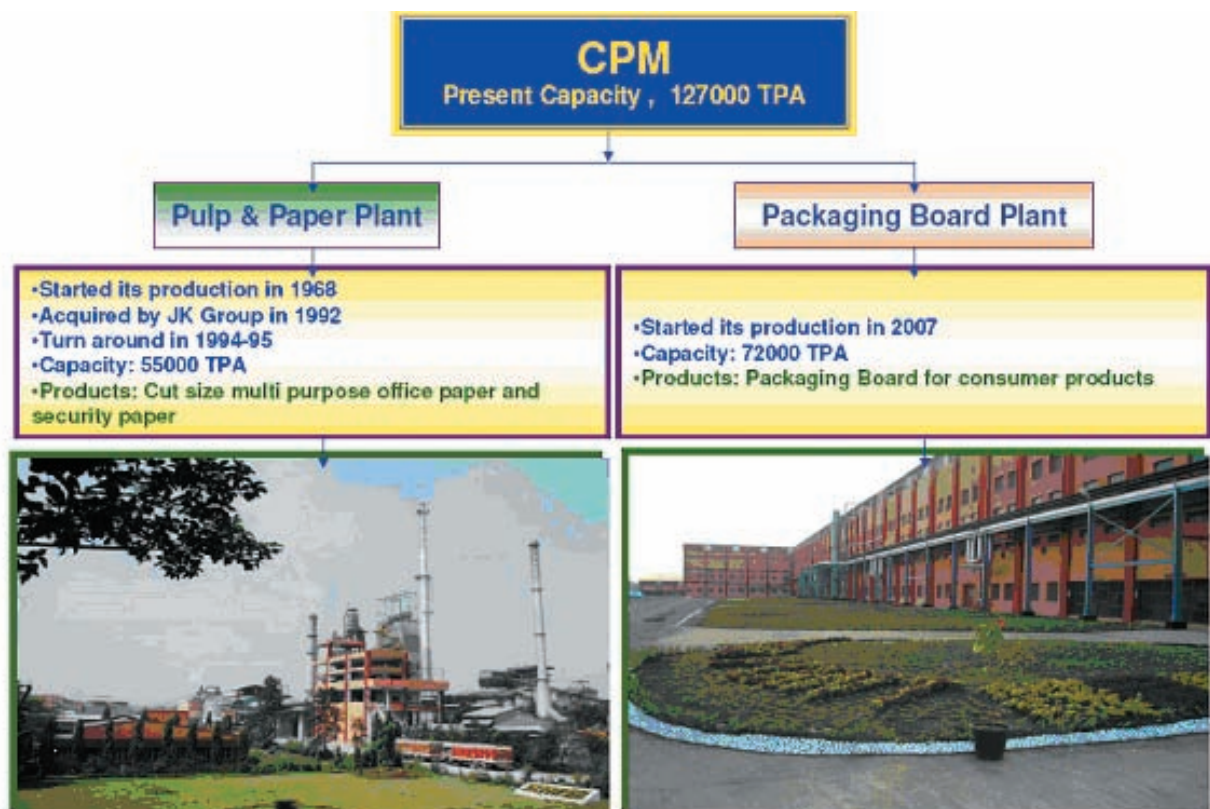


**JK PAPER LIMITED**  
Unit: Central Pulp Mills  
Fort Songadh, Distt. Tapi (Gujarat)

**Unit Profile**

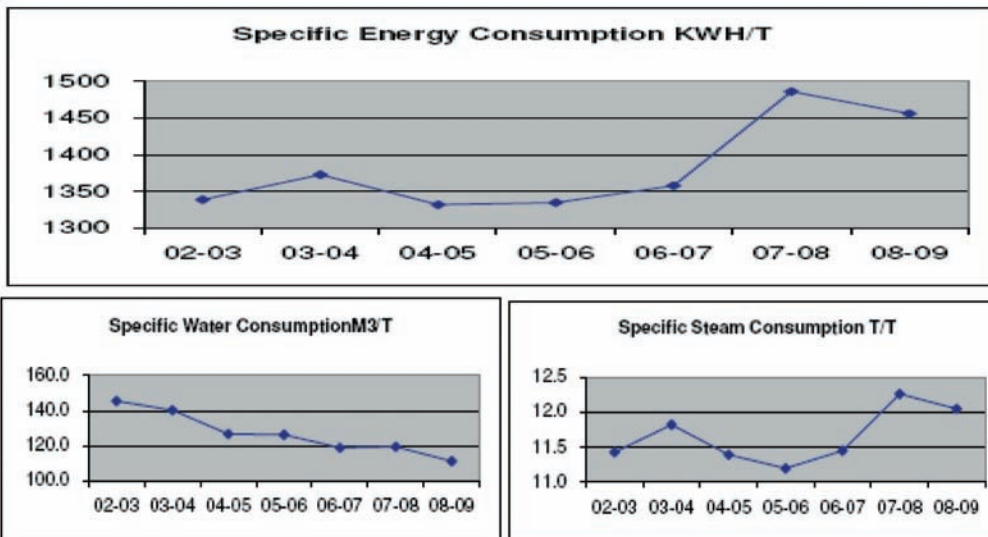
JK Paper Ltd is one of the largest paper manufacturing company in India having manufacturing operations in two units (i) JK Paper Mills in Orissa (ii) Central Pulp Mills in Gujarat. Central Pulp Mills is an integrated pulp and paper mill with an installed capacity 55000 TPA of writing and printing papers utilizing bamboo and hardwood as the raw materials. It was originally installed in 1968 and taken over by JK Organization in 1992. The unit was rehabilitated in 1993-94. It is an ISO – 14001; 2004, ISO 9001: 2008 and OHSAS 18001: 2007 certified unit manufacturing various varieties of writing and printing papers e.g. SS Maplitho, Copier, Ledger, Parchment, Base Paper, MICR Cheque Paper etc. Its product JK Easy Copier is one of the leading branded copier paper. It is the largest integrated pulp and paper mill in Western India.





## Energy Conservation

### Paper Plant




### Note

Specific Energy and specific Steam consumption are more in 2006-07 & 2007-08 due to commissioning of ODL plant in 2005-06 (Oct05) and ClO<sub>2</sub>, Bleaching plant in 2007-08 (Apr 07). However, with Energy Conservation Efforts specific energy and specific steam consumption have decreased and have declining trend.

Year	02-03	03-04	04-05	05-06	06-07	07-08	08-09
