STORA ENSO SKOGHALL
New QCS helps mill shorten run-in periods and grade change times

NEWSPRINT
Demand contracted further in 2015 and early 2016 as the decline in advertising revenues continue to batter publishers
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Watch the savings build up, not the scale.
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Made in America . . . by China Part II

By John O’Brien, Managing Editor
jobrien@paperage.com

In the May/June issue of PaperAge, I wrote about Sun Paper’s proposed fluff pulp mill in Arkadelphia, Arkansas and conceivable Chinese/American work culture differences once the mill becomes operational. However, any workplace challenges will have to wait a bit longer because construction of the plant, which was supposed to begin in early 2017, has been pushed back at least six months because Sun Paper is mulling the specifics of product mix for the $1.3 billion mill.

Maybe this isn’t out of the ordinary for a mega-project such as this one, but between Arkansas Gov. Asa Hutchinson, state officials, and a local lobbying firm, it’s been a rush job with more questions than answers — and not so much the doing of Sun Paper.

To put things in perspective, the project is receiving $10 million in local incentives for infrastructure at the site and another $92 million in local property tax abatement. The state (Arkansas) is providing $12.5 million for site preparation and equipment, up to $3 million workforce training funds and a $50 million fully collateralized loan. Other state incentives include cash rebates based on its payroll, sales tax refunds on construction materials and a recycling tax credit.

In addition, Arkansas state officials also agreed to expedite the process for approving the air and wastewater permits necessary for the project. However, Sun Paper is well behind schedule in the application process.

According to a story written by Wesley Brown, Business Editor for Talk Business & Politics, the planned construction start for the bioproducts mill will likely be pushed back because of ongoing pre-engineering and feasibility studies.

Mr. Brown noted that Julie Mullinix of Little Rock-based Mullenix & Associates, a local governmental relations, PR and lobbying firm, whose firm also handled negotiations on behalf of Sun Paper with state government officials in bringing the project to Arkansas, said Sun Paper is still trying to finalize the paper goods and “product mix” that the mill will be able to manufacture once operational.

“We are excited about this project coming to Arkansas, and it will be the most technologically advance mill of its kind in North America and a catalyst for other manufacturers looking for an (engineering) design that is very friendly to the environment,” Mullinix is quoted as saying in Brown’s story.

From my standpoint, an awful lot has been thrown at a venture that is still examining the feasibility of producing certain products, not to mention the use of a proprietary manufacturing process that has been touted as environmentally ‘superior’ to all others in North America, although the people involved with promoting and approving the project don’t know exactly what that process is.

Brown also noted that Arkansas’s Department of Environment Quality (ADEQ) and state Economic Development Commission officials said they had expected Sun Paper to be further along in the application process, given the aggressive early 2017 construction timetable the Chinese paper goods giant had set in April when the project was announced at the State Capitol.

According to ADEQ spokesperson Kelly Robinson, large industrial projects can typically take from six months up to a year or more to gain final approval under the federal Clean Air Act Title V rules for so-called “major sources” of air pollution, which is an industrial facility that emits or has the potential to annually emit 100 tons of any air pollutant, 10 tons of any hazardous air pollutant or 25 tons of a combination of hazardous pollutants.

“I’m assuming that Sun Paper is reassessing quantities and not the actual products. Regardless, they’ve got their hands full before those products are made in America.
A new deal for deinkers:  

How three mills cut feed cost and boost quality

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A recycled newsprint mill boosted ONP percentage to save money. With help from DEKA 2000, brightness gain allowed an ONP increase from 30% to 45%, dirt counts decreased, and stickies removal improved 15%.

A recycled paperboard mill added post-consumer and printed waste paper such as SWL, MOW and coated white paper to save money. DEKA 2000 helped this white top liner mill increase brightness, lower dirt count, and slash expense with cheaper furnish.

A recycled office paper mill opted for replacing the more expensive enzyme. Using DEKA 2000, brightness increased 2 points, dirt count is lower, color is improved, and chemical cost is reduced.

Contact us today for details on how you might benefit from using DEKA. We’ll be glad to show you more detailed mill results and schedule a trial in your mill.
Packaging Corporation of America (“PCA”) on July 6 announced that it entered into a definitive agreement to acquire substantially all of the assets of TimBar Corporation, a large independent corrugated products producer, in a cash-free, debt-free transaction for a cash purchase price of $386 million.

Under the terms of the deal, PCA will acquire five corrugated products plants, two fulfillment centers and four design centers located primarily in the eastern and southeastern U.S.

The transaction is structured as a purchase of assets resulting in a full step-up of the assets to fair market value. TimBar, with sales of $324 million in 2015, provides solutions to customers in the higher margin retail, industrial packaging and display and fulfillment markets with a focus on multi-color graphics and technical innovation.

