

## **BILT GRAPHIC PAPER PRODUCTS LIMITED**

**(Unit - Bhigwan)  
Distt. Pune (Maharashtra)**

### **Unit Profile**

Bilt Graphic Paper Products Limited Unit Bhigwan, India is the largest coated paper manufacturing plant of the country. Each employee of the unit is committed for efficient use of energy, efficiency and best utilization of resources right from the inception of the plant.



Capacity utilization of the Paper Machine has increased tremendously over the last two years due to innovative measures like debottlenecking of the refining constraint by use of Bio-refining enzyme, use of micro-particle for higher drainage & installation of the Polyurethane covered roll in the vibration prone fourth press position. Specific Energy Consumption for the Paper plant has reduced by 7.5 % due to path breaking initiatives taken by employees without any investment like drying after the coating by only hot air & cylinder drying. Energy consuming Infrared dryers have been stopped permanently after taking various printing trials with the paper produced without radiation drying in some grade of papers.

BGPPL specific electrical energy consumption is only 667.7 kWh /T which is at par in paper industry at international forum.

The success story of Bilt, Bhigwan is due to the continual improvement done by the company employees under the umbrella of strong management systems.

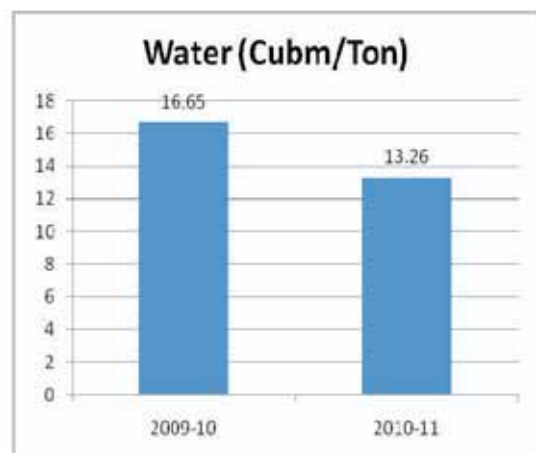
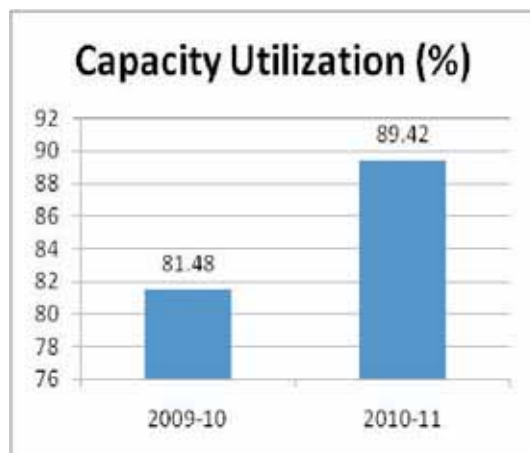
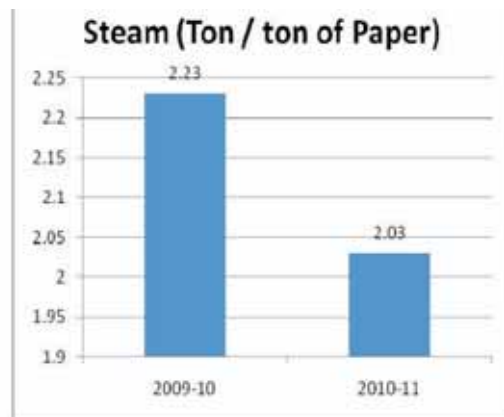
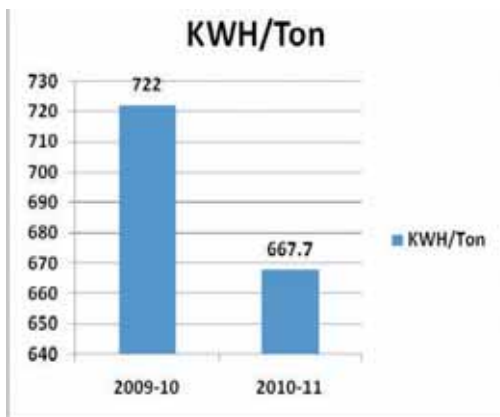
Through its consistent efforts in effective energy utilization & energy conservation Graphic Built is excelling past efficiency targets year after year.

### Energy Consumption

**BGPPL journey of excellence is visible from the table below :**

	2009-10	2010-11
Finished Production (Ton/annum)	248515	272741
Capacity Utilization (%)	81.48	89.42
Electrical Energy Consumption (Lacs kWh)	1794.77	1821.07
Steam Consumption (Ton)	553638	552546
Specific electrical energy consumption (kWh /T)	722	667.7
Specific thermal energy consumption (Ton/T)	2.23	2.03

Energy Performance of the unit is visible from the following trends. The trends are for Specific Energy consumptions of both machines put together. The trend is compared on finished Paper



### Energy Conservation Initiatives taken

During 10-11 mill has implemented following Energy Conservation Initiatives, resulting into saving of Rs 482.25 lacs.

