Company Profile

One of the Indonesia consumer packaging paper producer

Established in 1988, more than 30 years in the industry

1.3 million tonnes production capacity with Location in Cikarang Barat, Bekasi

100% Use of recycled waste paper.

Focus on Indonesia domestic market

FajarPaper is a company of the future in terms of its forward-thinking approach to business, energy conservation and the environment.

Green Company with environmental related certification, i.e. FSC, ISO 14001, and carbon credit, registered since 2012

JCM Project collaborate work with Kanematsu Corporation in energy consumption reduction of paper manufacturing process
## Key Milestones

<table>
<thead>
<tr>
<th>Year</th>
<th>CDB</th>
<th>CMP &amp; KLB</th>
</tr>
</thead>
<tbody>
<tr>
<td>1988</td>
<td>150,000</td>
<td>150,000</td>
</tr>
<tr>
<td>1989</td>
<td>150,000</td>
<td>150,000</td>
</tr>
<tr>
<td>1990</td>
<td>150,000</td>
<td>150,000</td>
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<tr>
<td>1994</td>
<td>150,000</td>
<td>150,000</td>
</tr>
<tr>
<td>1996</td>
<td>150,000</td>
<td>750,000</td>
</tr>
<tr>
<td>2001</td>
<td>150,000</td>
<td>850,000</td>
</tr>
<tr>
<td>2003</td>
<td>150,000</td>
<td>1,150,000</td>
</tr>
</tbody>
</table>

### Environmental and standards
- **1988**: Incorporation
- **1988**: IPO on the IDX
- **1996**: ISO9001:1994 quality management
- **1996**: Waste water treatment
- **2003**: ISO9001:2000 quality management
- **2010**: ISO14001 environmental management
- **2011**: OHSAS 18001
- **2011**: Ecolabelling certification
- **2012**: FSC certification
- **2012**: Clean development mechanism
- **2013**: Ecolabelling certification
- **2016**: WCO Authorized Economic Operator
- **2017**: Joint credit mechanism (Japan)

### Operational Milestones
- **1988**: Incorporation
- **1989**: IPO on the IDX
- **1990**: PM1
- **1994**: PM2
- **1996**: PM3, Cogen 1
- **2001**: PRP-1
- **2006**: PM7, Cogen 2
- **2010**: PM5
- **2011**: PRP-2
- **2012**: PM7 upgrade, PM2 upgrade
- **2016**: WCO Authorized Economic Operator
- **2017**: PM8, Cogen 3

**Note**: CDB (Coated Duplex Board), CMP (Corrugated Medium Paper), KLB (Kraft Liner Board)
## Sustainable Business Model

<table>
<thead>
<tr>
<th>Recycle waste paper</th>
<th>Paper manufacturing</th>
<th>Products</th>
<th>Boxes</th>
<th>Recycle waste paper</th>
</tr>
</thead>
<tbody>
<tr>
<td><img src="image1" alt="Recycle waste paper" /></td>
<td><img src="image2" alt="Paper manufacturing" /></td>
<td><img src="image3" alt="Products" /></td>
<td><img src="image4" alt="Boxes" /></td>
<td><img src="image5" alt="Recycle waste paper" /></td>
</tr>
</tbody>
</table>

- Recycle waste paper: Collecting and processing waste paper.
- Paper manufacturing: Converting recycled paper into paper rolls.
- Products: Using paper rolls to manufacture various products.
- Boxes: Packaging products in eco-friendly boxes made from recycled paper.
- Recycle waste paper: Continuously recycling waste paper to minimize waste and conserve resources.
Production Process

3. Screening & cleaning
- All the contaminants, such as plastics, wires, sands, etc. in the paper pulp are removed based on the size (Screening) and based on the density (Cleaning)

4. Headbox
- The formation of paper sheet from paper pulp starts here, where the paper pulp distribution and moisture reduction are controlled to get a good formation of paper sheet

5. Press & dryer section
- The water content of the newly-formed paper sheet is further reduced in these sections
- Press section is where paper sheet is pressed in between two rolling rolls before going to dryer section
- Dryer section is where paper sheet is dried using steam-heated rolls

6. Pope Reel
- The perfectly formed paper sheet is winded in the pope reel and becomes one jumbo roll

7. QC check
- Various sections of the jumbo roll are checked by QC to determine the paper quality of that jumbo roll

8. Rewinder
- The jumbo is re-winded where the cores are inserted in the middle of the new jumbo roll, and then cut into smaller rolls

2. Re pulping
- Waste papers are dumped in pulper using conveyors, to be dissolved with water and become paper pulp

1. Collection
- Waste papers are collected mostly by scavengers, and sold to collection agents
- Collection agents then will sell and transport the pooled waste papers to Fajar Paper
## Sustainable Operation