As a result of the acquisition, PCA’s containerboard integration level is expected to increase by over 200,000 tons or 6% from its current level of 87% and will allow for further optimization and enhancement of mill capacity.

PCA Chairman and CEO Mark Kowlzan said, “Following our successful integration of Boise, including the capacity we now have at the DeRidder, Louisiana mill, this acquisition is an excellent fit, both geographically and strategically, with substantial benefits and synergies.

“TimBar is a well-capitalized company with a commitment to continuous improvement, innovation and safety in their operations. This, along with their customer focus, has allowed them to achieve excellent operating margins and consistent results.”

Closing is subject to certain customary conditions and regulatory approval and is expected in the third quarter of 2016. The company expects to finance the transaction with a new term loan.

Cascades Inc. announced that it will build a new tissue converting plant in Scappoose, Oregon. The US$64 million investment includes new state-of-the-art converting lines that are scheduled for commissioning at the end of the first quarter of 2017.

The new converting plant will manufacture virgin and recycled bathroom tissue products and paper hand towels for the Away from Home market. The unit will be supplied by the Cascades tissue paper plant located 12 kilometers away in St. Helens, Oregon creating considerable synergies.

The new plant’s production capacity will be close to six million cases per year, or approximately 53,000 tonnes of finished product.

“This project, which is part of our strategic plan for development, will provide us with a new converting capacity that will improve our integration rate and coverage of the West Coast. The plant will be strategically located to allow us to better serve our customers and continue to grow in a region that offers potential for our company,” said Mario Plourde, President and CEO of Cascades.

According to Cascades, construction will begin once the municipal permit process has been completed.

KapStone Paper and Packaging on July 1 completed the acquisition of Central Florida Box (CFB) Corporation located in Lake Mary, Florida.

Terms of the deal were not disclosed.

CFB provides design, graphics, manufacturing, assembly, fulfillment, warehousing and distribution services to over 400 customers ranging from small, family-owned companies to large, national corporations.

“The acquisition of Central Florida Box enhances KapStone’s footprint in the strategic Southeast market,” said Roger Stone, Chairman and CEO of Kapstone. “In addition, this acquisition further strengthens our goal of increasing integration, providing additional internal opportunities for our Mill Division and Victory Packaging. We believe this business acquisition is a wonderful fit to our overall business strategy.”

Jeff Ramsey, President of Central Florida Box Corporation, stated, “CFB is excited to become a part of the KapStone family. With their ‘Think Big, Act Small’ philosophy, we believe their goals and values align perfectly with CFB. We will look to expand our footprint in the Florida market and leverage our relationships with existing national customers to grow national accounts for KapStone.”
Higher board, paper and tissue machine speeds mean higher demands for belt performance. Valmet’s BlackBelt is a unique shoe press belt that’s built for speed using a high performance elastomer material reinforced with dimensionally stable synthetic yarns. Available in different reinforcing structures and surface options, it is wear, chemical and heat resistant to ensure a long and trouble-free run. Learn more at [valmet.com/blackbelt](http://valmet.com/blackbelt)
Verso Corporation on June 23 completed another important step toward its emergence from bankruptcy when its Chapter 11 plan of reorganization was confirmed by the U.S. Bankruptcy Court in the District of Delaware. This confirmation, which comes less than five months after Verso and its subsidiaries filed for bankruptcy protection under Chapter 11 of the U.S. Bankruptcy Code, clears the way for Verso to emerge from bankruptcy, likely by the end of July.

“Verso is extremely pleased with this speedy and successful outcome,” said Verso President and CEO David J. Paterson. “Our smooth path through this critical step in the restructuring process would not have been possible without the strong support of our funded debtholders and the Official Unsecured Creditors Committee and the affirmative vote on our plan of reorganization by our creditors. Their confidence in Verso’s prospects for long-term value creation sets the stage as we chart our course to a sustainable financial future.”

Verso’s restructuring will reduce the company’s debt by approximately $2.4 billion upon emergence. Verso expects to emerge from bankruptcy with $595 million in exit financing to support ongoing operations and capital investments. The exit financing will consist of an asset-based lending facility with borrowing capacity of up to $375 million led by Wells Fargo Bank, National Association, and a $220 million term loan facility with available loan proceeds of $198 million led by Barclays Bank PLC.

The confirmed plan of reorganization requires no material changes in the ordinary course of business to Verso’s wages and salaries, benefits, pension plans or collective bargaining agreements, the company said.

“Verso’s restructuring will not change our fundamental operating strategy. In addition, we anticipate that our unified, highly de-levered capital structure will allow us to make investments in Verso’s business that will help mitigate the continuing decline in the demand for coated paper products, to explore strategic opportunities that enable profitable growth, and to create value for all of our stakeholders,” Paterson explained.

Georgia-Pacific Corrugated Acquires Reliable Container

Georgia-Pacific has acquired Southern California-based Reliable Container. The acquisition includes converting plants in Santa Fe Springs, California, and Tijuana, Mexico.

