88	1.85	Yr 2008
VFD for Trimming Press -2 and Other Ref line Hydraulic equipments	2.64	0.45	Yr 2008
Conversion of Electrical Heating in STLT & ELT into Thermal Heating	2	1.5	Yr 2008
Centralized SCADA system for Utility system Monitoring & Control	3.5		Yr 2008
VFD or Soft starter for Compressors	15	7.14	Yr 2008
Centralized SCADA system for Office AC system	4.5	2.34	Yr 2008