



November 2006

Forest Industry News

NEW PROJECTS ANNOUNCED

Planning Phase

[China] Asia Pulp & Paper China is looking to expand the bleached hardwood kraft pulp line at its mill on Hainan island. The aim is to boost the line's capacity from 1 million tonnes/yr to 1.32 million tonnes/yr by the end of 2008, an objective that should be facilitated by virtue of the fact that the 2 year-old pulp line was designed to be upgradeable at a minimal cost. The eucalyptus and acacia pulp line has been running at full stride and is producing around 3,200 tonnes/day, exceeding its design capacity of 3,000 tonnes/day, to meet strong demand in the domestic market. The company is still awaiting approval of the environmental impact assessment from governmental authorities. Construction of the \$65 million upgrade will begin as soon as the approval is received.

[Israel] American Israeli Paper Mills Ltd. announced that the Board of Directors approved an investment of approximately \$140 million in a project involving the setup of a new paper machine for the production of packaging paper from recycled paper and board. The new machine to be installed at the Company's facility in Hadera, will have a capacity of approximately 230,000 tonnes/yr.

[Australia] Swanbank Paper Pty Ltd. was in talks with the Tasmanian government about the possibility of investing in a paper mill on the island state. The company was considering whether such a development might be compatible with the proposed Gunns Ltd. bleached kraft pulp mill, whose design capacity is slated at 1.1 million air dried tonnes/year. The amount of pulp Swanbank could potentially use from the Gunns mill would be one quarter to one half of the production from the pulp mill.

[Georgia, USA] GP Cellulose is on track to begin a major capital project early next year that would lift capacity at its 826,000 tonnes/yr fluff market pulp mill to 953,000 tonnes/yr. Plans call for the installation of four new digesters, a new 771-tonne CaO/day lime kiln as well as the replacement of three existing five-stage bleaching plants with one four-stage bleaching plant. This would streamline the mill's pulp production and also result in layoffs.

[Vietnam] Incomex Saigon would be the lead investor in a 115,000 tonnes/yr greenfield pulp plant proposed for the central Vietnamese province of Quang Nam, assuming the project receives final approval by company and State authorities. The import-export company is currently awaiting the results of a feasibility study that is expected by year's end. The mill would produce bleached eucalyptus kraft pulp, and cost an estimated \$100 million. Incomex Saigon has already contracted farmers to plant eucalyptus on a 30,000-ha area around the proposed mill site.

[China] Asia Pacific Resources International (APRIL) plans to install a new 1 million tonnes/yr bleached hardwood kraft (BHK) pulp line at its plant in the Chinese port city of Rizhao, in Shandong province. The project is still awaiting approval from the Chinese government. The mill already houses a 300,000 tonnes/yr BHK pulp line, which feeds a 170,000 tonnes/yr cartonboard machine at the site, while the balance is sold on the market.

Implementation Phase

[Spain] Svenska Cellulosa Aktiebolaget (SCA) has begun installation of a new tissue machine at its mill in Valls, Spain, following delivery of the equipment from PMT Italia. Start-up of the 60,000 tonnes/yr unit is scheduled for April 2007. The total project cost, which includes an expansion of the plant's converting capacity, is estimated at \$68 million. The new machine will join another 60,000 tonnes/yr unit from PMT Italia at the mill. This 5.5 m wide crescent former paper machine started up in July 2005 and produces tissue paper from virgin fiber pulp in a basis weight range of 14-28 g/m². Output is converted into toilet paper and kitchen rolls.



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[Sweden] Holmen Paper's Braviken mill has ordered key components and services from Voith Paper to extend the capacity of their DIP 1 line. The equipment includes new pre-screening as well as upgrading the existing EcoCell flotation, fine screening and Thune screw press systems. The investment will raise the capacity of DIP 1 from 370 tonnes/day up to 410 tonnes/day for the production of newsprint papers. The delivery also covers full erection and start-up services, with start-up scheduled for May 2007.

[France] Tembec has nearly completed a new \$17 million evaporation plant at the Tartas facility in the southwest of the country. The company is also looking to install a new boiler at the mill, in order to replace two old units. This \$46 million project is scheduled to be completed in early 2008. The Tartas facility manufactures 165,000 tonnes/yr of bleached sulfite pulp.

[France] Tembec is also forging ahead with the installation of a new condensing turbine at its Saint Gaudens plant to bring energy costs down. The \$15 million investment is set to be completed by mid-December 2006. The Saint Gaudens mill produces 300,000 tonnes/yr of bleached softwood and hardwood kraft market pulp.

[France] Tembec Despite the implementation of a cost-cutting plan at its Tarascon mill, **Tembec** is forging ahead with the construction of a dike to protect the site from possible flooding. The company is also looking to install a new condensing turbine at the facility. The Tarascon mill churns out 250,000 tonnes/yr of bleached softwood kraft market pulp. Tembec plans to diversify production at the mill in the future and is considering the manufacture of fluff pulp and other niche grades.

[Chile] CMPC Cellulosa was expected to have started up a new 780,000 tonnes/yr bleached eucalyptus kraft pulp line at its Santa Fe mill by the end of November 2006. Once it enters into service, this \$745 million fiber unit will join the Santa Fe mill's existing 370,000 tonnes/yr bleached eucalyptus kraft pulp line.

