MILL MAINTENANCE
The pros & cons of using
contract maintenance
companies

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as packaging conversion
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This issue of PaperAge looks different, and not by design. It’s printed on 60# uncoated stock. Why? Mills are “oversold” on coated grades and have been for some time now.

We normally print on 65# or 70# coated freesheet (CFS).

In addition, this issue is getting to you later than it normally would. There was a chance our printer would receive a shipment of coated stock in mid-June, so we postponed the original print date by a few weeks and kept our fingers crossed. As the second week in June arrived, we were informed the shipment would not happen.

And that paper order wasn’t just for PaperAge. In March our printer began talking with all their clients who use coated paper and got as many as possible onboard to use stock of the same grade, width and weight in an effort to source one large order of the same product.

No luck.

In November of last year, our printer warned us that something like this could happen — that they may reach a point during 2022 where they would be unable to replenish their inventory of coated paper regardless of order lead time. The domestic mills are struggling to keep up with demand and sourcing imports is being hindered by logistics and exorbitant shipping costs.

Our client rep, whose family has been in the printing business for nearly 80 years, said he’s never experienced anything like this.

Machine shutdowns and conversions to packaging grades, challenges in container shipping and the trucking industry, and the recent labor strike that forced the shutdown of UPM’s mills from Jan. 1 until April 22 have created an “unprecedented” situation when it comes to sourcing specific grades of paper.

Scott Hider, President of Clampitt Paper, hosted a webinar on March 15 that provided a review of the market conditions and external factors causing the current paper shortage.

Hider pointed out that despite CFS operating rates that averaged 102% in 2021, days of supply dropped dramatically and have fallen well below the bottom control limit, indicating insufficient inventory to meet current and future demand.

“Historically, producers rebuild inventories in the first half of the year, but that seems unlikely this year given that they are shipping every roll of paper they can put their hands on,” Hider explained. “In fact, producers have (in some cases we are aware of) booked every single hour of machine time for all of 2022, and are still turning away orders — this has never happened before. The reality is that there isn’t enough paper to match demand, so prices must rise.

“As if on cue, producers [lined up] for more hikes in Q1 ($50–$60, generally) and these increases [are putting] prices at, or above, all-time highs — and we might not yet be at the peak for this cycle. We have heard of buyers offering hundreds of dollars more per ton to secure product, but they often get rebuffed. Long-term damage may be happening to the overall demand picture as buyers/users become forced to find alternatives, but there is little choice but to push prices up when demand is so intense,” Hider said.

PaperAge, for one, is a “buyer/user” that has and is continuing to search for alternatives to CFS if 2022 continues in the direction it’s been on.

As I write this Editor’s Note, I’m not quite sure how PaperAge will look and feel printed on uncoated stock — an alternative I’ve been forced to use.
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BillerudKorsnäs Completes $825 Million Acquisition of Verso

BillerudKorsnäs on March 31 announced the completion of its acquisition of Verso for a purchase price of approximately USD 825 million in cash. Verso is now known as Billerud NA.

Rob Kreizenbeck, Verso’s Sr. Vice President of Operations, on April 1 assumed the position of President, North America, in BillerudKorsnäs’ Executive Management team. Going forward, BillerudKorsnäs intends to simplify its company name and brand to “Billerud”, which it will operate under in all markets, including the U.S.

“I am very glad to welcome the entire Verso team to BillerudKorsnäs,” said Christoph Michalski, President and CEO of Billerud-Korsnäs. “Our combined assets and expertise in high-quality virgin fiber paper and board packaging materials create an excellent platform for sustainable and profitable growth.

“Integration work starts immediately, and we look forward to working together, sharing knowledge, initiating preparations for the conversion project and realizing a successful development,” Michalski added.

BillerudKorsnäs said the acquisition of Verso reinforces its strategy to drive profitable and sustainable growth and its ambition to accelerate its growth in North America. In addition, the company is committed to continuing to serve Verso’s customers across all segments and realizing previously announced plans to convert several of Verso’s assets into paperboard machines, while maintaining Verso’s position as a quality and cost leader in specialty and coated paper.

Kruger to Acquire Kamloops Pulp Mill from Domtar

Kruger Inc. announced that its affiliate Kruger Specialty Papers Holding L.P. entered into a definitive share purchase agreement pursuant to which one of its wholly-owned subsidiaries will purchase all the issued and outstanding shares in the capital of DKP Pulp ULC, a legal entity wholly-owned by Domtar Inc. that will, at the time of closing, own and operate the Kamloops Mill located at 2005 Mission Flats Road, Kamloops, British Columbia, Canada.

The Kamloops mill operates one fiber line with the capacity to produce 408,000 air-dried metric tonnes per year of Northern Bleached Softwood Kraft (NBSK) pulp and unbleached softwood kraft pulp.

“We’re very excited about the opportunities that will arise from this acquisition, not only for Kruger but also for the Kamloops Mill, B.C. wood fibre suppliers and the local community,” said François D’Amours, Executive Vice President and COO for Kruger Inc., Kruger Specialty Papers’ parent company.

The Paper Excellence Group, in the context of its acquisition of Domtar Corporation in November 2021, had agreed with the Canadian Commissioner of Competition to sell Domtar’s pulp mill in Kamloops.

Kruger said the acquisition will enable it to secure the supply of high-quality pulp for some of its Quebec paper mills. As a reminder, Kruger, which has 2,700 employees in Quebec, is investing about $1 billion in Sherbrooke, Quebec, for the construction of two state-of-the-art tissue plants.

Kruger expects to close the transaction in the second quarter of 2022, which is subject to customary conditions, including the approval of the Commissioner of Competition.

