Mondi Syktyvkar

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Investor and Analyst site visit, Syktyvkar and Świecie
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Syktyvkar – capital of Komi Republic

About Komi Republic

- Area – 416 774 km²
- Population – 951 000 (thereof 251 000 in Syktyvkar)
- Industry – oil, gas, mining, pulp & paper, wood processing
- Governor – Vjacheslav “Mikhaylovich” Gaizer
Mill site
- Utilized area – 1 134 hectares
- Number of buildings and constructions – 420
- Railway tracks – 61 km
- Roads extension – 65 km
- Engineering communications extension – 500 km

- Mill start up in 1969
- Annual pulp wood processing capacity – 4.0 m m³ (3.1 m m³ before STEP)
- Annual pulp production volume – 0.9 m tonnes
- Annual paper production volume – 1.0 m tonnes
- Headcount – 8 500 employees including subsidiaries
Paper and board production

**PM11**

- **Office paper, offset paper**
- Production capacity – 150 000 tonnes

**PM14**

- **Office paper, offset paper**
- Production capacity – 340 000 tonnes
- Before reconstruction – 280 000 tonnes

**PM15**

- **Newsprint**
- Production capacity – 197 000 tonnes

**PM21**

- **Containerboard**
- Production capacity – 280 000 tonnes
- Before reconstruction – 215 000 tonnes
Mondi Syktyvkar will increase **Paper & Board** production after STEP commissioning by 20% and reach 1 m tonnes per year, increased pulp production by 25%.

The higher output will strengthen the position of Mondi Syktyvkar on the domestic and CIS market.

Decrease in water and chemical consumption will be achieved through new equipment.

The increase in **energy sales** to the region will positively effect the profitability of the mill.
Komi wood market

Area of 2.1 m ha with twenty-six lease agreements. Total standing wood of 200 m m³.

Total allowable cut of 5.1 m m³ per annum with total cut of 3 m m³ in 2009. 100% pulp wood supply ensured.

Optimal mixture of hard and soft wood inventory.

Lease period up to 49 years.

7 logging areas.
Wood demand structure

Wood Supply

Annual wood consumption
- Purchased wood 1.11 million m³
- Own wood 2.19 million m³

Annual wood harvesting
- Contractors 0.5 million m³
- Own logging 2.5 million m³

Level of mechanization

Split soft wood / hard wood

Komi Republic
- Birch 16%
- Aspen 5%
- Spruce 55%
- Pine 24%

Mondi leased areas
- Birch 21%
- Aspen 14%
- Pine 10%

Wood cost structure

- Stumpage fee 6%
- Harvesting 26%
- Logistics and infrastructure 60%
- Other 7%

Annual SW consumption: 1.7 m³
Annual HW consumption: 1.4 m³
Timber supply operations

Harvesting technologies

- Our timber supply operations are based on economical and ecological sustainability
- Focus on high performance and sustainability, applying advanced logging technology (CTL and Canadian)
- Own harvesting volume 2009: 2.5 m $^3$

Wood supply management

- Wood transportation management: transport by road (over 240 own log trucks), by railway and by river in rafts
- Construction and maintenance of main and secondary roads: target for 2010 – 300 km of new roads
- Wood storage management on upper and lower landings
- Cooperation with logging and transport contractors
Sustainable development

Forest Management and FSC certification
- Today 100% of leased forest areas of Mondi Syktyvkar are FSC certified
- Total leased areas: 2.1 m hectares (thereof 1.4 m hectares certified at end of 2009 and 0.7 m hectares in March 2010)

Social responsibility
- Social economic agreements with logging regions and villages, including financial support
- Cooperation and support of small scale businesses in the logging regions
- Social economic analysis (SEAT)

Reforestation and silvicultural activities
- Opening of nursery in 2009 (investments: 60 m roubles)
  - High mechanization of the seedlings’ growing process
  - Planting stock with closed root system 1 m pieces per year
    target for 2011: 3 m pieces per year
- Expenditures for silviculture in 2010: 44 m roubles
Health and safety Organisation

Health and Safety Targets

- We are committed to zero tolerance for risky behaviour and unsafe conditions and meeting the following objectives:
  - Zero fatalities
  - Zero lost time injuries
  - Zero occupational diseases

- Management is responsible for employees’ safety and health
  - Conducting behaviour-focused audits
  - Conducting joint team audits of all work areas
  - Playing an active and visible leadership role in safety and health issues.
  - Promoting the report of near misses
  - Enforcing management level walkabouts and audits

- Communication within safety
  - Every meeting started with safety
  - SHE appendix to every contract
  - Common safety introduction and training program
Human resources

- Total headcount – 8,485
- Average mill headcount – 4,318
- Average age – 43 years
- Turnover index mill – 1.1%
- Turnover index subsidiaries – 10%
The **Syktyvkar mill modernisation program** reflects the strategy of Mondi to achieve leading market positions, high quality and top performance.

