

PAPER, PACKAGING AND FIBER MARKET NEWS AND PRICES FOR NORTH AMERICA

# US boxboard prices hold again in November as markets enter seasonal demand slowdown

While some boxboard buyers reported newer opportunities for lower prices in November, most contacts continued to see a steady market, with quick deliveries making for a smooth running industry, in sharp contrast to the record backlogs a year ago.

Some lower prices emerged again on bleached folding and recycled grades, sources said, as the market moved into its seasonally slower winter hibernation. Boxboard prices in the US domestic market remained unchanged in November.

"The season is over," asserted a recycled buyer who

>>> continued on page 8

# US boxmakers report 'steady' not strong uptick, sound fairly confident about orders to yearend; liner prices hold

North American corrugated box demand was reported as "steady" by various boxmakers with one calling demand for his company as "steady-plus" yet another calling the market "steady to soft." In all, despite the mixed reviews, the boxmakers expected an e-commerce-fueled holiday gift-buying pickup through yearend.

No one reported a strong uptick although a few plants ran six-day work weeks once or twice this month.

Pricing for unbleached kraft and recycled linerboard was unchanged on the domestic market in the US and Canada, >>> continued on page 6

# Capacity closures appear as uncoated freesheet prices hold pat in the USA and demand continues to decline

Uncoated freesheet (UFS) paper prices held steady in November, even though demand is seasonally soft and still declining, market contacts reported.

Sources mentioned that the price stability in November was supported by the upcoming conversion of 235,000 tons/yr of capacity at International Paper's (IP) Riverdale mill in Selma, AL, that is expected for the first quarter in 2020, and the recent closure of two Domtar paper machines.

Domtar closed a 170,000 tons/yr PM at Ashdown, AR, in October and a 34,000 tons/yr PM at Port Huron, MI, in November. >>> continued on page 14

### In this issue:

Pricing: Paper and board	3-5
Liner: McKinley, Verso to start up	2
Pulp: Family firm to restart mili	10
News: Prices hold, op rate at 80%	11
RCP: EPA calls for recycling help	18

#### Readers Note:

Fastmarkets RISI's PPI Pulp & Paper Week will not be publishing on Friday, Nov. 29 because of the Thanksgiving holiday in the USA and P&PW's 48-Issue-per-year publishing schedule.

The next P&PW will be published on Friday, Dec. 6. The issue will include the top industry news and developments along with a market story and pricing for US domestic and export recovered paper.

Sincerely and thanks,

Greg Rudder

Managing Editor, PPI Pulp & Paper Week

510-922-9504

arudder@fastmarkets.com

### Fastmarkets RISI News & Prices App





For more info: risi.com/app

DID YOU KNOW...

"Regular copying or other redistribution of this publication—in whole or in part—violates U.S. copyright law and is punishable by fines plus attorney's fees. For subscription and other inquiries, including discounted bulk subscriptions, contact info.risi@fastmarkets.com



### **Transportation**

## CN rail strike in Canada could threaten industry

The largest rail strike in 10 years against Canada's biggest rail carrier Canadian National (CN) by the Teamsters Canadian Rail Conference entered its third day Nov. 22, with 3,200 conductors, trainpersons, and yard workers off the job. Workers have been without a contract since July 23, and say they're concerned about long hours, fatigue, and what they consider dangerous working conditions, reports said.

CN moves \$250 billion worth of goods annually and is the largest forest products freight carrier in North America. The company reported C\$450 million in revenues from the forest sector in the third quarter, down 11% from a year ago. The industry accounted for 93,000 carloads in the quarter, down 14%.

The BC Council of Forest Industries (COFI) expressed concern about the strike's disruptions.

"Ninety percent of the forest products we produce are sent to export markets in North America and around the world," said COFI CEO Susan Yurkovich. "We rely on critical transportation infrastructure and reliable rail service to get our products to market and serve our customers."

The Forest Products Assn of Canada (FPAC) noted the forest products sector accounts for 10% of total tonnage transported on Canada's railroads, often in remote locations.