Appvion to Make Large Capital Investment in New Coating Equipment

Appvion announced a significant investment in new curtain coater equipment and technology at its plant in Appleton, Wisconsin, that will improve safety and increase productivity.

This new equipment will allow Appvion to make products more efficiently, allowing the company to optimize finished goods capacity and eliminating the need to secure pre-coated base paper.

“This is the largest single investment made in our Appleton plant for many years and marks the start of a new and exciting journey for the Appvion team,” said Laurie Andriate, CEO at Appvion. “The investment provides many benefits for Appvion and our customers, including elimination of ‘double-handling’ of rolls to improve productivity as well as safety of our people.”

The new equipment is slated for delivery and installation in 2023.
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Georgia-Pacific has announced plans to upgrade areas of its 640-acre Muskogee (Oklahoma) bath tissue, towel and napkin manufacturing operations. The Muskogee Mill has proposed investments of more than $50 million during the next three years to improve the safety, reliability and efficiency of operations in addition to the investment of a new production line and equipment.

“These investments will help Georgia-Pacific continue our focus on transforming manufacturing equipment and processes that result in better employee safety, environmental performance, reliability and quality,” said Amy Borovich, Muskogee Mill Facility Leader. “We appreciate the support from all of our Muskogee community partners, including the Muskogee City-County Port Authority, City of Muskogee, and the City of Muskogee Foundation.”

The Muskogee City-County Port Authority Board of Directors approved up to $500,000 in local incentives through its Strategic Investment Program (SIP). The program allows the Port Authority to consider incentive awards to companies with qualifying job creation and/or qualifying investment in new or expanded facilities.

Georgia-Pacific’s Muskogee Mill employs more than 700 people, making it the largest private employer in the city. The mill makes bath tissue, paper towels and napkins for both retail and away-from-home markets.

Paper Excellence is nearing completion of a significant project to winterize the pulp mill at Prince Albert Pulp Inc. (PAPI) in Saskatchewan, Canada. Winterizing the mill means that the interior of the mill is now heated for the first time since 2014, when the site last operated.

The project will cost approximately $500,000.

“Winterizing and heating the interior of the mill is another step forward as we keep working on restarting PAPI,” said Carlo Dal Monte, VP of Energy and Business Development for Paper Excellence. “As we all know, Prince Albert winters can be very cold, so being able to heat the interior of the mill means a safer working environment for our team and contractors that may be on site with us. Winterizing the mill also helps to prevent weather-related damage to the exterior of the mill and important infrastructure inside.”

Government of Saskatchewan Ministers toured the site on May 5 to see the upgrades. Last year, The Government of Saskatchewan announced 1,034,000 m3 of softwood timber allocated to support the restart of the Prince Albert mill.

“We’re excited to see that work is underway,” Energy and Resources Minister Bronwyn Eyre said. “This project will support Saskatchewan’s world class, sustainable forestry sector and create economic opportunities in the north, including over 1,650 new jobs.”

The winterization project will be completed entirely by Saskatchewan contractors, including several companies from Prince Albert.

Paper Excellence continues to work with the Saskatchewan Ministry of Environment on the environmental assessment process for the overall project to restart the mill and expects that process to be completed in the coming months.

The restart project remains subject to market conditions and permit approvals, the company said.

The Prince Albert Pulp Mill, which first opened in 1968, has the capacity to produce about 350,000 tonnes per year of Northern Bleached Softwood Kraft (NBSK) pulp.

Ox Industries has acquired a 150,000 square foot facility in Hanover, Pennsylvania to expand its converting capacity in the Mid-Atlantic Region.

According to the company, the facility will house next-generation equipment and manufacturing practices and expand just-in-time stocking products and services.

“We are excited to expand our Hanover location and to continue to invest in the community where we originally started Ox,” said Kevin Hayward, CEO of Ox Industries. “This is part of a $15 million investment in Hanover that will vertically integrate with our 100% recycled paperboard mills and create 50 new green-collar jobs.”

Ox Industries operates four recycled paper mills and seven converting plants in the U.S.
Saica Group has started production of corrugated packaging at its new plant in Hamilton, Ohio. The Hamilton facility is Saica’s first U.S. corrugated plant — a newly-built 360,000 square-foot facility that includes manufacturing, converting and production areas, along with a warehouse and office space.

This announcement comes as the company installed a state-of-the-art corrugator. The plant will have a production capacity over 1,500 MSF/year of corrugated board.

Along with the corrugator, the plant also has a 4-color 50x110” folder gluer, which allowed Saica to deliver its first orders late last year. With the finalization of the installation of a 4-color Rotary Die Cutter and a Vega specialty gluer, Saica will be able to operate at its full capacity.

“We are very excited with this new milestone,” said Akin Burak Onder, General Manager in the U.S. “We have invested in the technology, equipment and people needed to bring performance packaging solutions to this market.”

**Phase 2**

As part of a second phase of the project, Saica is already working to improve and expand the Hamilton facility. With the addition of two converting machines, a 4-color 36” Bobst Flexo Folder Gluer and a 2-color 66” Bobst Rotary Die Cutter, the company will increase its production capacity.

Civil works for this stage are scheduled to start in the coming months with the objective of having both machines in operation in the second half of 2023.

**Second Plant Planned for Midwest**

Saica said it will also be announcing a second plant location — most likely in Ohio or Indiana — in the coming months. This is part of a previously-announced $800 million investment the company plans for the U.S. market, growing through strategic acquisitions or new plant construction during the next five years.
Stora Enso has initiated a sales process for a possible divestment of four paper mills in Europe.