Terms of the deal were not disclosed.

“Georgia-Pacific has had a working relationship with Reliable Container for many years and now welcomes them as part of our organization, expanding our capability and geographic reach in the important Southern California and Baja region,” said Billy Medof, president, GP Corrugated.

“With this acquisition and following the conversion of our La Mirada sheet feeder to a state-of-the-art box plant, we will serve customers in Southern California and Northern Mexico with a box plant, two sheet plants, and through our interest in the GoldenCorr sheet feeder.”

Established in 1979, Reliable Container offers a variety of custom corrugated containers and point-of-purchase displays, in addition to offering consultation, design and inventory services. Their diverse customer base includes furniture, food and beverage, consumer products, auto, electronics, fabricated metal products and services industries. The approximately 250 employees are now part of Georgia-Pacific.
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FASTER DRYING

ECO-FRIENDLY
CONSISTENCY

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*Independent testing by SpencerLab Digital Color Laboratory, commissioned by HP. The full October 2009 report, “Print Quality Analyses - ColorLok Media Evaluation: AiO Printers: Brother MFC-5490CN, Canon PIXMA MX860 & MX7600, Epson WorkForce 600, HP Officejet 6500 and Officejet Pro 8500,” is available for download at spencerlab.com
**NORTH AMERICA**

**Weyerhaeuser to Sell Liquid Packaging Board Business to Nippon Paper Industries**

Weyerhaeuser Company in mid-June announced an agreement to sell its liquid packaging board business to Nippon Paper Industries Co., Ltd. for $285 million in cash. Weyerhaeuser expects to use a substantial portion of the estimated $225 million after-tax proceeds for repayment of debt.

The transaction includes one mill located in Longview, Washington, with an annual capacity of 280,000 tons.

This announcement concludes a portion of the strategic review of the company’s Cellulose Fibers business, which was initiated in November 2015. Weyerhaeuser announced the planned sale of its pulp mills in May 2016. The company’s review of its printing papers joint venture is ongoing.

“This transaction creates significant value for Weyerhaeuser shareholders and enhances the focus of our portfolio as we work to be the world’s premier timber, land, and forest products company,” said Doyle R. Simons, president and chief executive officer.

“The employees of our liquid packaging board business have much to contribute to the future success of Nippon Paper Industries. I want to thank our team for continuing to operate safely, and for delivering an exceptional customer experience throughout the strategic review process,” Simons said.

The transaction is subject to customary closing conditions, including regulatory review, and is expected to close in the third quarter 2016.

The Weyerhaeuser liquid packaging board mill and Nippon Paper Industries will continue to operate separately until the transaction closes.

**EUROPE**

**UPM Investing EUR 98 Million in Its Kymi Pulp Mill**

UPM is investing EUR 98 million in Kymi pulp mill in Finland to increase the mill’s capacity and further improve its cost-competitiveness and environmental performance.

“Over the past three years we have significantly improved the production efficiency of our pulp mills. This EUR 98 million investment in Kymi will strengthen our position on the pulp market with competitive costs and low risk. After the completion of this project, we will have increased our annual pulp production capacity altogether by over 500,000 tonnes since 2013,” said Heikki Vappula, Executive Vice President, UPM Biorefining.

The Kymi mill’s annual pulp production capacity is expected to increase from the current 700,000 tonnes to 870,000 tonnes of bleached northern softwood and birch pulp by the end of 2017.

The investment at Kymi mill will begin immediately and includes upgrades in wood handling, the birch fiber line, recovery plant and effluent treatment. New machinery will be connected to the process during the next pulp mill shut-down planned for the autumn of 2017.

Besides pulp, the Kymi mill produces biomass based electricity, biochemicals, soap and crude tall oil as a production residue. The mill also generates more energy than it uses. The surplus electricity is sold to the national grid.

**Rayonier Advanced Materials and Borregaard to Build Lignin Plant in Florida**

Rayonier Advanced Materials (RYAM) and Borregaard (BRG) at the end of June concluded a market, technical and engineering analysis regarding a new lignin operation at RYAM’s Fernandina Beach site in Florida to serve the growing demand for natural lignin-based products.

The final review of the investment by the companies’ boards of directors is anticipated during the second half of 2016 upon receipt of final permits and incentives from government entities. If the companies elect to proceed, operations are expected to commence approximately 18 months later.

Cost of construction of the lignin plant is expected to be $135 million over two phases of the project. Phase one, which will have a lignin capacity of 100,000 metric tons, is estimated to cost $110 million. An estimated incremental $25 million will be required in phase two to increase the total capacity to 150,000 metric tons. LignoTech Florida intends to access the debt markets to fund a portion of the capital requirements.