"Further compounding the severity of a disruption is the

ongoing truck driver shortage, which means additional costs, higher rates, and an inability to ship products to customers," said FPAC CEO Derek Nighbor.

CN on Nov. 21 said it had proposed to present its arguments to a neutral arbitrator to end the dispute, and hoped the union would do the same. Press reports Nov. 22 said there was "no real progress" in negotiations.

--by jmclaren@fastmarkets.com

### Containerboard

### McKinley Paper says it plans mid-Jan. Port Angeles startup; Verso, Crossroads moving ahead

Bio-Pappel's McKinley Paper expects to start up one or two converted groundwood paper machines in mid-January in Port Angeles, WA, the company said this week. The capacity of the two machines is to be at about 180,000 tons/yr of recycled lightweight containerboard and 60,000 tons/yr of recycled unbleached kraft paper.

The machines previously made groundwood paper and were run by Japan's Nippon Paper. Bio-Pappel and McKinley are already in the kraft paper business in the US and Mexico, so the Port Angeles tonnage was expected to be in demand when it starts up, contacts claimed.

McKinley Paper mill general mgr Edward Bortz told a local newspaper on Nov. 18 that equipment is being installed at the mill site and the company was hiring sorters for recovered paper, but Bortz added, related to the startup, that "we are trying to do it as fast as we can."

Bio-Pappel in July launched in a much larger fashion in the US market when purchasing a majority share of US Corrugated, which runs corrugated plants around the country and plans a new 440,000 ft² one by yearend or more likely in early 2020 in Lebanon, IN. The company also plans to start up corrugated plants in the Dallas area and in Mexico in the next several years.

Low cost and sustainability. At Fostmarkets RISI's International Containerboard Conference (ICC) last week in Miami Beach, Bio-Pappel chmn and CEO Miguel Rincon spoke on the CEO panel and while not naming Port Angeles said that the key for his company overall was to be a low-cost recycled producer that supports sustainability.

As for the US investments, Rincon told attendees that the "best place in the world to invest" is in the USA. He cited business tax and energy benefits.

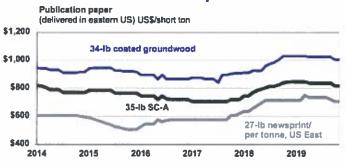
The Port Angeles mill would start up at an advantageous time because US recovered paper prices for old corrugated containers, the main material that the Port Angeles machines will run on, are at possibly their lowest ever FOB seller's dock level.

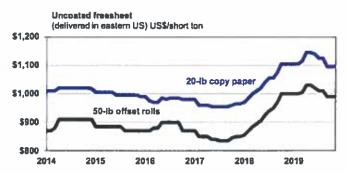
An industry contact claimed that the mill could sell its containerboard into the large box-making Los Angeles/Southern California region or along the West Coast and also could develop trades that end up supplying US Corrugated plants in other parts of the country that are too far away freight-wise from Port Angeles.

>>> continued on page 5



## PRICE WATCH: Paper





Delivered US\$/short ton (unless otherwise noted). Ranges represent the range of prices in which the bulk of transactions have taken place. However, there is significant tonnage that transacts at prices outside of this range.