Stora Enso stated, “In line with Stora Enso’s strategy, paper is not a strategic growth area for the Group, and the divestment intent is aligned with the Group’s strategy to focus on long-term growth potential for its renewable products in packaging, building solutions and biomaterials innovations.”

Stora Enso’s paper production sites intended for divestment are: Anjala in Finland, Hylte and Nymölla in Sweden, and Maxau in Germany.

Stora Enso noted that the assets are high-quality sites for pulp and paper production with strong infrastructure, and skilled and experienced staff.

“Through divesting a majority of our paper assets, we are able to increase the focus on our defined strategic growth areas of renewable packaging, building solutions and biomaterials innovations,” said President and CEO Annica Bresky. “When assessing potential divestment options, we look for new ownership that will provide a sustainable long-term future for the sites and the people that work there.”

The four Stora Enso sites are subject to divestment in one or a series of transactions.

Stora Enso has not committed to a deadline for the conclusion of the divestment process.

The initiated sales process has no immediate effect on Stora Enso’s paper operations which continue to serve their respective customers.

Stora Enso’s Langerbrugge site in Belgium will be retained within the Group.

Stora Enso currently has five paper production sites that are supported by divisional sales, management, and administrative functions. In total, the Paper division currently employs approximately 2,200 employees.

In 2021, the Paper division’s net sales amounted to EUR 1,703 million.

**About the Mills**

Anjala Mill in southern Finland produces printing paper from mechanical pulp — both coated and uncoated book paper, magazine paper and improved newprint grades. Annual capacity: 435,000 tonnes of paper.

Hylte Mill in southwest Sweden is one of the largest newsprint mills in the world and produces high-quality newsprint, biocomposites and Formed Fibre products. Annual capacity: 240,000 tonnes of Newsprint based on TMP (thermo-mechanical pulp), 15,000 tonnes of Circular Solutions and 50 Million units of Formed Fiber products.

Nymölla Mill in southern Sweden produces pulp and wood free uncoated paper. Annual capacity: 475,000 tonnes of paper and 340,000 tonnes of pulp.

Maxau Mill in southwest Germany produces supercalendered paper primarily from recovered paper. Annual capacity: 530,000 tonnes of paper and 270,000 tonnes of pulp.
EUROPE

Sappi Stockstadt Mill Transitioning from Coal to Biomass and Natural Gas

Sappi will be abandoning the use of coal at its Stockstadt pulp and paper mill in Bavaria, Germany. To this end, the current coal-fired Boiler 9 will be decommissioned and the mill will be operated using only renewable biomass and natural gas.

In a press release, Sappi said, “This fits seamlessly into Sappi’s large-scale projects to reduce CO2 emissions as part of its ambitious decarbonization roadmap: for instance, with the fuel boiler modernization at the Gratkorn site in Austria; fuel conversion to biomass at the Karkniemi site in Finland; and the installation of a new electric boiler at the Maastricht plant in the Netherlands.”

The Stockstadt mill has the capacity to produce 145,000 tons per year of bleached chemical pulp for our own consumption and kraft pulp, and 220,000 tons per year of coated and uncoated woodfree paper.

The exiting of coal is expected to reduce annual emissions in Stockstadt by at least 100,000 tonnes of CO2. This corresponds to roughly one third of previous fossil emissions.

In addition, the project is expected to have numerous positive benefits for the environment in terms of less traffic, noise and waste.

Christian Dietershagen, Managing Director and Plant Manager at Sappi Stockstadt, explained, “In addition to the positive climate impacts, we anticipate that roughly 700 truck journeys for waste disposal per year will be dispensed with, and that noise emissions will be reduced due to the elimination of various sources, e.g. the ramping up and down of the coal-fired steam boiler, operation of the coal mills, and the absence of truck shuttle traffic.”

Sappi said the transition from coal to biomass and natural gas at the mill began towards the end of 2021 and completion of the project is expected by September 2022.
Finnpulp is abandoning plans to build a bioproduct mill in Kuopio in Eastern Finland.

Finnpulp in February of 2015 first announced plans to construct a greenfield softwood pulp mill in Kuopio at an estimated cost of 1.6 billion euros after completing a feasibility study a year earlier. The mill would have had the capacity to produce 1.1 million tons of softwood NBSK pulp, 60,000 tons of crude tall oil and generate 0.8 TWh bioelectricity to the national grid.

The company started an environmental impact assessment in spring 2015 and a permit was granted by the Regional State Administrative Agency for Eastern Finland in March 2017.

However, in December of 2019 the Supreme Administrative Court (SAC) of Finland, the highest court in the Finnish administrative court system, rejected the project’s environmental permit on the basis that Finnpulp had not provided sufficient studies.

At the time, Martti Fredrikson, Managing Director of Finnpulp pointed out that the project had been prepared with the best expertise in the world, including leading consultants in the forest industry.

“We have provided all necessary and requested material to the authorities and courts during the permit process. Therefore, the statement in the decision that Finnpulp has not provided sufficient studies is incomprehensible,” Fredrikson said.

Fredrikson disagreed with the court’s stance that Finnpulp ‘should have comprehensively assessed the impact also of all other pollutants on Kallavesi (a lake near the mill site) throughout the mill’s estimated economic life cycle (40-50 years).’

“This is a requirement that no industrial mill can meet. No such studies have been required neither during this process nor in previous pulp and paper projects,” Fredrikson said.

In May of 2021, Finnpulp filed for an annulment of the negative decision on the environmental permit of the mill project and the immediate granting of an environmental permit, mainly under permit conditions approved by a minority of the SAC, or at least a review of the matter.

The evaluation of options is expected to be completed by the end of 2022.