<table>
<thead>
<tr>
<th>#</th>
<th>Certification</th>
<th>Issuer</th>
<th>Description</th>
<th>Valid</th>
<th>Logo</th>
</tr>
</thead>
<tbody>
<tr>
<td>1</td>
<td>FSC CoC (Forest Stewardship Council - Chain of Custody)</td>
<td>SGS</td>
<td>The only Indonesian company with non-illegal logging source of raw materials certification, since 2012</td>
<td>2022</td>
<td><img src="image" alt="FSC" /></td>
</tr>
<tr>
<td>2</td>
<td>Clean Development Mechanism (CDM)</td>
<td>United Nation Framework on Climate Change</td>
<td>Carbon credit registered, since 2012</td>
<td>2022</td>
<td><img src="image" alt="JCM" /></td>
</tr>
<tr>
<td>3</td>
<td>Joint Credit Mechanism (JCM)</td>
<td>Government of Japan</td>
<td>Greenhouse Gas (GHG) emission reductions or removals</td>
<td>2021</td>
<td><img src="image" alt="JCM" /></td>
</tr>
<tr>
<td>4</td>
<td>Ekolabel &amp; Recyclable</td>
<td>BBPK (Indonesia)</td>
<td>Products are certified recyclable and eco friendly</td>
<td>2020</td>
<td><img src="image" alt="BBPK" /></td>
</tr>
<tr>
<td>5</td>
<td>Authorized Economic Operator (AEO)</td>
<td>Ministry of Finance Indonesia</td>
<td>A party complying with international supply chain security standards</td>
<td>2021</td>
<td><img src="image" alt="AEO" /></td>
</tr>
<tr>
<td>6</td>
<td>ISO 9001</td>
<td>TUV Sud</td>
<td>Management Quality System</td>
<td>2019</td>
<td><img src="image" alt="ISO9001" /></td>
</tr>
<tr>
<td>7</td>
<td>ISO 14001</td>
<td>TUV Sud</td>
<td>Environmental</td>
<td>2022</td>
<td><img src="image" alt="ISO14001" /></td>
</tr>
<tr>
<td>8</td>
<td>ISO 45001</td>
<td>TUV Sud</td>
<td>Occupational Health and Safety Management System</td>
<td>2020</td>
<td><img src="image" alt="ISO45001" /></td>
</tr>
<tr>
<td>9</td>
<td>OHSAS 18001</td>
<td>TUV Sud</td>
<td>Employee health and safety</td>
<td>2020</td>
<td><img src="image" alt="OHSAS18001" /></td>
</tr>
</tbody>
</table>
Self-sufficient and Sustainable Energy

2 Gas Turbines Co-generation Power Plant
- Production of approx. 70MW
- Ability to transform waste heat into steams (200 tons/hour)

1 Coal Co-generation Power Plant
- Production of approx. 55MW or 110 ton of steam per hour

Waste Water Treatment Plant
- Existing treatment capacity of 68,000m³ of waste water/day
Pembakar Reject Plastik dan Sludge (PRP) 1 & 2

2 Fluidized-bed PRP Plants
- Transforming approximately 40 tons/hour of steam energy out of the PRP

PRP-1
- The first initiative toward emission reduction.
- A grant from Japan & NEDO to Indonesian government
- PRP-1 has been in operated since 2001.

PRP-2
- PRP-2 was installed using internal fund, the object of CDM/carbon credit.
- Emission reduction through the avoidance of using fuel to produce steam from boiler, instead we got for free through PRP-2.
- PRP-2 has been in operated since 2011
Workflow Process

In the OCC process, the material of sheet paper is made by removing foreign substances, using multiple machines from ground and then liquefied old paper with water.
Target and Challenge - JCM

**Saving tCO2 per year target**
Reduced emissions and electricity usage through the introduction of efficiencies in the processing and cleaning of recovered paper (OCC) used in the company’s manufacturing process - a saving of over 14,800 tCO2 per year.

**Challenge in JCM**
- Financing must come from internal fund.
- Information and Regulation data.

Projected Emission Reduction from 2017 thru 2020 is 71,291 tCO2e

<table>
<thead>
<tr>
<th>Year</th>
<th>Estimated Reference emissions (tCO2e)</th>
<th>Estimated Project Emissions (tCO2e)</th>
<th>Estimated Emission Reductions (tCO2e)</th>
</tr>
</thead>
<tbody>
<tr>
<td>2017</td>
<td>39,433.5</td>
<td>25,174.8</td>
<td>14,258</td>
</tr>
<tr>
<td>2018</td>
<td>52,578.0</td>
<td>33,566.4</td>
<td>19,011</td>
</tr>
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<td>2020</td>
<td>52,578.0</td>
<td>33,566.4</td>
<td>19,011</td>
</tr>
<tr>
<td>Total (tCO2e)</td>
<td>197,167.5</td>
<td>125,874.0</td>
<td>71,291</td>
</tr>
</tbody>
</table>

[Note] The emission reductions are counted from April 1, 2017.
Parameters
- Paper production measured at the PM line connected to the project OCC line
- Electricity consumption of the project OCC line
JCM Event at FajarPaper

Date : 20 December 2016

Location : Mill Site of PT Fajar Surya Wisesa Tbk. Cikarang Utara Bekasi

Venue : Local Stakeholder Consultation (LSC) gathering In relation to the application process for FajarPaper’s JCM project, Introduction of High Efficient Old Corrugated Cartons Process at Paper Factory

Attendee : 1. Indonesia Pulp and Paper Association (APKI)
2. JCM Secretariat Indonesia
3. Ministry for Economic Affairs
4. Ministry of Industry
5. Kanematsu
6. Suncosmo Co, Ltd.
JCM Event - 20 December 2016
THANK YOU