- **Investment**: up to € 545 m
- **Project areas**: wood yard, fibre line, recovery boiler, evaporation, steam turbine, white liquor plant, lime kiln, paper machine 14, board machine 21
- **Increase in pulp productivity**
- **Increase in office paper and containerboard productivity**
- **Increase of energy supply to the region**
- **Decrease of maintenance costs, chemical and wood losses**
- **Reduction of fresh water consumption, effluents and emissions to air**
Mondi Syktyvkar in July 2008
Mondi Syktyvkar in August 2009
Mondi Syktyvkar in August 2010
Upgraded and new equipment

Wood Yard 1 → TMP/CTMP → PM 15 → PM 11

Wood Yard → HW Line → PM 14 → PM 21

Sw Line → 2 Bark Boilers → 2 Turbines 40 Bar

Evaporation → Recovery Boiler 92 Bar → 1 Turbine 92 Bar

White Liquor Plant → Lime Kiln

New

Rebuilt / Upgrade

4.0 m $m^3$ pulp wood

1.0 m tonnes paper, board, pulp

0.12 m MWh

0.52 m MWh

2.18 m MWh

1.6 m MWh mill energy consumption

1.2 m MWh energy sales to the region

4.0 m $m^3$ pulp wood

2 Turbines 40 Bar

1 Turbine 92 Bar

6 Turbines 140 Bar

6 Gas Boilers 140 Bar
Wood yard

- New Wood Yard has the capacity to debark and chip 4 m m³ of soft and hardwood logs annually – an increase of 25%
- 2 chip piles situated near the newly built wood room are part of system implemented to improve the chip quality
- A 23 metre-high chip processor piles the chips, which are then transported by two 60 metre long reclaimers
- Changes in this area include the reduction of water and electric power consumption
- Local water and gas treatment equipment

<table>
<thead>
<tr>
<th>Steel wheel supported debarking drums</th>
<th>Horizontally fed HHQ-Chipper</th>
</tr>
</thead>
<tbody>
<tr>
<td>Dimensions:</td>
<td></td>
</tr>
<tr>
<td>diameter:</td>
<td>Ø 5.5 m</td>
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<tr>
<td>length:</td>
<td>42.0 m</td>
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<tr>
<td>Capacity:</td>
<td></td>
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<tr>
<td>300 m³</td>
<td>sob/h H</td>
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<tr>
<td>415 m³</td>
<td>sob/h SW</td>
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<tr>
<td>Nr. knives</td>
<td>18</td>
</tr>
<tr>
<td>Capacity:</td>
<td>360 m³ sub/h</td>
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Fibre line upgrades

- All 3 digesters significantly improved
- Modernisation included:
  - Installation of pressure diffuser
  - Installation of blow tank
  - Equipment for the additional stage of oxygen delignification
  - Washing equipment for before and after oxygen delignification
  - Upgrades to the screening and unbleached washing areas
  - Two new pulp washers
- The total production of all fibrelines increased by one third, reaching 720 000 air-dry tonnes per year (900 000 air-dry tonnes per year including CTMP/TMP production)
Recovery boiler & evaporation

- Largest in the Russian pulp and paper industry
- 80 meters high
- 11 000 tonnes of steel, state-of-the-art equipment, electronics and hydraulics
- Burns 3 560 tonnes of dry solids per day at the pressure of 92 bars, reaching temperatures of approximately 500 °C
- Replaces 3 pre-existing recovery boilers

New evaporation train: 550 tonnes of evaporated water per hour
- 2 new cooling towers → multiple water usage
- The new equipment decreases water consumption per unit of production
  - Amount of water taken from the Vychegda river from 349 000 m³ per day down to 206 000 m³

<table>
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<tr>
<th>RECOVERY BOILER</th>
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<tr>
<td>Start-up year</td>
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<tr>
<td>Capacity</td>
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<tr>
<td>Steam temp.</td>
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<td>Steam pressure</td>
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<td>Steam flow</td>
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</table>
Steam turbine generates more electricity

- Together with the new recovery boiler, a new 100 MW turbo-generator was constructed.
- The Republic of Komi is primary recipient of this additional green electricity produced from biomass.
Burnt lime is a necessary component for pulp production

New lime kiln
- 4.5 metres in diameter
- 105 metres in length
- 700 tonnes of burnt lime per day

The filters in the new lime kiln are extremely efficient, trapping up to 99.9% of dust that arises during the burning process.
• Modernised in October-November 2008
• Preparation time of less than 1 year
• Productivity and quality increased
• Production speed increased to 1 150 metres per minute
• New cut size line operational since May 2009
PM21

- Linerboard production on PM21 since 1969
- Rebuilt with innovative technology and optimum process control
- High-quality white top kraftliner and outstanding service concept
Benefits of STEP

SHAREHOLDERS
- Modernised and new equipment ensures stable operation and high production volumes
- Basis for long term profitability, high margins and increasing sales revenues
- Low cost position through optimal equipment and raw materials utilisation

Customers
- Focus on the developing Eastern European markets and Russia
- Our office and printing paper, and white top kraftliner customers benefit from
  - Enhanced capacity
  - Improved quality
  - Overall higher productivity

Ecology
- Sustainable corporate governance is of highest importance
- Efficiency improvements result in
  - Less water and power consumption
  - Generate 80 MW more green energy from biomass

Region
- STEP has boosted regional
  - Tax revenues
  - Road construction
  - Use of not utilized wood resources
- Mondi Syktyvkar proves Russia as an attractive area for investment
- Important platform for Russian pulp and paper industry
Mondi improved its market position in both segments (offset and cutsize)

- Ukraine is the only country where Mondi has reduced sales volumes due to strict credit policy and geographic mix optimization
- Grow domestic sales to maximize the returns

Market size: 886 000 tonnes / year

Market size: 590 000 tonnes / year

Data for 7 months 2010
Source: Mondi, ZBK, Pyrabelisk, customers info
Sales and market update – Containerboard

Market share – Russia

- Our White Top Liner deliveries have been increasing every year since 2004. Total market in Russia and CIS amounted to 132 000 t in 2009
- After successful realization of STEP project the overall containerboard production will increase by 30% on the PM21
- Challenges: become leading supplier on CIS market, Premium Pricing Strategy due to improved quality

Containerboard market size: 2.4 m tonnes / year

Source: WCO, Packaging news, Mondi, customers info