Currently, Metsä Board has an ongoing investment at its Husum integrated mill in Sweden that will increase the company’s annual folding boxboard capacity by approximately 200,000 tonnes. The investment is expected to be completed in the second half of 2023 and the additional capacity is expected to be reached by the end of 2025.

Finnpulp Will No Longer Pursue Plans for Bioproduct Mill in Finland

The final blow was dealt to the project earlier this year in January, when the SAC issued its decision rejecting Finnpulp’s application for annulment of the court’s decision in 2019.

Finnpulp said it “has now given the project up. At the same time, the company also gave away the site agreement with the City of Kuopio for the planned Sorsasalo mill area.

“Finnpulp has also had preliminary agreements with the owners of the neighboring properties of the planned mill area. Similarly, these agreements will be abandoned. After this the company does not have any other agreements or plans pending in Kuopio,” Finnpulp concluded.
EUROPE

UPM and Paperworkers’ Union Reach Agreement, Ending Strike

UPM and the Paperworkers’ Union on April 22 agreed on first-ever business-specific collective labor agreements for five UPM businesses, ending the strike at UPM mills in Finland that began on January 1. The strike covered UPM Pulp, UPM Communication Papers, UPM Specialty Papers, UPM Raflatac and UPM Biofuels units in Finland.

“We are very pleased that the parties have approved all settlement proposals and that the Paperworkers’ Union’s long strike ends,” said Riitta Savonlahti, Executive Vice President, Human Resources, UPM. “UPM and the union have made history together by agreeing on five business-specific collective labor agreements, which replace the paper industry’s old agreement stemming from the 1940’s.

“UPM’s long-standing goal has been to take collective bargaining to a level where the conditions of the work are best known, i.e. the individual businesses. The negotiations lead to agreements that benefit both the businesses and the employees and strengthen the premises for success well into the future,” Savonlahti added.

The contract period of the new agreements is four years. Pay increases are in line with the current industry norm. Revisions to wages will be negotiated after the first two years. New agreements are structurally less complicated than the old one.

A significant change in all business-specific agreements is the substitution of periodical pay with hourly pay. Hourly wages are paid by the work done, making the formulation of the pay easier to understand. New collective labor agreements make it possible to take competence and performance into account in wage formulation.

All businesses also agreed on added flexibility to shift arrangements and the use of working time.

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INDONESIA

APRIL to Build New Paper Mill for Folding Boxboard in Indonesia

Asia Pacific Resources International Limited (APRIL Group) said that it is investing IDR33.4 trillion (approx. US$70 million) in the construction of a new paper mill in Indonesia.

The construction of the new facility, which will be located at APRIL’s operations in Pangkalan Kerinci, in Riau province, Sumatra, is one of the largest manufacturing investments in Sumatra in the last decade.

When completed, the new paper mill will be capable of producing 1.2 million tons of folding boxboard (FBB) per year.

APRIL did not disclose a timeline for the project or an expected date of start-up.

Speaking at a ceremony to mark the construction of the new production facility, Agus Gumiwang Kartasasmita, Minister of Industry, said, “The increased manufacturing of paperboard in Indonesia will reduce our dependence on imports for this product, while also boosting our foreign exchange reserves through export-oriented sales. This development is also aligned with our Government’s focus to reduce reliance on imports and boost Indonesia’s industrial and manufacturing development.”

Sihol Aritonang, President Director, PT Riau Andalan Pulp and Paper, the operating arm of APRIL Group, said, “This is our largest single investment here since the company was founded almost 30 years ago. This product diversification strengthens our commitment to grow our business sustainably, in line with our existing sustainability commitments and our APRIL2030 targets.”

INDUSTRY SUPPLIERS

Valmet to Supply Eren Paper’s Shotton Mill with New Containerboard Machine

Valmet will supply Eren Paper’s Shotton Mill in the UK with a new containerboard machine, stock preparation and old corrugated container production lines, along with a large scope of automation systems, Industrial Internet solutions and services.

The new containerboard machine (PM3) will produce high-quality testliner and fluting grades in a basis weight range of 70-135 g/m² using 100% recycled paper.

PM3’s design speed will be 1,700 m/min and it will have an annual production capacity of approximately 650,000 tonnes.

“Shotton’s new containerboard machine will make our paper mill the largest and most technologically advanced paper mill in the UK,” said Hamdullah Eren, Chairman, Eren Paper/Modern Karton. “We chose a board making line with high performance, high speed, and higher production rates.”

“Our technical highlights together with the speed and production potential of the containerboard machine were definitely the decisive factors to Eren Paper,” said Mika Ollikainen, Vice President, Sales and Marketing, Valmet. “Valmet’s OptiAir impingement dryer will give substantially higher runnability, and hard nip sizer will increase the strength properties of the produced board. Additionally, the OCC line will be the largest one delivered by Valmet.”

The start-up and further optimization of the new board machine will be supported with a Performance Agreement in cooperation with Shotton Mill to support the continuum of the successful start-up curve.

Additionally, the production will be supported remotely from Valmet Performance Center. Industrial Internet solutions, such as advanced monitoring and predictive applications, will complete the optimization of the paper machine operation.

Valmet paper machine clothing, spare parts and consumables packages will be delivered as well.

Start-up of PM3 is scheduled for the second quarter of 2024.
INDUSTRY SUPPLIERS

ABB to Deliver DCS and Machine Drives Upgrade to DS Smith Kemsley Mill

ABB has been awarded a new contract by long-term customer DS Smith with an Ability™ System 800xA distributed control system (DCS) and paper machine drives upgrade across PM3, PM4 and PM6 at their Kemsley Mill in the UK.

The Kent mill is the second largest recovered fiber-based paper operation in Europe, with an annual production capacity of over 840,000 tons. Aligning with the company’s focus on recycling and sustainable paper and packaging production, the mill produces recycled, lightweight paper.