[Finland] Botnia has started work on a \$58 million project to upgrade the bleaching process and wastewater treatment at its Rauma mill. The buildings are being extended to house new bleaching equipment and a chlorine dioxide plant. Installation of the machinery is expected to begin in early 2007, with start-up scheduled to follow in May 2007. The main reason for the upgrade is to improve the quality of the bleached softwood kraft pulp produced and to allow the production of both elemental chlorine-free and totally chlorine-free bleached pulps in the future. The modernization will also increase the mill's capacity by 55,000 tonnes/yr to 605,000 tonnes/yr.

[United Arab Emirates] Abu Dhabi National Paper Mill has kicked off the installation of a new 35,000 tonnes/yr tissue machine at its plant in Abu Dhabi. The unit is part of a \$54 million expansion project, which will more than double the current tissue production capacity of 24,000 tonnes/yr.

[Spain] Georgia-Pacific is installing a new tissue machine at its Allo mill in the Navarra region. PMT Italia supplied the 230 tonnes/day crescent former unit. The PM will have an operating speed of 2,000 m/min and a reel width of 5.5 m. The Allo plant currently houses two tissue machines, which have a combined capacity of 110,000 tonnes/yr.

[Indonesia] Asia Pacific Resources International (APRIL) is poised to begin commercial production on a new uncoated fine paper machine, PM2, at its Kerinci mill, on the Indonesian island of Sumatra. The 415,000 tonnes/yr unit's output has reached saleable quality, following fine-tuning during trial runs which started last month. The new paper machine has a trim width at the reel of 8.6 m and an operating speed of 1,600 m/min. The Kerinci complex is an integrated mill, which houses two bleached hardwood kraft (BHK) pulp lines with a total capacity of 2 million tonnes/yr, as well as a 350,000 tonnes/yr uncoated woodfree paper unit, PM1.

[France] Smurfit Kappa completed a rebuild of the PM5 unit at its Cellulose du Pin mill in Biganos. This project involved the installation of a new press section and an upgrade of the wet end and dryer section, as well as the sizing and calendering stages. Although the unit's capacity increased from 130,000 tonnes/yr to around 180,000 tonnes/yr, the revamp was principally aimed at improving the quality of the white-top kraftliner and reducing variable costs. Smurfit Kappa took advantage of the downtime to halt the mill's other paper machine, PM6, for maintenance work. The total cost of the shutdown was \$48 million.



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[China] Shandong Chenming Paper Holdings started trial runs on the world's largest newsprint machine at its greenfield No. 5 mill in the province of Shandong. The unit has a web width of 11.15 m and a trim width of 10.55 m, a design speed of 2,000 m/min and an operating speed of 1,900 m/min. A 1,500 tonnes/day deinked pulp line was also set-up to feed the new PM. According to the supplier, the machine will have a capacity of 480,000 tonnes/yr.

MERGERS, ACQUISITIONS & PLANT CLOSURES

[Michigan & West Virginia] SFK Pulp announced that it has completed the acquisition of the two recycled bleached kraft (RBK) pulp mills owned by the American Fiber Resources Holding Company for a total purchase price of \$156.1 million, subject to certain post-closing working capital adjustments; the purchase price excludes an expected investment in working capital of approximately \$26 million. The Fairmont Mill (located in West Virginia) and the Menominee Mill (located in Michigan) have a combined production capacity of 360,000 tonnes/yr.

[Maryland] NewPage said its Luke Paper coated freesheet subsidiary would permanently shut its No. 7 paper machine in order to align capacity with demand. This machine has been modernized several times since it was installed in 1904, and currently produces approximately 100,000 tons/year. However, with the growing influx of low-priced coated freesheet products from Asia, the smaller line scale and costs of the No. 7 paper machine have become non-competitive. About 130 jobs will be eliminated by the closure.

[China] International Paper (IP) has set-up a joint venture with *Sun Paper* for cartonboard production in China. Sun Paper will merge its strong sales network in China with the advanced technology and management experience from International Paper. This venture will manage two cartonboard machines, PMs 17 and 18, at Sun Paper's Yanzhou plant. These units have a combined capacity of 425,000 tonnes/yr. Furthermore, the joint venture will develop a \$160 million project to build a 300,000 tonnes/yr liquid packaging board machine at a greenfield site.

[Ontario] Bowater notified employees at the company's Thunder Bay newsprint mill that it will conduct a major restructuring of its operations at the facility following a review of all processes, personnel, and existing union agreements. Bowater ceased newsprint production at Thunder Bay in September to take market related downtime. Production resumed on the mill's 250,000 tonnes/year PM5 a month later, but no start-up date has been given for its 146,000 tonnes/year PM4 machine.



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PRODUCT PRICE SUMMARY (US\$)

Product	Units	1995	2000	2003	2004	2005	2006E	2007E	Current Price	Comments
NBSK Pulp (N.E.)	m. ton	880	680	525	617	611	680	680	730	Rising
Newsprint	m. ton	670	565	503	547	610	670	685	665	Falling
Uncoated Freesheet	sh.ton	990	755	628	676	727	825	800	840	Falling
Light Weight Coated	sh.ton	1,226	1,065	829	859	997	985	1,000	945	Falling
Linerboard	sh.ton	510	470	421	468	478	550	565	565	Flat
Lumber #2&Btr.	Mbf	250	295	278	394	353	300	300	252	Falling
OSB	Msf	245	205	380	369	319	220	180	175	Flat
Canadian Dollar	US\$	0.73	0.67	0.72	0.77	0.83	0.88	0.89	0.88	Falling

E= estimated