Lignin, a natural component of wood, is a co-product of the sulphite cellulose manufacturing process. The new operation will process the lignin into value-added products that provide environmentally friendly alternatives to fossil fuel-based products used globally in construction, agriculture and other industrial applications.

The new company, LignoTech Florida LLC, is to be owned 55 percent by Borregaard and 45 percent by RYAM.
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EUROPE

Stora Enso Investing EUR 26.5 Million to Increase Fluff Pulp Production

Stora Enso will invest EUR 26.5 million in Skutskär pulp mill in Sweden to increase its fluff pulp capacity to meet the growing demand in the hygiene market.

According to the company, the investment will enhance Skutskär Mill’s profitability and long-term competitiveness by increasing fluff production by approximately 160,000 tonnes per year (tpy). The mill’s softwood pulp capacity is expected to be reduced by 160,000 tpy, starting from year 2018.

The total fluff pulp capacity of the mill after the investment will amount to 415,000 tpy.

“Both hygiene and non-woven products are a fast-growing market. This investment will enable us to support the growth of our customers and further develop this business together with them,” says Juan Carlos Bueno, EVP, Stora Enso’s Biomaterials division.

The investment is expected to be completed during the second quarter of 2018.

Holmen Completes Sale of Spanish Newsprint Mill to International Paper

Holmen announced that the sale of its newsprint mill in Madrid, Spain to International Paper (IP) has been completed. The deal was previously announced in mid-March of this year.

IP has plans to convert production at the mill to recycled containerboard production, but will continue to produce newsprint at the mill until the second half of 2017. During this period, Holmen will sell the newsprint produced at the mill and continue to serve its customers.

“During this period we will maintain our service and deliveries of today’s products. Our customers will not be affected,” commented Nils Ringborg, CEO of Holmen Paper.

IP said that after the conversion to recycled containerboard, the expected annual capacity of the mill would be 380,000 metric tonnes.

Included in the deal is the recycled paper collector Cartón y Papel Reciclado S.A. (Carpa) and Holmen’s 50 percent shareholding in the energy producer Peninsular Cogeneración S.A.
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**CHINA**

**Stora Enso Inaugurates New Consumer Board Mill in China**

In mid-June, Stora Enso inaugurated its new consumer board mill in Beihai, China. The mill started up in May and it is expected to reach full production within 18 to 24 months. With an investment of EUR 800 million, this is the largest Nordic direct investment in China, and a significant investment in the history of Stora Enso, the company said.

The Beihai consumer board mill has an annual capacity of 450,000 tonnes of high-grade carton board products. One of the key end products is liquid packaging board, of which more than 80 percent today is imported to China.

“We are delighted to announce the official opening of the Stora Enso consumer board mill in China. This is a very important milestone for us,” said Stora Enso’s chief executive, Karl-Henrik Sundström. “China is a market with high potential and the start-up of our consumer board mill is crucial to meet the growing demand for high-quality and safe fiber-based food packaging in China and the Asia Pacific region.”

The consumer board mill is located in the Tieshangang industrial zone of the Guangxi region, 40 miles outside of Beihai city.

Stora Enso’s operations in the Guangxi region also consist of tree plantations with around 85,000 hectares of land leased since 2012. The plantations have been certified to the Forest Stewardship Council (FSC) and the China Forest Certification Council (CFCC), and they will provide a sustainable, cost-competitive and self-sufficient fiber base for the mill.

**INDUSTRY SUPPLIERS**

**Valmet to Supply New Tissue Machine to Papel San Francisco**

Valmet will supply an Advantage DCT 100TS tissue production machine to Papel San Francisco in Mexico. The new machine will be installed at the company’s mill in Mexicali. The value of the order was not disclosed.

The new tissue machine will have a width of 2.8 meters and a design speed of 2,200 m/min and will add 30,000 tons tissue paper per year to Papel San Francisco’s current production of toilet tissue, kitchen towels and napkins.

Valmet’s scope of delivery includes an Advantage DCT 100TS tissue machine equipped with OptiFlo headbox and cast alloy Yankee cylinder. The machine will also feature Valmet’s “Advantage” tissue technology including ViscoNip press, AirCap hood and WetDust dust system.

Start-up and commissioning are also included in the order. Start-up is planned for the second half of 2017.

**Voith to Rebuild Board Machine for Grigeo Klaipėdos Kartonas**

Voith announced that it will rebuild a board machine for Grigeo Klaipėdos Kartonas AB in Klaipeda, western Lithuania. According to Voith, the primary focus of the rebuild project is to increase the machine’s capacity by 30% and improve product quality.

The rebuild of the board machine is the first step of a three-phased investment program to double the company’s production capacity within the next three to five years.

Voith will rebuild the wire section and deliver new drives for the dryer section.

Voith expects to complete the project in the third quarter of 2016. After the rebuild, the board machine will have the capacity to produce 130,000 tonnes per year of corrugated medium and testliner in a basis weight range of 90 – 200 g/m².