“ABB’s consultation, involving numerous remote workshops and ongoing discussions, helped us define the best approach for our modernization project,” said Ben Jennings, Kemsley Mill Manager at DS Smith. “The team showed real expertise and understanding of our future ambitions and will act as a partner to us in our digital transformation journey.”

According to ABB, the upgraded DCS will be integrated across the mill, working as the backbone that connects everything securely into one system for better, more automated functionality and easier maintenance.

Jan-Willem Bos, Regional Industry Lead, ABB Pulp and Paper, added, “The Kemsley Mill is a great example of a facility with the foresight to plan for the bigger digitalization rapidly emerging in the pulp and paper industry. We’re pleased to build on our long-standing relationship and work closely with DS Smith to drive their strategic evolution.”

ABB will also deliver a one-year support contract, the latest cyber security set up and two new Virtual Measurements for PM4, which will provide online calculations for strength and weight.

System delivery is expected in Q3 2022. A progressive implementation of the system will align with the planned maintenance program in successive months, ABB said.

Motion Launches Mi Fluid Power Solutions Brand

Motion Industries announced the formation of its fluid power business brand: Mi Fluid Power Solutions (Mi FPS).

Unifying top tier fluid power business units—including the former Kaman Fluid Power divisions of BW Rogers, Catching FluidPower, Intellimation, Calkins Fluid Power, Northwest Hose & Fittings, Western Fluid Components, and Inrumec along with Hydraulic Supply Company and Motion’s OE Mobile service capabilities — Mi FPS is a complete provider of fluid power, integrated electronic controls and electro-mechanical technologies for industrial and mobile equipment.

Mi FPS’s main focuses are hydraulics, pneumatics, lubrication, filtration, process pumps, precision industrial tooling and factory automation products. New and serviced components range widely from hydraulic pumps and motors to valves and cylinders of virtually any size. The new brand comprises North America’s largest network of over 65 on-demand retail fluid power and hydraulic industrial hose assembly stores and support facilities, including repair, build and engineering capabilities, while applying the highest-quality fluid power components and engineered systems.

“Fluid power combines products and engineering skills to design a system that solves a customer’s need,” said David Mayer, Motion’s Group Vice President of Fluid Power. “We have partnered with the world’s best suppliers to provide more products, more inventories and more robust capabilities to ensure we can optimally solve a project, maintenance or production problem. Our deep inventory of hydraulic equipment, pneumatics, pumps, filtration, motors and lubrication products get any equipment up and running quickly.”
Canfor Pulp Products Inc. recently named Kevin Edgson as President and CEO. Edgson most recently served as President and CEO of EACOM Timber Corp. Prior to joining EACOM, he was with Millar Western Forest Products in a series of increasingly senior roles, including serving as Chief Financial Officer.

Graphic Packaging Holding Company announced that Elizabeth Spence has joined the company as Executive Vice President, Human Resources. Spence joins Graphic Packaging from Gypsum Management and Supply where she was most recently Vice President and Chief Human Resources Officer.

International Paper has elected Joseph R. Saab as Senior Vice President, General Counsel and Corporate Secretary, effective July 1, 2022. He succeeds Sharon Ryan, who retired June 30. Saab joined IP in 2001 as legal counsel for Environment, Health and Safety.

International Paper has named Mark Nellessen as Vice President of Investor Relations. Nellessen succeeds Guillermo Gutierrez, who has been named Vice President and General Manager, Latin America for IP’s North American Container business.

Mercer International appointed Juan Carlos Bueno as Chief Executive Officer and President, effective May 1. He succeeds David Gandossi, who has served as CEO and President since 2015 and turned 65 this year and decided to retire. Gandossi will continue with Mercer as an advisor until August 31. Bueno most recently served as the Chairman of the Board and co-founder of Global Energy which produces novel green energy generation devices. Prior to that Bueno was Executive VP and Divisional CEO, Biomaterials, for Stora Enso.

Monadnock Paper Mills announced that Kenneth Fox has joined the company as Vice President Human Resources. He succeeds Bill Peterson, who has retired. Fox’s experience includes having held senior-level positions with the United States Air National Guard. He previously worked for Sappi North America as Corporate Manager Safety & Health and Madison Paper as Manager Safety & Security. Monadnock also announced that Frank Shaffer has joined the company as Technical Services Manager. Shaffer was with Hub Folding Box in Mansfield, Mass., for the past six years.

WestRock Company announced that Alpa Sutaria has joined the company as Senior Vice President, Strategy and Sustainability. Sutaria comes to WestRock from the Coca-Cola Company, where she most recently served as Vice President and General Manager of Sustainability, North America.

The Fibre Box Association has elected Doug Bosnik, President and CEO of Buckeye Corrugated Inc., as the Association’s 2022–2023 chairman.
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Like many great books, our paper recycling success story is filled with pages of accomplishments.

The latest chapter in this effort was published earlier this year and speaks to the high rate of access Americans have to community recycling in the U.S.

Earlier this year, we published the 2021 Access to Recycling Study. The good news? This study confirmed a clear majority, 94% of Americans, have access to community paper recycling programs.

Furthermore, 79% have access to residential-curbside recycling programs for paper and paper-based packaging. That's an increase of about 14 million people since 2014, the last time we conducted a study.

This matters for the millions of Americans who use our sustainable paper products. Items such as cardboard boxes, newspapers, paper bags, pizza boxes and magazines, all of which are widely accepted for recycling in the U.S.

But our recycling success did not start here. Our good news story is decades in the making. Today, paper is one of the most widely recycled materials in the world.