<b>Specific Energy Consumption KWH/T</b>	1339	1373	1332	1335	1358	1486	1456
Year	02-03	03-04	04-05	05-06	06-07	07-08	08-09
<b>Specific Steam Consumption T/T</b>	11.4	11.8	11.4	11.2	11.4	12.3	12.0
Year	02-03	03-04	04-05	05-06	06-07	07-08	08-09
<b>Specific Water Consumption M3/T</b>	145.4	140.3	126.7	126.2	118.8	119.5	111.2

### Energy Conservation Achievements

<p>BURNING MOTHER LYE ALONG WITH BLACK LIQUOR IN RECOVERY BOILER FOR STEAM GENERATION</p>  <p>Total investment, Rs. NIL lacs Energy savings 1<sup>st</sup> yr Rs.1.9Lacs</p>	<p>CONTROLLING PM-2 TOTAL HEAD IN HEAD BOX BY CONTROLLING RPM OF FAN PUMP WITH VFD</p>  <p>Total investment, Rs. 1.52 Lacs Energy savings 1<sup>st</sup> yr, Rs.0.54 Lacs</p>	<p>REDUCTION IN AIR CONSUMPTION IN CFB-3 BY MODIFICATION OF ASH REMOVAL SYSTEM BY INCORPORATING TIME DELAY AND REDUCTION IN AIR PRESSURE</p>  <p>Total investment, Rs.0.8 Lacs Energy savings 1<sup>st</sup> yr Rs.0.39 Lacs</p>
<p>REDUCTION IN AIR IN CFB-4 BY MODIFICATION OF ASH REMOVAL SYSTEM</p>  <p>Total investment, Rs. 0.9 Lacs Energy savings 1<sup>st</sup> yr Rs 4.12Lacs</p>	<p>REDUCTION IN IMPELLER DIAMETER OF TG-4 COOLING TOWER CIRCULATION PUMP</p>  <p>Total investment, Rs. NIL Lacs Energy savings 1<sup>st</sup> yr Rs 3.88Lacs</p>	<p>STOPPING 1 NO. DECKER BACK WATER DISTRIBUTION PUMP OUT OF 2 NOS. SIMULTANEOUSLY RUNNING PUMPS</p>  <p>Total investment, Rs. 4.2 Lacs Energy savings 1<sup>st</sup> yr Rs 2.24Lacs</p>