Machine furnish will be OCC, Voith noted.
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- The application prescribes the quantity and size of the nozzles – variable adaption
- The FabriCare design does not require a suction hose inside the beam which could get clogged.
Doyle Simons, President and CEO of Weyerhaeuser, has been named by RISI as its 2016 North American CEO of the Year. Simons was selected by a group of investment analysts and portfolio managers who cover the North American and global pulp and paper industry. The criteria for the award include leadership, vision and strategic accomplishment. Analysts credited Simons for Weyerhaeuser’s merger with Plum Creek Timber and also for the company’s decision to review strategic alternatives and ultimately divest its cellulose fibers business.

Verso Corporation announced that David J. Paterson, President and Chief Executive Officer and a director of the company, will become the Chairman of the Board of Verso immediately upon its emergence from its pending Chapter 11 bankruptcy proceeding. In addition, Paterson has informed Verso’s board of directors that he intends to step down as the company’s President and CEO when Verso finds his successor, but until then, he intends to continue to serve in this role.

Fisher International announced that Xia Min has joined the company as Senior Consultant in Asia. Ms. Min, who previously served as a management consultant at Pöyry, will be responsible for providing “Leveraged Consulting” services to Fisher’s client base in Asia.

Xerium Technologies, Inc. announced the promotion of Robert Burke to the position of Xerium - President of Asia. He will be based in Xerium - Asia headquarters located in Kunshan, China. Burke joined Xerium as an Executive leader in 2009, and most recently held the position of Vice President of Sales and Marketing for Xerium - Asia.

The Confederation of European Paper Industries (CEPI) has named Sylvain Lhôte as its new Director General, effective September 5. Lhôte will take over from CEPI’s Acting Director General, Jori Ringman. Lhôte is currently Vice-president Governmental Affairs in Europe for Alcoa. Prior to joining Alcoa, Sylvain directed EU and sustainability affairs for the Borealis Group, in the base chemicals and plastics industry and led a global CSR program for the company in the EMEA region.

BillerudKorsnäs has appointed Mikael Andersson to the position of Senior Vice President for Business Area Corrugated Solutions, effective August 1.

Ilim Group recently named Ksenia Sosnina as its new Chief Executive Officer, effective June 16. She replaces Franz Josef Marx, who has held the post for the past three years. Ms. Sosnina has been a member of the Ilim’s Board of Directors since 2015 and most recently served as President of International Paper Russia.

Twin Rivers Paper Company named Robert (“Bob”) Snyder as Chief Executive Officer, effective June 24. Snyder succeeds Tim Lowe, who completed his three-year term as CEO. Snyder brings a great deal of experience to the CEO role, including Executive and Board roles in coated paper, newsprint and tissue mills in various parts of the U.S. and Canada. Lowe has agreed to transition into the role of Chairman of Twin Rivers to continue to provide strategic guidance into the future.

Also, Twin Rivers has named John Reichert as Chief Operating Officer. Most recently, Reichert served as Mill Manager of the NewPage (now Verso) Stevens Point mill.

UPM announced that Antti Jääskeläinen has been appointed Executive Vice President responsible for UPM Raflatac, effective July 1. He also joined UPM’s Group Executive Team as of the same date. Previously, Jääskeläinen served as Senior Vice President for UPM Raflatac’s EMEIA business (Europe, Middle-East, India and Africa).
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The American Forest & Paper Association’s (AF&PA) recently released 2016 Sustainability Report showcases our members’ sustainability performance. This report marks the halfway point in our ten-year journey to reach our Better Practices, Better Planet 2020 goals.

Through the Better Practices, Better Planet 2020 initiative, which was established in 2011, our members are successfully pursuing one of the most extensive sets of sustainability goals established for a U.S. manufacturing industry. AF&PA works with our members, government agencies, communities and other stakeholders to employ advanced sustainability practices benefitting the economy, environment and society and transparently reports on the industry’s performance. We are pleased to report that our members have met the greenhouse gas emissions and safety goals ahead of schedule.

Unless otherwise noted, the progress below represents our members’ calendar year 2014 performance against a 2005 baseline.

**PROGRESS ON OUR SIX GOALS**

Our members are committed to sustainability along the entire value chain, starting with the renewable resources our members acquire to make their products. AF&PA members procured 98 percent of their fiber through certified fiber sourcing programs and have also increased the amount of fiber procured from certified forestlands to 29 percent.

AF&PA is a strong proponent of international efforts to suppress illegal logging and to reduce the demand for illegally harvested forest products. We actively engage with businesses, ENGOs and government policy makers to ensure the U.S. is not a market of choice for illegally harvested wood.