The data shows us the accessible nature of paper and paper-based recycling. As an industry, we voluntarily invest in paper recycling’s success.

So much so that every year since 2009, the recycling rate has met or exceeded 63%.

Paper recycling is one of the best examples of how we as a society are working to protect our environment. And how we are part of an innovative and circular economy.

Nationwide, the paper industry recycles about 50 million tons of recovered paper every year. This totals more than one billion tons over the past two decades.

The resilience and strength of our industry is clear, as is the active participation of consumers who make paper recycling the success story it is today.

Our industry continues to be a leader in recycling, with approximately $5 billion in manufacturing infrastructure investments through 2024 to continue the best use of recycled fiber in our products. These investments will create the capacity to increase the amount of recovered paper used by U.S. paper and paperboard mills by approximately 8 million tons, a 25% increase over 2020 levels.

However, like many great triumphs, our voluntary paper recycling system has also seen its fair share of challenges, including some concerning recent ones.

For instance, right now, policymakers in Washington, D.C., and in states across
the nation are considering things like minimum-recycled-content requirements, bottle bills and extended producer responsibility programs (EPR). Programs such as these could have negative impacts for paper recycling.

AF&PA understands there are several factors that go into developing recycling legislation and policies like EPR. We support the U.S. EPA Waste Management Hierarchy and ensuring that recyclable materials go to their highest and best use.

We encourage lawmakers to use the success of paper recycling as a model for improving recycling overall.

There is also an almost limitless opportunity for us to inform, educate, and ultimately influence policymakers. Each of you can be a voice to advocate for our industry whether in your local community, state capital, or on Capitol Hill.

Our messages are focused and clear. And I encourage you to share them with policymakers:

► We make essential products that millions of people rely on from renewable and recyclable materials.
► Paper products continue to be manufactured 365 days a year, by a dedicated and essential workforce.
► The industry has been and continues to be a leader in sustainability.
► Paper products are widely accepted for recycling and mills need recycled paper to make new products.

In fact, the paper and wood products industry has an inherently circular supply chain. One of our 2030 Sustainability goals is to advance the circular value chain through the production of renewable and recyclable products. Our members’ dedication to this will strengthen the role our industry plays in the circular economy.

We are also a significant contributor to the U.S. economy, including in many small and rural communities. On our website (afandpa.org) you will find an interactive map that tells you the economic impact of our industry in your home state and even your congressional district.

Business leaders, like yourself, have a much-needed opportunity to shine a spotlight on our incredible economic and sustainability story.

The question is: Will you engage and help us share this good news? We need you to answer with a resounding yes!

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The fluff pulp industry is set for a boom year in 2022, with record prices and recovering demand pushing global consumption to 6.90 million air dried metric tonnes (ADMTs). This will yield a to-market value of $8.31 billion, up from $6.88 billion in 2021, according to exclusive forecasting in the new Smithers market study, *The Future of Fluff Pulp to 2027*.

At the beginning of the year the price of fluff pulp is approaching $2,000 per air dried tonne — nearly two to four times its historic average. Demand has been stimulated by the recovery of the world economy post-Covid, and strengthened by the call for more sustainable materials in hygiene applications (diapers/nappies, toddler training pants, adult incontinence, and feminine hygiene goods) and non-wovens, especially wipes.

Smithers dedicated analysis on this segment examines the outlook for this critical year and the longer-term prospects through to 2027 — with a specific analysis on current and future demand, fluff mill capacities and investment, and competing technologies.

Despite several mill expansions in South America in the past five years, in 2022 global fluff pulp supply remains constrained even as demand continues to build. Swing production — mills switching from producing dissolving or papermaking pulps to make fluff pulp — will be key in the short and medium term to meeting customer demands. The volume of swing production now and through to 2027 is analyzed in depth by Smithers, alongside both announced and unannounced mill expansions for the forecast period.

Overall world fluff pulp consumption will increase to 8.13 million air dried tonnes in 2027, equivalent to a compound annual growth rate (CAGR) of 3.4% for 2022-2027. The market will be unable to sustain the record prices seen in H1 2022, but will remain buoyant. Smithers forecasts global value will reach $8.63 billion in 2027, as prices and supply adjust towards historic norms.

North America is the key producer of fluff pulp. In 2022 it is the only world region that is a net exporter, although it is anticipated it will soon be joined by South America. New demand through 2022-2027 will come mostly from Asia, consuming 2.9 million air...
dried tonnes valued at $3.0 billion in 2022; it is also set to develop its first domestic fluff pulp production industry within the year.

Adding absorbency to disposable hygiene products remains the main use for fluff pulp. Consequently fluff pulp use will track demand for hygiene and other nonwovens goods in the post-Covid economy. In North America and Western Europe, these consumer segments are relatively mature, and are facing some distinct challenges that will change fluff pulp consumption patterns. Hygiene goods will account for nearly 90% of global volumes in 2022, but design changes will mean that growth will be essentially flat through to 2027. These include greater sales of diapers that use less or no fluff pulp in their absorbent cores.

Growth will be much faster in nonwoven substrate applications, especially airlaid constructions. This is supported by the global trend toward elimination of plastics and plastic waste, especially in wipes. Fluff pulp is one the most sustainable raw materials in the nonwovens inventory, wipes can contain 80-85% fluff pulp; and this can rise to 90% for other products like table covers. R&D is now focused on developing biodegradable airlaid product lines, without plastic binders or bonding fibers. There is also a small, but rapidly accelerating market, for fluff pulp in spunlace nonwovens.

Southern soft woods will remain the main tree species used in fluff pulp, this will be supplemented by other species, including South America eucalyptus grades, and a limited use of fluff pulp made from recovered/recycled sources.