	Project Description	(Lakhs KWH)	Steam (MT)	Total fuel In MTOE	Total Savings (Rs .Lakhs)	Investment incurred on the project (Rs. Lakhs)
2010-11	Replacement of old inefficient Secondary Air conditioner Pump 1 with energy efficient pump-1 in PM1	1.01			4.15	2
2010-11	Replacement of old inefficient Secondary Air conditioner Pump 2 with energy efficient pump in PM1	1.01			4.15	2
2010-11	Replacement of old inefficient Condenser Pump 1 with energy efficient pump in PM1	0.24			0.97	0.9
2010-11	Replacement of old inefficient Condenser Pump 2 with energy efficient pump in PM1	0.24			0.97	0.9
2010-11	Temperature control of pm2 VAM Cooling basis fan resulting into energy saving in fan and additional pump (22kw) both.	0.59			2.44	0.01
2010-11	Stoppage of Pre -coat(1 &2) IR Drying system during all 180 GSM and above board paper in Off Machine coater (Average 10 days/month)	7.2			29.66	0
2010-11	Provided interlock to stop the Dust blower when machine is not running	0.0729			0.30	0

	Project Description	(Lakhs KWH)	Steam (MT)	Total fuel In MTOE	Total Savings (Rs .Lakhs)	Investment incurred on the project (Rs. Lakhs)
2010-11	Installation of Tiron Aerator in ETP-1 No	2.92			12.02	8.26
2010-11	Use of B CTMP in Furnish in PM1 to reduce KWH and steam	2.96	16666	1050	140.34	0
2010-11	Optimizations of IRCON Drying system in PM2 coater 1 and coater 2	10.5			43.26	0
2010-11	Stoppage of NBKP Soft wood Refiner motor in pm2 by optimizing the process like reducing the soft wood from 20% to 12%.	45.36			186.88	0
2010-11	Stoppage of 1 No of Supply blower in coater 1 and coater 2 in PM2	10.75			44.30	0
2010-11	Stoppage of 1 No of Exhaust blower in coater 1 and coater 2 in PM2	1.01			4.15	0
2010-11	Installation of VFD at cooling water pump 2 motor in pm2	2.10			8.65	5
<b>Grand Total</b>		<b>85.94</b>	<b>16666</b>	<b>1050</b>	<b>482.25</b>	<b>19.07</b>





Replacement of old inefficient Secondary air conditioner pump1 with energy efficient pump1



Replacement of old inefficient secondary air conditioner pump2 with energy efficient pump 2



Replacement of old inefficient condenser pump1 with energy efficient pump



Temperature control of pm2 VAM Cooling basis fan resulting into energy saving in fan and additional pump(22kw) both.



Stoppage of Pre-coat(1 &2) IR Drying system during all 180 GSM and above board paper in OMC



Provided interlock to stop the Dust blower when machine is not running



Installation of VFD at cooling water pump 2 motor in pm2



Optimisation of IRCON Drying system in PM2 coater 1 and coater 2



Stoppage of NBKP Soft wood Refiner moto in pm2 by optimising the processe like reducing the soft wood from 20% to 12%.



Replacement of old inefficient condenser pump2 with energy efficient pump2



Installation of Titon Aerator in ETP -1 No



Stoppage of 1 No of Supply blower in coater 1 and coater 2 in PM2

## Energy Policy



**Bilt Graphic Paper Products Limited  
Unit – Bhigwan**

**: ENERGY POLICY:  
(ISO 50001:2011 Energy Management System)**

We, at BGPPL manufacturer of coated and uncoated papers including operation of on-site ETP, Coal based thermal power plant are committed to:

- ❖ Continual improvements in operations to maximize efficiency and achieve resource conservation like ( water, power, steam, air, oil and Fuel ) to improve the overall energy performance .
- ❖ Evaluate & execute the feasible opportunities for renewable energy sources.
- ❖ Ensure the availability of information and of all necessary resources to achieve objectives and targets related to Energy Management
- ❖ Comply with all applicable Legal & other requirements related to our energy use , consumption & efficiency .
- ❖ Strive for the purchase of energy efficient products, services & design for energy performance improvement.
- ❖ Create participative, motivating and challenging environment amongst our employees to strive for highest degree of energy conservation and achieve national / international Benchmarks.

1.Sep, 2011



**I.N.GUHA  
(Associate Vice President )**