nowever, there is significant tonnage that	Current months							Year-to-year	
	Unit	Nov. 2019		Oct. 2019		Sep. 2019		Nov. 2018	% chg
NEWSPRINT 1									
45-g (27.7-b) East	tonne	706		706		721		766	-7.8
45-g (27.7-lb) West	tonne	696		696		711		756	-7.9
UNCOATED MECHANICAL									
35-lb MF offset, 65 bright	sh. ton	740 - 760		740 - 760		740 - 760	THE ST	770 - 790	-3.8
35-lb supercalendered (SC-A)	sh, ton	805 - 830		805 - 830		825 - 850		835 - 855	-3.3
33-lb supercalendered (SC-B)	sh, ton	740 - 790		740 - 790		740 - 790		795 - 815	-5.0
45-lb offset substitute, 83/84 bright	sh, ton	880 - 925		880 - 925		880 - 925		900 - 945	-2.2
COATED PAPERS									
Premium 80-lb sheets 4	sh. ton	1,420 - 1,520	4	1,420 - 1,520	6	1,440 - 1,540		1,440 - 1,540	-1.3
Economy 80-lb sheets *	sh. ton	1,160 - 1,225		1,160 - 1,225		1,180 - 1,245		1,180 - 1,245	-1.6
No. 3, 50-lb rolls	sh. ton	1,065 - 1,110		1,065 - 1,110		1,085 - 1,130		1,085 - 1,130	-1.8
No. 3, 60-lb rolls	sh. ton	1,005 - 1,035		1,005 - 1,035		1,025 - 1,055		1,025 - 1,055	-1.9
No. 4, 50-lb gwd. rolls 78/80 bright	sh. ton	940 - 980		940 - 980		960 - 1,000		960 - 1,005	-2.3
No. 5, 34-lb roto, rolls	sh. ton	980 - 1,030		980 - 1,030		1,000 - 1,050		1,010 - 1,050	-2.4
No. 5, 40-lb offset, rolls	sh. ton	835 - 905		835 - 905		855 - 925		885 - 925	-3.9
UNCOATED FREESHEET									
20-lb copy paper, 92 bright *	sh. ton	1,070 - 1,120		1,070 - 1,120	*	1,070 - 1,120	*	1,090 - 1,120	-0.9
20-lb copy paper, 30% PCW, 92 bright	sh. ton	1,130 - 1,180		1,130 - 1,180	*	1,130 - 1,180	*	1,150 - 1,180	-0.9
50-lb offset rolls, 92 bright	sh. ton	980 - 1,000		980 - 1,000	*	980 - 1,000	*	990 - 1,010	-1.0
24-lb white wove envelope rolls, 92 bright	sh. ton	1,030 - 1,070		1,030 - 1,070	w	1,030 - 1,070	W	1,040 - 1,080	-0.9
20-lb forms bond, stock tab	sh. ton	1,055 - 1,095		1,055 - 1,095	w	1,055 - 1,095	w	1,065 - 1,105	-0.9
50-lb trade book, offset, rolls	sh. ton	1,165 - 1,205		1,165 - 1,205	*	1,165 - 1,205	rite .	1,175 - 1,215	-0.8
SPECIALTIES <sup>3</sup>									
48-g thermal POS non top coated <sup>3</sup>	MSF	18.20		18.60		18.60	w	20.60	-11.7
40-lb SCK release liner label (2.5 mil)	MSF	10.40		10.40		10,40	W	10.40	0.0
13- to 16-lb carbonless CB, roll midrange	sh. ton	2,354		2,354		2,354	w.	2,180	8.0

### NOTES

### DISCLAIMER

While the information contained in this report has been actained from sources believed to be reliable, Fastmarkets RISI does not warrant or guarantee the accuracy and completeness of the information. As or ces are best estimates of prices and are composed to median or average prices.

<sup>(\*)</sup> Some discounting below transaction prices. May indicate imported paper at lower price levels. PCW#postconsumer waste

<sup>1.</sup> Newsprint 48 8-g (30-b) assessments were discontinued in April 2019

<sup>2.</sup> Future price increase announced by major producer(s) but not reflected in current data.

<sup>3.</sup> The 48-g is 12.8 bs.

<sup>4.</sup> Premium sheets are equivalent to No. 2 and Economy sheets are equivalent to No. 3

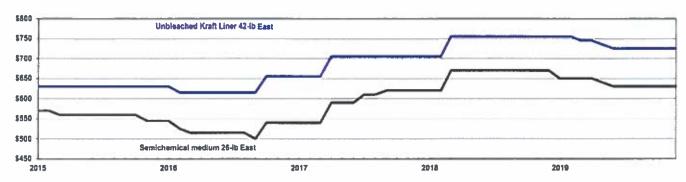
<sup>5.</sup> Prices represent printer list prices. Prices for large retail program tonnage will be lower.