**STOPPING OXYGEN DELIGNIFICATION BLOW TANK DILUTION PUMP BY CONNECTION WITH VAT DILUTION PUMP**



Total investment, Rs. 2.2 lacs  
 Energy savings 1<sup>st</sup> yr Rs. 1.82Lacs

**INSTALLATION OF VFD IN MC PUMP FEEDING TO D-STAGE BLEACHING TOWER**



Total investment, Rs. 7.25 Lacs  
 Energy savings 1<sup>st</sup> yr, Rs.4.00 Lacs

**REPLACEMENT OF OLD INEFFICIENT CAUSTICIZER-3 AGITATOR MOTOR BY ENERGY EFFICIENT MOTOR**



Total investment, Rs.0.4 Lacs  
 Energy savings 1<sup>st</sup> yr Rs.0.73 Lacs

**REPLACEMENT OF 1000W HALOGEN LAMPS OF LIGHTING BOARD AT FRONT SIDE OF MILL BOUNDARY BY 4 NOS. 50W METAL HALIDE LAMPS**



Total investment, Rs. 0.14 Lacs  
 Energy savings 1<sup>st</sup> yr Rs 0.53Lacs

**INSTALLATION OF AIR VENTILLATORS INSTEAD OF EXHAUST FAN IN SCREW COMPRESSOR BUILDING**



Total investment, Rs0.1 Lacs  
 Energy savings 1<sup>st</sup> yr Rs 0.36Lacs

**SWITCHING OFF 14 NOS. OF TUBELIGHTS DURING DAY TIME IN CUTTER-1 AREA**



Total investment, Rs. 4.2 Lacs  
 Energy savings 1<sup>st</sup> yr Rs 2.24Lacs

**REPLACEMENT OF 400W MERCURY VAPOUR LAMPS BY TWO 36W METAL HALIDE LAMPS IN LINE-O-MATIC**



Total investment, Rs. 0.23 Lacs  
 Energy savings 1<sup>st</sup> yr Rs 0.27 Lacs

**ISOLATION OF COOLING WATER IN STANDBY SCREW COMPRESSOR**



Total investment, Rs Nil Lacs  
 Energy savings 1<sup>st</sup> yr Rs 0.25Lacs

**REPLACEMENT OF MILL WATER PUMP MOTOR BY EEM OF SLIGHTLY HIGHER FRAME RATING**

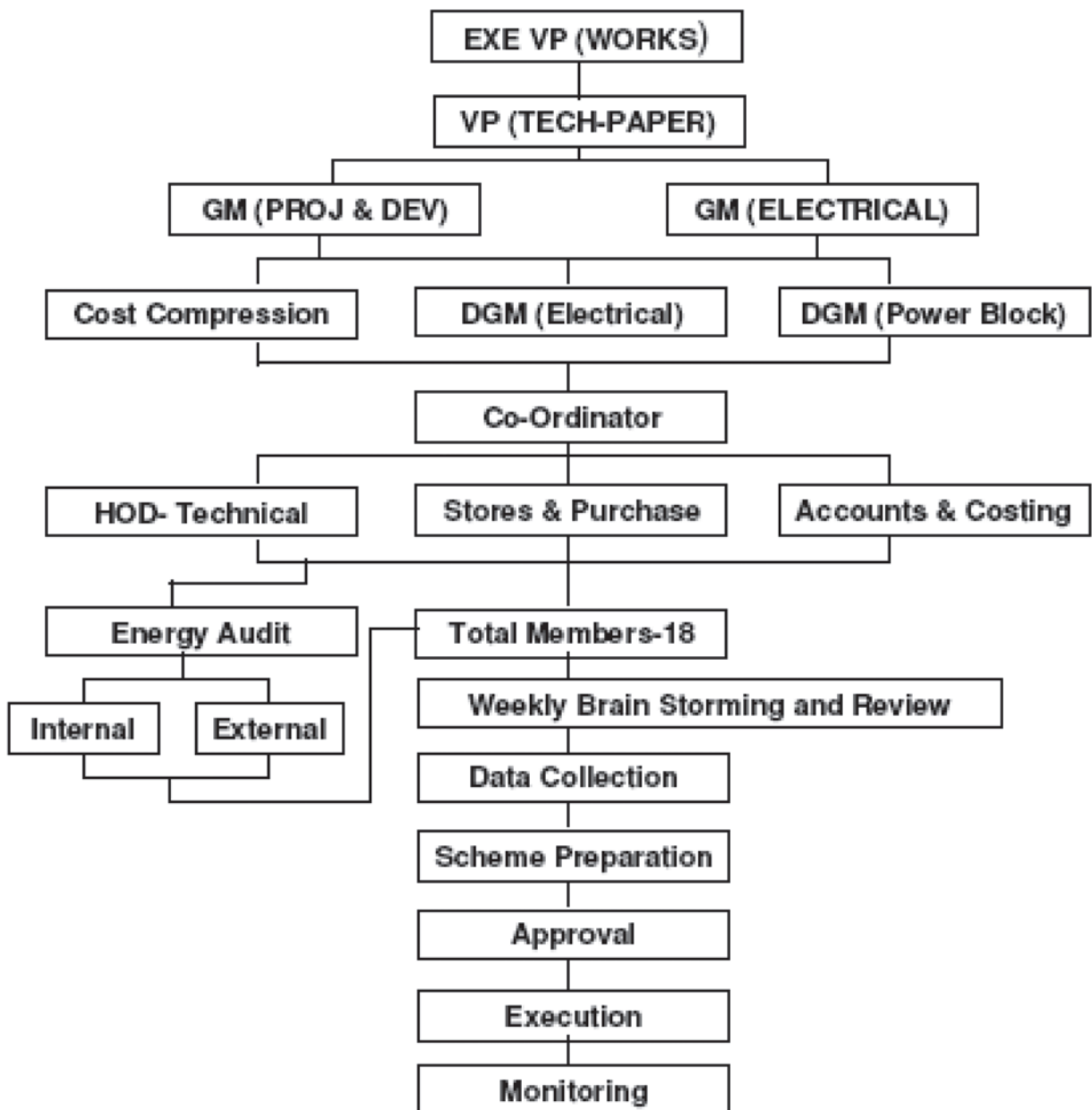


Total investment, Rs. 3.7 Lacs  
 Energy savings 1<sup>st</sup> yr Rs 1.07 Lacs

**Energy Conservation Organisation**

**JK PAPER LTD  
Unit : Central Pulp Mills**

**ENERGY CONSERVATION AND COST COMPRESSION CELL**



## Energy Conservation Policy

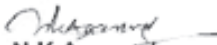
**J K Paper Limited**  
Unit: Central Pulp Mills