Any injury to our industry’s employees is unacceptable and AF&PA’s mandatory Environment, Health & Safety Principles require that members have health and safety policies in place. Implementing worker training, reducing known hazards, and a host of injury prevention measures and safeguards allowed AF&PA members to reduce their incidence rate by 40.8 percent between 2006 and 2014. Although we have met our goal to reduce reportable incidents by 25 percent, we are continuing efforts to reach our aspirational goal of zero workplace injuries.

Our members’ purchased energy efficiency improved by

Some of AF&PA’s members’ pulp and paper mills are largely energy self-sufficient, producing onsite on average more than two-thirds of the energy used for production, and in some cases supplying energy to the electric utility grid. For example, Graphic Packaging’s Macon, Georgia paperboard mill used to generate a little over 50% of its power, purchasing the rest from the electric utility. Now, the mill is 100% self-sufficient electrically, with the ability to sell excess power. The installation of a new boiler (pictured above), also allowed Graphic Packaging to retire an old coal boiler and remove about 40 MW of coal-fired emissions from the atmosphere.
8.1 percent due to investments in energy efficiency projects. Some of our members’ pulp and paper mills are largely energy self-sufficient, producing onsite on average more than two-thirds of the energy used for production, and in some cases supplying energy to the electric utility grid.

Improved energy efficiency and the use of less carbon-intensive fuels and carbon-neutral biomass, enabled the industry to significantly reduce its greenhouse gas emissions. Our members reduced their greenhouse gas emissions by 16 percent, surpassing our goal of 15 percent reduction.

Water is a valuable natural resource and a vital component of the papermaking process. The forest products industry directly returns about 88 percent of the water it withdraws and uses in its manufacturing processes. Ongoing technology and innovation enable water to be reused and recycled up to ten times throughout the pulp and paper mill process before it is treated in a wastewater system and returned to the environment. So far, water use at member pulp and paper mills was reduced by 6.5 percent since 2005.

Our industry’s commitment to sustainability extends beyond the manufacturing process: more than 60 percent of paper consumed in the U.S. was recovered for recycling each year since 2009, reaching a record 66.8 percent in 2015.

Paper recycling depends on the millions of Americans who recycle at home, work and school every day. In 2014, 96 percent of the U.S. population had access to community curbside and/or drop-off paper recycling services. AF&PA works to promote paper recovery by creating materials to educate consumers about best recycling practices. Through our support for The Recycling Partnership, we are helping to create public-private partnerships that will drive sustainable market-driven increases in the amount of recyclable commodities recovered in the Southeast region.

Our members are united in the objective to ensure the industry’s long-term success through improved environmental performance, economic progress and support for the communities where we live and work.

We are proud of our members’ sustainability leadership and are committed to continuing our industry’s journey to advance sustainability performance.

For more information about our industry’s sustainability progress, visit: http://sustainability.afandpa.org.
Higher Newsprint Prices Help To Offset Rapidly Shrinking Demand

Newsprint demand contracted further in 2015 and early 2016 as the decline in advertising revenues continue to batter publishers. Prices gained some lost ground following the first increase in several years but remain low and exchange rates have battered Canadian mills in recent months. The price gains combined with minimal cost pressures mean 2016 could turn out better than last year although the going remains tough.

By Harold M. Cody

Newsprint markets had a little good news for the first time in quite a while in early 2016 as the first North American newsprint price increase in several years took hold. Newsprint mills initially implemented about half of a $40 hike in January and February 2016 but it was fully implemented thereafter. Mills have announced additional $15 increases targeted at June 1 and July 1. That’s good news for producers struggling with very low profitability driven in part by the sustained fall in prices as well as plummeting demand and production in recent years.

Unfortunately, the downturn in newsprint demand continued unabated as North American demand dropped about 10% in 2015 to 3.7 million metric tonnes. The drop equals about 400,000 tonnes and was the third straight annual decline of about 10%.

By Harold M. Cody

Traditional newspapers rapidly lose ground to other media. Gannet’s advertising revenues, for example, were down 12.4% in 2015 with declines posted by all categories. Retail fell 9%, national 21% and classified advertising was down 15% vs. the prior year. News Corp.’s advertising revenues, which include major properties such as the Wall Street Journal, fell 10% in the fiscal year ending June 30, 2015. Advertising revenues for McClatchy were down about 13% in 2015 with classified down by 14% and retail off by about 15%. A key reason for the decline was large retail advertisers reducing preprint insert advertising and in newspaper ROP advertising. Retail advertising, i.e. local retailers, restaurants, etc., is the largest component and often accounting for about half of newspaper advertising.