<sup>6.</sup> Volume of transactions outside of reported range is wider for copy paper than other grades. Prices higher than the range typically include smaller volumes and/or mill brands, and prices lower than the range typically involve larger contract volumes.

n.a. - not available.



## PRICE WATCH: Containerboard/Kraft Papers Domestic



Delivered, US\$ (unless otherwise noted)	Current months					Year-to-year		
CONTAINERBOARD	Unit	Nov. 2019	Oct. 2019	7	Sep. 2019		Nov. 2018	% chg.
DOMESTIC OPEN MARKET PRICE								
Unbleached kraft linerboard (42-lb)								
East	sh. ton	\$720 - 730 *	\$720 - 730	*	\$720 - 730	*	\$750 - 760	-4.0%
West	sh. ton	720-730 *	720 - 730	*	720 - 730	*	750 - 760	-4.0
High performance linerboard (35-/36-lb)								
East	sh. ton	730 - 740 *	730 - 740	*	730 - 740	*	770 - 780	-5.2
Recycled linerboard (30-/31-lb) <sup>1</sup>								
East	sh. ton	630-640 *	630 - 640	W	630 - 640	*	700 - 710	-9.9%
West	sh. ton	630-640 *	630 - 640	*	630 - 640	*	700 - 710	-9.9%
White top linerboard (42-lb)								
East	sh. ton	950-960 *	950 - 960	*	950 - 960	*	970 - 980	-2.1
West	sh. ton	960-970 *	960 - 970	×	960 - 970	*	980 - 990	-2.0
Corrugating Medium (26-lb semichemical)								
East	sh. ton	625-635 *	625 - 635	=	625 - 635	*	665 - 675	-6.0
West	sh. ton	625-635 *	625 - 635	*	625 - 635	*	665 - 675	-6.0
EXPORT LINERBOARD - Unbleached kraft								
175-g+ Southern Europe (CIF)	tonne	€ 415 - 435 *	€ 425 - 445	*	€ 430 - 450	*	€ 630 - 640	-33.1
175-g+ China (C&F) <sup>2</sup>	tonne	520-550 *	520 - 550	Ħ	520 - 550	*	750 - 780	-30.1
42-lb Laredo border/Mexico (FOB)	tonne	600-610 *	600 - 610	*	605 - 615	+	690 - 700	-12.9
42-lb Central/South America (FAS)	sh. ton	500 - 510 *	500 - 510	=	505 - 515	*	620 - 630	-19.2
KRAFT PAPERS								
Unbleached					I SVERE			
Extensible multiwall sack, 50-lb	sh. ton	1,280 - 1,300 *	1,280 - 1,300	*	1,280 - 1,300	+	1,320 - 1,340	-3.0
Natural multiwall sack, 50-lb	sh. ton	1,125 - 1,135 *	1,125 - 1,135	*	1,125 - 1,135	*	1,165 - 1,175	-3.4
Grocery bag, 30-lb	sh. ton	1,310 - 1,330 *	1,310 - 1,330	*	1,310 - 1,330	*	1,350 - 1,370	-2.9
Bleached								
Grocery bag, 30-lb	sh. ton	1,640 - 1,650 *	1,640 - 1,650	*	1,640 - 1,650	*	1,640 - 1,650	0.0

### NOTES

With the launch of new assessments for recycled linerboard, and lower basis weight assessments, Fastmarkets RISI has removed the footnate to this table containing indicative differentials for other containerboard basis weights and grades. As we add new assessments to our portfolio, we believe this footnate is no longer relevant.

### DISCLAIMER

While the information contained in this report has been obtained from sources believed to be reliable, l'astmarkets RISI does not warrant or guarantee the accuracy and completeness of the information. All prices are best estimates of prices, and are composite prices as apposed to median or average prices.

<sup>\*</sup>Discounting has been reported below price shown.