**Energy Policy**

We, at Central Pulp Mills, are committed to conserve various forms of Energy through cost effective utilization of fuel and power. To accomplish this we shall:

- Adopt appropriate energy conservation technologies.
- Maximize the use of cheaper, non – conventional, and easily available forms of energy.
- Effectively monitor and control the consumption of energy through energy management information system at various processes.
- Involve all the people in the organization and make them aware on energy conservation.
- Carry out periodic energy audits.

Date: 01.12.2007

  
**N K Agarwal**  
Exe. VP (Works)

## Environment and Safety

JK Paper Limited, Unit : CPM is well known for maintaining its leadership, as a dynamic benchmark for the entire paper industry in India, be it quality, harnessing of modern Eco friendly Technologies or performance in Industrial Safety, Occupational Health and Environment Management. Numerous awards won so far are testimony for it. Implementation of TPM, ISO-14001 EMS and OHSAS 18001 also speak about Management's commitment for not only to the safety and health of the workmen but also to maintain harmony with nature by continual improvement in resource conservation and waste minimization. In line with company EHS policy plant has adopted all Eco-friendly Technologies like Computerization of Digester house operation, New Chemical Recovery Boiler, Oxygen Delignification, Chlorine Dioxide bleaching systems, New coal fired boiler with CFBC technology and Rotary Lime Kiln.

CPM had done commendable work in the conservation of energy and water. CPM has implemented Combine bore Recharging cum Rain water harvesting system (RWH) in colony .

For sustainable development CPM is also carrying out social and farm forestry for afforestation through distribution of seedlings and clones to farmers and by undertaking plantations at mill as well as in private lands.