EXTRA SLIPPED

Exports also slipped in 2015, falling by a comparatively larger level of 15%. While exports continue to be a key outlet for U.S. and Canadian production, they have been trending down. U.S. exports in 2015 were just less than 400,000 tonnes, down 11%, while Canadian overseas exports fell 15% to about 1.2 million tonnes. The Canadian level is down compared to the prior two years but is about equal to the traditional newspapers rapidly lose ground to other media. Gannet’s advertising revenues, for example, were down 12.4% in 2015 with declines posted by all categories. Retail fell 9%, national 21% and classified advertising was down 15% vs. the prior year. News Corp.’s advertising revenues, which include major properties such as the Wall Street Journal, fell 10% in the fiscal year ending June 30, 2015. Advertising revenues for McClatchy were down about 13% in 2015 with classified down by 14% and retail off by about 15%. A key reason for the decline was large retail advertisers reducing preprint insert advertising and in newspaper ROP advertising. Retail advertising, i.e. local retailers, restaurants, etc., is the largest component and often accounting for about half of newspaper advertising.

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level sent overseas in 2012. U.S. exports have been trending down since hitting almost 600,000 tons in 2013. The decline in U.S. exports last year was in part driven by the strong U.S. dollar. One ray of sunlight peeked through the clouds, however, as export rose a modest 1% during the first quarter and operating rates were 92%.

As noted, the recent gain in prices was welcome news as newsprint prices have been steadily declining for several years. Prices fell from about $600/tonne in early 2014 to $550/tonne by early last year and slipped to under $500/tonne ton in the fourth quarter of 2015. The recent increase have pulled them back up to the $545/tonne level.

Market fundamentals such as weak and falling demand and modest operating rates wouldn’t necessarily seem to support higher prices. However, one factor that may have contributed to a successful price increase is the recent appreciation of the Canadian dollar against the U.S. dollar. From the perspective of a Canadian newsprint mill, currency fluctuations have essentially wiped out the increases posted in early 2016. For example, at the end of last year the exchange rate was 72 U.S. cents per Canadian dollar. In contrast, at an exchange rate of almost 80 cents per dollar three months later higher U.S. dollar prices actually translated to lower prices in Canadian dollars. There was a highly volatile period from the fourth quarter of 2015 to April 2016, when the Canadian dollar fell to the lowest level in many years in early January before recovering to over 80 cents in April. Since then it’s held fairly steady in the 75 cent range.

In order to sustain recent price gains capacity closures will most likely be required unless export demand were to suddenly turn around. If demand fell by an additional 10% this year then that would equate to 365,000 tonnes of capacity. Some of this has already occurred as Resolute closed one newsprint machine in May 2016 at its mill in Augusta, Georgia. The mill has two machines and produced about 400,000 tonnes annually. This closure may be enough to sustain recent price gains but additional reductions may be needed depending on operating rates. Despite the continued collapse on the revenue side for publishers, if prices hold and the summer increase is successful newsprint mills may get a little bit of a breather.

Harold Cody is a contributing writer for PaperAge. He can be reached at HaroldCody@paperage.com.

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Making the Grade — Change, That Is

A new quality control system installed on KM 8 at Stora Enso Skoghall results in faster run-ins and quality changes when moving from one board grade to another.

By Sören Back, Owner, SB Kommunikation, Örnsköldsvik, Sweden and Mark Williamson, Journalist Engineer

So-called legacy quality control systems don’t run on forever as the cost of service and spare parts availability eventually become a problem. But merely replacing an old QCS to reduce the service costs is only part of the picture. With a modern system a mill can actually get a significantly larger return on investment since the system controls the papermaking process better and some optimization is possible. Stora Enso Skoghall is case in point where they achieved a good ROI by replacing their old QCS on board machine KM 8 with a modern Valmet IQ system with three scanners. The system, with its more precise measurements and controls, has cut the time of grade changes by 25%.

Stora Enso is one of the world’s largest producers of liquid packaging board. KM 8 is the biggest liquid packaging board machine in the world, with a production capacity of 465,000 tonnes of five-ply board coated three times on the top side with a starch application on the wire side.

“In 2011 we had reached the end of the lifetime of the existing quality control system, which had been operating since KM 8 started in 1995,” says Leif Karlsson, Project Manager at Stora Enso Skoghall. “Therefore, we started a project to replace the existing QCS, at the same time as we wanted to keep the existing special solutions and develop them further.”
“In addition to the project group, a reference group that included process operators was created to make sure that all the important matters were taken into account. Requirements were listed, and in order to give potential suppliers a good basis for their calculations, around a hundred machine runs were conducted to e.g. determine how long run-ins and quality changes took. We needed to shorten them using a new quality control system,” Karlsson pointed out.

A quality control system with the right choice of sensors to measure the relevant properties, good profile control across the machine, advanced control of property variations in the machine direction, and online retention measurements for the different board plies should make run-ins and quality changes at least 25% faster. Stora Enso opted for Valmet’s IQ QCS system.

PROJECT SPLIT INTO THREE PARTS

“As it is a big deal to change from one quality and control system to another, we wanted to make it as risk-free as possible,” Karlsson explained. “In order to reduce the risks, we therefore split the project into three parts.”