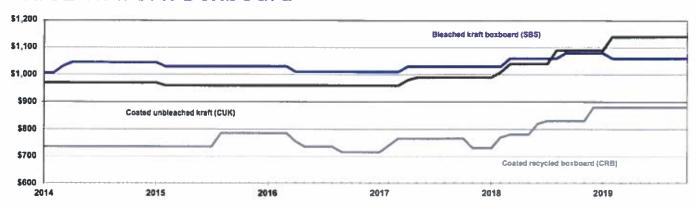
<sup>1.</sup> Fastmarkets RISI launched assessments of 30-/31-lb recycled Inerboard in September 2019. A two year synthetic history was compiled by Fastmarkets RISI economists to coincide with the launch. These historical prices are meant as indicative levels only and should not be considered formal Fastmarkets RISI assessments.

<sup>2.</sup> From January 2018 the reference to Hong Kong was removed. This is a change in location name, not in methodology. Price includes all China ports.

<sup>3.</sup> Future price increase announced by major producer (s) but not reflected in current data.



### PRICE WATCH: Boxboard



Delivered, US\$/sh.ton (unless otherwise noted)

Current months

Year-to-year

Nov. 2019

Oct. 2019

Sep. 2019

Nov. 2018

% chg.

Solid bleached sulfate board (SBS)

16-pt folding carton, C1S 1,040 - 1,080 1,040 - 1,080 -1.9 1.040 - 1.080 1,060-1,100 14-pt cup stock, PE2S 1,330 - 1,370 1.330 - 1.370 1.330 - 1.370 1.330 - 1.370 0.0 Coated unbleached kraft board (CUK) 20-pt folding carton, C15 1,120 - 1,160 1,120 - 1,160 1,120 - 1,160 1,070-1,110 4.6 Recycled folding boxboard (CRB, URB) 20-pt clay coated news 870 - 890 870 - 890 870 - 890 820-840 6.0

720 - 740

720 - 740

720 - 740

20-pt bending chip

### DISCLAIMER

NOTES

While the information contained in this report has been obtained from sources believed to be reliable, fast markets RISI does not warrant or guarantee the accuracy and completeness of the information. All prices are best est mates of prices, and are composite prices as apposed to median or average prices.

### 2 Liner startups In Jan.

>>> continued from page 2

• Verso interim CEO Les
Lederer said recently that the
company expected to complete
a conversion at its Duluth, MN,
mill to recycled containerboard
and unbleached kraft paper in
January. Lederer told analysts
that the company plans to make
about 40,000 to 44,000 tons/
yr of recycled containerboard
and kraft bag paper, and "that
project is well on its way to
completion." "It's expected that
we will produce on that capital

expenditure sometime in the first part of January," Lederer said. Contacts have said the company makes containerboard at basis weights of 35-lb and under.

• New-Indy Containerboard is to receive a locked-in 4% tax rate in South Carolina for its \$433 million project to convert a coated printing and writing paper machine to one that is to make "ultra" lightweight linerboard and corrugating medium in Catawba, SC. The York County (SC) Council approved the tax break, which is employed if New-Indy invests at least \$400 million within eight

years. New-Indy has not identified when it plans the conversion. New Indy COO Rick Hartman was quoted in the Rock Hill Herald as saying that the project would be "about a 10-month process," and "we're in the throes of finalizing engineering and purchasing of the equipment." Hartman said the incentive agreement was important for New Indy. "It'll breathe new life into the mill, which was really headed on a downward spiral. It'll cement the future of the mill and it will actually provide and preserve jobs," he said. New Indy purchased the former Resolute

720 - 740

0.0

<sup>\*</sup> Discounting has been reported below price shown.

# Future price increase announced by major producer (s) but not reflected in current data

I Boxboard prices above and below these levels have been reported

## Fastmarkets

### PPI Pulp & Paper Week

Forest Products mill at the end of 2018 for \$300 million.

