
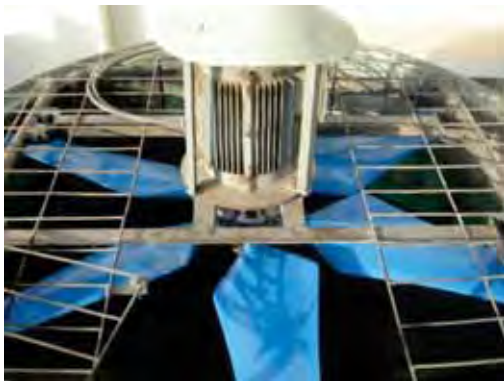


1	ID: 32	Title of measure	Sector: Consumer Goods
2	Survey Year: 2006	Energy Conservation by control of air pressure	Technology: Compressed Air Pressure Controller
3	Name of the Company : LG Electronics India Private Limited, Pune, Maharashtra, INDIA		
4	Agency that executed the project : In-house		
5	Year of Implementation : 2006-07		
6	<p>Unit Profile: Established in 1997, LG Electronics India Private Limited, is a wholly owned subsidiary of LG Electronics, South Korea., in India for a decade now. LGEIL has one manufacturing unit at Noida, Uttar Pradesh and the second Greenfield manufacturing unit in Pune, Maharashtra. Covering over 50 acres, the Pune facility manufactures LCD TV, GSM Phones, Color Televisions, Air Conditioners, Refrigerators, Microwave Ovens Color Monitors. The annual turnover of the Pune unit is US\$ 0.41 billion.</p>		
7	<p>Description of Energy Conservation Measure:- The in-house team observed that in the compressor room, there was no control for air pressure and setting was high at 8.2 bar to maintain pressure of 6.0 bar at the user end. Frequent loading and unloading was also observed. Maintaining higher generation pressure, not only results in higher power drawn by the air compressor, but as well increases the compressed air leakage loss. The compressor power consumption could be reduced by using control air equipment. This helped to stabilize the supply of constant air pressure. It also helped to reduce and optimize the supply air at 6.5 Bar. This modification resulted in 15% savings in electricity consumption.</p>		
8	<p>Picture Before Modification</p> 	<p>Picture After Modification</p> 	
9	Total investment :	16,075 US\$	
10	First year energy cost savings :	17,125 US\$	
11	First year additional savings beyond energy (i.e. water, raw materials etc.):	Nil	
12	Annual electricity consumption before, MWh	964	
13	Annual electricity consumption after, MWh	819	
14	First year electricity savings, MWh	145	
15	First year tons of CO ₂ mitigated	145	
16	Assumed sustainability, years	10	
17	Expected tons of CO₂ mitigated throughout life cycle	1,450	

1	ID: 33	Title of measure	Sector: Consumer Goods
2	Survey Year: 2006	Replacement of Cooling Tower Aluminum Fan Blades by FRP Blades	Technology: Cooling Tower Fans
3	Name of the Company : LG Electronics India Private Limited, Pune, Maharashtra, INDIA		
4	Agency that executed the project : Eureka, Aurangabad, INDIA		
5	Year of Implementation : 2006-07		
6	<p>Unit Profile: Established in 1997, LG Electronics India Private Limited, is a wholly owned subsidiary of LG Electronics, South Korea., in India for a decade now. LGEIL has one manufacturing unit at Noida, Uttar Pradesh and the second greenfield manufacturing unit in Pune, Maharashtra. Covering over 50 acres, the Pune Facility manufactures LCD TV, GSM Phones, Color Televisions, Air Conditioners, Refrigerators, Microwave Ovens Color Monitors. The annual turnover of the Pune unit is US\$ 0.41 billion.</p>		
7	<p>Description of Energy Conservation Measure:- The in-house team, during the survey of the unit pointed that there was wastage of electrical energy due to the existing inefficient die cast aluminium blades. The air flow of these fans is not uniform, maximum near the blade tips and minimum near the hub. Further, the existing set up of die cast aluminium blades consume higher power to the extent 20-30% in comparison to the FRP blades. The existing aluminium blades were replaced with fiber reinforced plastic (FRP) blades and savings to the tune of 25% was achieved.</p>		
8	<p>Picture Before Modification</p> 		<p>Picture After Modification</p> 
9	Total investment :		4,875 US\$
10	First year energy cost savings :		13,875 US\$
11	First year additional savings beyond energy (i.e. water, raw materials etc.):		Nil
12	Annual electricity consumption before,	MWh	468
13	Annual electricity consumption after,	MWh	351
14	First year electricity savings,	MWh	117
15	First year tons of CO ₂ mitigated		117
16	Assumed sustainability, years		10
17	Expected tons of CO₂ mitigated throughout life cycle		1,170