The Future of Fluff Pulp to 2027 examines all important commercial fluff pulp variants by species and process, as well as fluff pulp markets by region and end-use. Supply and demand, as well as pricing, is quantified and projected through 2027. The report also includes a review of major producers and their strategies.
The decision to use a contract maintenance firm hinges on the people and maintenance practices in-place at your mill, and the contractor must provide a better system for people to work in. Otherwise, they will not be more effective than your existing system.

By Christer Idhammar, Founder, IDCON INC.
If this is the case, you must ask yourself why you cannot improve the system yourself when the contractor can. The answer may be that you have tried many times without sustainable success. Your organization might be in gridlock because of politics, ingrained union practices, and so on.

A situation like this can lead to an “act of desperation.” In other words, your organization has lost its power and ability to improve as fast as a contractor can (or at least promises to), so this becomes the reason why your maintenance is contracted out.

Temporary Scheduled Increase in Workload. During scheduled shut-downs and major outages, it is natural that you contract out work. It can be very cost-effective to not only contract the resources for executing the work, but to also have them plan and schedule major outages.

However, periodic shutdowns — for example, every five to seven weeks — of a paper machine can, most probably, be managed better by your own shutdown planners.

Core Business Philosophy. Contract maintenance companies often argue, as a selling point, that maintenance is not a core business. Well, if you are a pulp and paper mill, or any other manufacturing plant, I would like to challenge that statement.

Why would maintenance not be a core business, while operations and manufacturing are considered core businesses?

In fact, I believe that one of the best ways of approaching outsourcing is to have a manufacturing contract that is not limited to maintenance alone.

In looking at maintenance contracts alone, you should look upon “equipment reliability tasks” as a core business.

You can always question if it makes good business sense to have your own carpenters, painters, people for scaffolding, masons, tinsmiths, and blacksmiths. Having the resources a phone call away and no invoice to explain will lead to more use of these resources than is needed.

I sometimes wonder how many unnecessary paint jobs — and bookshelves, tables, and other carpentry work — have been done just because the resources were available and the requestor of the work did not need to pay the full cost of it.

Equipment reliability is the result of maintenance work, and it includes such essential elements as maintenance prevention, including lubrication, filtration, alignment, cleaning, and operating practices.

It also includes preventive maintenance activities such as vibration analysis, basic inspections, and so forth.

I believe all equipment reliability activities should be performed with in-house resources, unless you contract out all maintenance on an equipment reliability performance and cost basis.

Lack of Skills. If your organization does not frequently use certain special skills, it is necessary to contract for these skills. Even if you train your own people in specialty skills, they cannot maintain them because they do not use them frequently enough.

The present and the future shortage of skilled craftspeople, especially in the U.S. pulp and paper industry, might be one of the best sales arguments for maintenance contract suppliers — if they have these resources to offer.
Also, it is not unheard for unions to hold back their own members from receiving training.

This fact has never made sense to me, since it should be in their interest to support training of members so that they are competitive with contractors.

Incentives and Goals
If you consider outsourcing maintenance, I advise you to set up a contract that includes an incentive for the contractor to continuously perform better.

Service
If your contract is based on buying service alone, there is no real incentive for the contractor to perform better. The more hours they sell, the more money they make, and they can sell more hours if your maintenance needs are reactive.

Only the fear of losing the contract will motivate the contractor to perform better.

Reliability
If your contract is based on delivering results, you can create a win-win situation for yourself and the contractor.

In most mills, results should be in the following order of priority after safety and environmental issues:
- Reliability of equipment.
- Cost of delivering reliability.

If there is an incentive for a contractor to deliver reliability, it naturally follows an incentive to prevent maintenance and to perform preventive maintenance, plan maintenance, schedule maintenance, and so forth. In summary, they need a disciplined process in place and a good system to support it.

In selecting a contractor, I suggest that you not only look at their rates, but that you spend the most time evaluating their maintenance philosophy (if they have one), what reliability and maintenance process they will implement, and how they will measure results.

Go into detail on the basics of how they would decide whether to prevent — or not prevent — component failures, how planning will be done, how scheduling will be done, which key performance indicators will be used, continuous training of their people, and so forth.

This is important, because you must remember that the only thing a contractor can do differently than you is that they can implement a more efficient work system.

They can often do this quickly, or at least they can promise to do it quickly. Seldom will a contractor bring in a crew with superior skills to your own.

The characteristics of a good maintenance contract.

Long Term Contracts
A maintenance contract should be long term — no less than five years and preferably longer than that. There are many reasons for this. Two of them are included in what Dr. Deming called the seven deadly diseases common to U.S. management. They are “Lack of constancy of purpose” and “Mobility of top management.”

My observation is that one phenomenon leads to the other. New managers are called in for fast and, unfortunately, often temporary results.

They often change the organization, perhaps only because they want to bring in their buddies, make some cut backs, and then move on to another place before the long-term effects are noticed.

The front line of the organization, where the actual actions of new directives have to take place, sees this as a constant change of direction. They start talking about the program of the month and, consequently, they do not change anything and the results of management efforts will be absent.

If this goes on for some time, no sustainable results will be achieved. In this situation, I think a long-term maintenance contract offers a possible solution.

The contract has to be founded on the right principles and work processes, because, when these are not changed for a long period of time, your contractor can help eliminate the “lack-of-constancy-of-purpose phenomenon.”

With good leadership, the work processes and your results should continuously improve. It could be done without a contractor, but not in a system where a new mill manager or maintenance manager means a new program.