 Also, for a \$320 million project expected to start in 2 ½ years, Crossroads Paper leader Ron Sasine, a former Walmart packaging executive and now also a consultant for Hudson Windsor in Arkansas. told ICC attendees that the company appears "very close" to selecting a site for its 100% recycled lightweight containerboard machine project in the Salt Lake City area. The company sees a second-quarter 2022 startup for the PM, which is supposed to produce 950 to 1,000 tons/day. Sasine said the company visited mills in both the US and Europe. He said Crossroads would sell its board primarily within an area

from roughly Salt Lake City to Boise to Denver to Reno.

 Two of three large international kraft linerboard projects were on display at ICC. Klabin's Flavio Deganutti told attendees that the company planned the startup of MP No. 27 in 2021 with capacity of 450,000 tonnes/yr as part of the company's Puma project. MP No. 27 is to make 80- to 200-g/ m2 kraft linerboard and white top linerboard. The company plans to start up MP No. 28 in 2023 with capacity of 470,000 tonnes/yr. MP No. 28 is to make 150- to 300g kraft linerboard. Both PMs are to make Klabin's eukaliner out of 100% bleached eucalyptus kraft pulp. Ilim's Alexei Malikov said the company, which is in a 50-50 venture with International Paper, plans to start up a 600,000

tonnes/yr kraft linerboard machine at its Ust-llimsk mill in Russia in 2021. The PM will make 80- to 175-g/m2 linerboard.

--by <u>arudder@fastmarkets.com</u>

### Box demand called steady

>>> continued from page 1

according to Fastmarkets RISI's PPI Pulp & Paper Week survey.
One contact suggested that "price chatter had died down" as box cutup was at a "pretty good clip." P&PW last dropped the benchmark 42-lb kraft linerboard domestic price in June. Also, US export kraft linerboard was unchanged in three of four regions, with only a Euro 10 drop to southern Europe. It was the first time in months that export kraft linerboard held sequentially in almost all regions surveyed.

This said, North American boxmakers also said their cut-up overall for the year was unchanged vs last year or very slightly increased. The flat business condition has been a recurring theme this year especially following negative output from US manufacturing in the second quarter. Through October, US average-week box shipments were up 0.2% vs shipments in 2018 through October and actual shipments were down 0.2%, with one less shipping day so far this year, according to Fibre Box Association figures.

A West Coast contact reported that integrated box plants were said to be "very busy" and other smaller box

### Key US market indicators

(Percent changes are month-over-month or quarter-to-quarter unless otherwise noted.)

	10 2019	2G 2019	3GI 2019
Gross domestic product, %	3.1	2.0	1.9
	Aug. 2019	Sept. 2019	Oct. 2019
Natural gas wellhead industrial (per 000 cu. ft)	\$3.20	n.a.	n.a.
US industrial production, % chg.	0.7	-0.3	-0.8
Nondurable (non-energy) output growth, %	0.2	0.3	0.7
Trade deficit (billion)	\$55.0	\$52.5	n.a.
Housing starts, seasonally-adjusted			
(millions of units)	1.375	1.266	1.314
US retail sales, % growth, seasonally-adjusted	0.6	-0.3	0.3
Institute for Supply Management Index Manufacturing, %	49.1	47.8	48.3
US unemployment, %	3.7	3.5	3.6
US consumer price index, % chg.,			
seasonally-adjusted	0.1	0.0	0.4
Target US federal funds rate %	2.0-2.25	1.75-2.0	1.75-2.0
Printing/support output, monthly rate, % chg.	0.4	0.0	0.4
Rates per US dollar	Sept. 30	Oct. 31	Nov. 15
*Euro	1.090	1.115	1.104
C\$	1.324	1.314	1.322
Brazilian Real	4.16	4.01	4.19
Chinese RMB	7.14	7.03	7.00

Notes: The monthly US Energy Information Admn. natural gas industrial price was \$3.34 in July 2019. \*US dollars per Euro. The target federal funds rate was decreased to 1.75-2.0% on Sept. 19. e=estimate, n.a.=not available. Sources: RISI's Monthly Economic Commentary, US Federal Reserve, Dept of Commerce, Bureau of Labor Statistics, Dept of Energy, and Census Bureau, and Institute for Supply Management.



plants "were struggling" for additional business.