The first part was done during the autumn maintenance break in 2012 and comprised the base paper scanner with sensors for grammage, moisture, caliper, fiber orientation, formation and color, as well as a new moisturizer for profile moisture control. A Valmet Retention Measurement device (Valmet RM3) was installed for one of the board plies to test its capability. The outcome was very positive, so Skoghall bought RM3s for all plies as they saw great potential for optimizing the chemicals used. During the first year, the operators were able to switch between the old moisturizer and existing fiber orientation control and the new equipment from Valmet.

The second part of the project, completed in autumn 2013, was in the coating section, in which the manual profile controls of all three coating stations were replaced with a Valmet IQ Coat Weight Profiler for automatic control of the coating. Two of the scanners were installed after the first and third coating units. After the second pope reel, the grammage, moisture, caliper, coat weight and color are measured, as well as the surface moisture on both sides. In the future, measurements of surface moisture on both sides of the web can be used to control the curl.

During the autumn maintenance break in 2014, the last parts of the old quality control system were replaced. Valmet renovated or exchanged all the actuators for grammage control in the headboxes.

Today, the fiber orientation of the board’s top and back plies is controlled with Valmet IQ Slice Profilers, while the basis weight control for the three middle plies is done with a Valmet IQ Dilution Profiler.
making the grade

“All three start-ups have been very successful and managed to achieve approved quality after just ninety minutes,” Karlsson said. “We have now been running KM 8 for more than eighteen months with the complete Valmet QCS system. Almost all our goals have been achieved, including shortening run-in periods and quality change times by 25%.”

REDUCED MAINTENANCE

“A QCS is a narrow competence area, so it is important to have our own people with knowledge about the system,” said Peter Grabner, who is in charge of the QCS system maintenance for KM 8. “So we have a dedicated QCS group to keep control of the system and be able to give support to the operators. One of four teams is, in turn, available to give around the clock service, but luckily most of the support needed can be given from home.”

“All in all, the maintenance needed for the new QCS system has been considerably reduced compared to the previous situation, and of course we can easily get hold of spare parts,” Grabner added.

STRONG SUPPORT

“The total investment was roughly five million euros, which was below our budget even though we split the project into three parts over three years,” Karlsson said. “We wanted to minimize the risks. We believed — and we still do — that it was the right decision. Some additional, unforeseen money could easily have been lost if we had had problems with the new system or our lack of experience with it if everything had been done in one go.

“We have had excellent support from Valmet every step of the way. During the start-up, experts from Valmet worked with each shift team and we also had a support link from Finland so that any issue or problem could be resolved swiftly,” Karlsson concluded.
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Demand for retail ready packaging is forecast to increase 5.2 percent annually to $6.2 billion in 2020, outpacing the overall packaging market average, according to a new study from The Freedonia Group, a Cleveland-based industry research firm.

Retail ready packaging (RRP), also known as shelf ready packaging, display ready packaging, and pallet ready packaging, refers to secondary packaging for retail products that arrives in a manner enabling items to go directly onto the shelf or selling floor without the need for unpacking of inner contents. RRP offers a number of advantages over traditional retail packaging in terms of labor costs, stock handling, and product visibility. Gains will be supported by further growth of mass retailers and club stores, and increased food and beverage sales volume in nontraditional outlets such as drug and dollar stores.

Additionally, the proliferation of club stores and no-frills deep discount grocery stores will be especially important for RRP, as such stores primarily sell merchandise directly from secondary packaging and require their vendors to ship products in RRP. These and other trends are presented in Freedonia's study, *Retail Ready Packaging*.

Among major RRP product types, corrugated boxes, which represent more than 50 percent of total demand, will provide the strongest opportunities. According to analyst Esther Palevsky, “Growth will be supported by expansion in the retail user base and the increased presence of value-added box types.”

**CORRUGATED BOXES, FOOD PACKAGING WILL DOMINATE DEMAND**

Gains for retail ready corrugated floor displays, folding cartons, and reusable plastic containers (RPCs) will be more moderate than those for boxes, but will still be helped by overall retail trends promoting greater use of RRP.

Food is the predominant market for RRP, accounting for almost three-fourths of demand in 2015. Through 2020, growth in food uses will be fueled by labor cost savings resulting from reduction of product handling requirements during stocking. In addition, disruptive trends in the US food retailing landscape will bode well for RRP. Among such trends is the increasing competition that traditional supermarkets face from a host of alternatives, including club stores, deep discounters, mass retailers, drug stores, farmers’ markets, and e-commerce vendors.

Increased openings of smaller-format locations by mass retailers will also promote gains for RRP, as these stores carry a more limited product selection than their traditional counterparts and have fewer employees. These stores can benefit from RRP’s ability to speed stocking of shelves and increase shelf space efficiency.

The Freedonia Group is a leading international business research company. Further information is available on the company’s website: www.freedonia.com.
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