Christer Idhammar is the Founder of IDCON INC., a reliability and maintenance management consulting and training company based in Raleigh, North Carolina (www.idcon.com). Christer can be reached by email at: c.idhammar@idcon.com.
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Kingsport Team Marks Milestones as Packaging Conversion Project Progresses

Editor’s note: The following story was originally published by Domtar and posted on the company’s website in the Newsroom section.

Bales, a boat and a bridge dedication have each played a part in the conversion of Domtar’s Kingsport Mill this spring, as the company has continued to meet important milestones on its way to machine startup.

The company’s first 100-percent recycled packaging facility should be completed by the end of the year and will use a bridge dedicated to the memory and vision of Marty Barfield, a friend, colleague and former mill manager who died in December 2020 after a long illness.

Dedicating the Bridge to the Future

In May, Domtar’s leaders held a bridge dedication ceremony at the site to honor Barfield.

As part of the project to convert the mill into our first 100-percent recycled packaging facility, the City of Kingsport and Domtar agreed to swap land parcels.

Domtar received Cloud Park, where a hub is being created to route truck traffic to and from the mill and nearby interstate highway.

A crucial component is the new bridge over the Kingsport Greenbelt and Reedy Creek. The new location will be more convenient for large trucks entering and leaving the mill as they bring bales of recovered paper to the mill.

The bridge also will alleviate heavy truck traffic downtown, reducing wear and tear on city streets, as well as noise pollution.

“We believe this structure is symbolically our ‘bridge to the future,’” Mill Manager Troy Wilson says. “It’s a perfect and meaningful way to honor Marty Barfield and his contributions to the mill. It represents his vision for the mill’s future and the positive influence he’s had on us all.”

Barfield enjoyed a 30-year career at Domtar. He was named Kingsport Mill manager in February 2019 and was instrumental in getting the mill’s packaging conversion project approved and launched. He was also the key architect behind the new operational work design.
His family, friends and colleagues, as well as Domtar President & CEO John Williams and other company leaders, traveled great distances to attend the event and enjoy a barbeque lunch — Barfield’s favorite.

**Mill Receives First Bales of Recovered Paper**

In April, the team received its first bales, made up of retail boxes and other mixed paper such as cereal boxes, office paper and newsprint. These will be stored until the mill starts producing 100-percent recycled containerboard by the end of the year.

The delivery was the first of many to come. Each year, the mill will use about 660,000 tons of recovered paper to produce new recycled packaging products to serve independent corrugated converters.

“We’re building recovered paper inventory in a thoughtful, measured way to prepare for our start up later this year,” says Steve Henry, packaging senior vice president.

**Agile Thinking Avoids Potential Shipping Delay**

In March, supply chain issues threatened to delay the team’s conversion schedule. Some out-of-the-box thinking kept the project on track.

The prospect of getting 43 dryer cans and other crucial equipment from the Dalian port in China to the mill in Tennessee presented a potential three-to-six-month schedule delay because of global shipping and supply chain backups.

This could have cost millions of dollars in lost earnings potential for the company. To ensure that didn’t happen, the mill team decided to rent its own boat — actually, a large ocean freighter — to take the load from China to the port in Charleston, South Carolina.

This not only brought the equipment to port more quickly, but also, after the ship arrived in port, it was able to unload immediately because it had cranes on board. In all, about 85 truckloads of equipment made its way from the port to the mill without delay.

“This project has given us an opportunity to demonstrate each of Domtar’s core values — innovation, agility and caring,” says Charlie Floyd, vice president of packaging capital. “And there’s more to come as we move toward completion and production.”

**About the Kingsport Conversion Project**

Domtar’s Kingsport, Tennessee, mill is undergoing a machine conversion project that will transform production of the mill’s paper machine from uncoated freesheet to about 600,000 tons of high-quality 100 percent recycled linerboard and corrugated medium annually. The mill will become Domtar’s first packaging facility and home to the second-largest recycled containerboard machine in North America. Visit: www.domtarpackaging kingsport.com for project news and updates.
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VTT Develops Transparent Cellulose Film to Replace Traditional Plastic in Food Packaging

VTT Technical Research Centre of Finland is piloting a new transparent cellulose film that reduces microplastic.

Food packages fulfill their most important tasks when they protect food and minimize waste. Thin plastic films are nevertheless difficult to recycle, and they often end up in the wrong places after use.

VTT has developed a solution to the problem of plastic packaging. Regenerated or recrystallized cellulose can replace plastic films.

“We can produce transparent and flexible cellulose film,” said Ali Harlin, Research Professor at VTT. “The consumer cannot distinguish between the crystal-clear material and traditional oil-based plastic. Cellulose film can resist dampness, but in nature it disappears as completely as a sheet of paper does. The product is biobased and biodegradable.”

Atte Virtanen, Vice President, for Biomaterial processing and products at VTT, added, “The cellulose film developed by VTT can replace plastic as a more climate-friendly solution. It also makes recycling easy, as it can be placed in cardboard recycling along with other packages.”

Finland remains far from the goals set by the EU for reducing the environmental harm caused by plastics. At present about 20 percent of plastics are collected, and even less ends up recycled. Under the EU target, 55 percent of plastics should be recycled by 2025.

Plastic Film Market Worth $110 Billion

Finland is currently more of a packaging material country than a printing paper country. In 2021, the value of sales of cardboard exceeded that of paper for the first time. The forest industry is looking for new products with a big market, which bring value-added. Flexible, transparent cellulose film is one such product. The world market for plastic films was about $110 billion last year.

VTT’s unique expertise has been used in cellulose film as a replacement for plastic. “VTT has researched cellulose films for more than ten years, and for more than six years on regenerated cellulose in transparent films,” Virtanen pointed out.

The production of packaging material is in the pilot phase, and it could be in extensive industrial use in 5–7 years.

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