"Is it a false busy?" the contact asked. "Everyone thought they'd be a lot more busier."

"We're all just kind of sitting pat to see what's going to go on to yearend and then come January," the contact added.

### Quick turnarounds. One

Midwest boxmaker reported some "down" manufacturing output from customers, and noted that some customers held less stock while wanting "quick turnaround" on boxes. He said these customers appeared "concerned about where the economy might be going" and this affected how they ran their business now and their expectations in the short-term.

Government statistics showed the manufacturing slowness.

The ISM Manufacturing Report increased to 48.3% for October after a six-month decline. September's 47.8% PMI was the lowest month in 10 years since the Great Recession and was the low-point of a decline from 55.3% in March. US government figures showed industrial production was down 1.1% compared with October 2018 production.

### Walmart grocery growth.

In grocery, which represents about 55% of Walmart's first-quarter revenue of \$127.9 billion, the company reported samestore US sales grew 3.2% in the third quarter, vs in third-quarter 2018, and said it would continue to grow online sales.

The world's largest grocery/ retailer started testing store grocery delivery to customers'

## Top US kraft linerboard country destinations

(Year-to-date through Sept. 2019.)

	000 tonnes	% chg. YTD
1 Mexico	560	-3.3%
2 China	321	-25.3
3 Canada	209	20.8
4 Italy	211	0.5
5 Guatemala	162	-8.5
6 Costa Rica	140	-9.7
7 Ecuador	110	-25.7
8 Spain	103	-18.9
9 Turkey	74	-49.6
10 Dominican Rep	. 72	7.4%

YTD: year-to-date.
Source: US trade statistics.

refrigerators in three cities, has an InHome grocery delivery membership program, has more than 2,700 grocery pickup locations for online US orders, and has a "Delivery Unlimited" option from 1,400 locations for unlimited grocery delivery.

In retail per se, "is the consumer healthy and is the consumer shopping? The answer is definitely yes," said retail expert Joel Bines of turnaround consulting firm AlixPartners on a TV business show this week.

Both Target and Walmart CEOs expected "good" and "solid" holiday sales at their stores. Only about 20% of Target's sales are in grocery, which the company said this week improved in the last quarter. Again, like Walmart, the company reported strong growth in online orders and pickup of goods at stores. The company's share price hit an all-time high on Nov. 20.

"It's pretty oddly, quietly, good," described an Eastern boxmaker, explaining his order flow.

The boxmaker told of steady October through late November demand and was already seeing what he expected to be an e-commerce pickup.

"October was not very strong," said another contact. "November is not declining compared to October so it's kind of compensated for the other."

One box distributor this week reported a longer wait time of about four days for boxes, compared with three to four months ago. Another, in the Midwest, reported noticeable "pent-up" demand the last few weeks.

- Packaging Corp of America (PCA) proposed a \$900 million offering in sr unsecured notes as part of a refinancing. The new notes mature in 2029 and 2049. PCA intends to use proceeds to repay bonds due in 2020 and 2022. According to Moody's Investors Service, "PCA has strong liquidity with more than \$1.3 billion. PCA had about \$738 million of cash (as of September 2019), \$329 million of availability under a \$350 million committed revolver (matures August 2021), and our expectations of approximately \$300 million of free cash flow (after dividends) over the next 12 months."
- A theme during RISI's
  International Containerboard
  Conference (ICC) CEO panel
  in Miami Beach last week was
  sustainability, focused on reducing
  waste and carbon footprint. Leaders
  also pointed to sustainability as
  a plug for papermakers against
  plastic packaging. WestRock
  CEO Steve Voorhees said he
  expects the company to gain \$100
  million/yr in additional business
  that previously was with plastics
  companies. "It is our obligation"
  to support sustainability, Klabin

# Fastmarkets

## PPI Pulp & Paper Week

CEO Cristiano Teixeira said during the CEO panel on Nov. 14. He pointed to two new large kraft linerboard machines with 920,000 tonnes/yr of capacity that are to be 100% fibered with bleached eucalyptus kraft (BEK) pulp that should result in lighter packaging, a better print quality surface, and 10% less fiber for customers. He said the company has tested BEK-furnished kraft linerboard in Brazil. On the panel, along with sustainability, the leaders told of needing to be faster to market with end products, such as "delivering a commitment" on a job within a half hour and working with 18-hour lead times, and continuing to move to "digitalize" the supply chain from the box maker and corrugated buyer to the end box user. Voorhees told of his firm making corrugated displays in one day. Teixeira added that Klabin has to "follow what e-commerce will be in the future and adapt to its needs." McKinsey Group Sr Expert and Associate Partner Daniel Nordigarden later told attendees, which numbered about 260, that he expects a corrugated converting plant will soon be installed in an e-retailer's fulfillment center. He saw this as a more direct approach for converters to e-commerce business.

• Smurfit Kappa Group
launched its GreenClip corrugated
packaging product for bundling
canned and bottled beverages.
The "new corrugated range
eliminates the need for single-use
plastic and is 100% recyclable,
renewable and biodegradable,"
the company said. The GreenClip
product is to replace plastic
rings that are used to group six
packs. Smurfit Kappa's German
Pulido discussed the GreenClip
during his presentation on
sustainability at ICC on Nov. 15.

• Green Bay Packaging (GBP) said it became a minority owner of CompanyBox, effective Nov. 22. CompanyBox, based in Charlotte, NC, was formed in in 2014 by Louie DeJesus and his family to use "proprietary workflow processes and software to be one of the few companies in the US to have truly mastered the web to print in packaging," the companies said. "Company Box is ahead of the curve in their ability to customize, sell and service through the internet." "We are very excited about investing in and becoming a minority owner of CompanyBox. Louie DeJesus and the entire CompanyBox team bring innovation, speed-to-market and full customization to the online packaging marketplace," said Green Bay Packaging pres/CEO Will Kress. "They have cutting-edge capabilities and most importantly, an extremely intelligent team that has their ear to the marketplace. We feel the GBP team can help CompanyBox continue their staggering growth rate and be the leader in packaging customization," said Green Bay Packaging Exec VP Bryan Hollenbach, in the summer of 2018, CompanyBox announced the purchase of a HP PageWide C500 Press to produce high-quality digital post-print corrugated packaging. The company operates a greenfield all-digital packaging plant in Charlotte and an additional plant in Geneva, OH.

---by grudder@fastmarkets.com

### Boxboard slowdown in play

>>> continued from page 1

said market players were "livid" over high pricing after a string of increases last year. As did others, he said recovered paper furnish costs do not justify today's paperboard prices, and market conditions are slowing, not just seasonally.

October trade data showed some contradictions in coated recycled board (CRB), such as a 100% operating rate, yet unmade orders at 38% below a year ago, inventories 68% higher, and flat shipments.

Solid bleached sulfate (SBS) folding carton operated at 79.2% in October, reflecting the shut of two machines at Georgia-Pacific's mill in Crossett, AR, as well as a major maintenance outage at Graphic Packaging in Texarkana, TX. Total SBS shipments were down 11% and inventories were up 24%.

A producer contact called November conditions "normal, seasonal stuff," and downplayed ongoing reports of discounting.

"We are not participating in that," he said.

"They are saying one thing and doing another," insisted another recycled buyer. He believed discounts on CRB and uncoated recycled board (URB) were there for the taking.

"They're not asking," he said of other buyers. "Why do they [suppliers] do it for me?"

Another buyer said there was "a flood of URB" in the market and called CRB conditions "terrible" for producers.

Several contacts reported maintaining contractual terms while the remainder of up to \$150/ton in price increases, including coated unbleached kraft



(CUK), continued to be passed through the market, by both producers and carton converters.

"You have to reach an agreement on pricing," said a buyer. "Not break the contract, but get better prices."

"Every contract is unique," said a consumer product group contact, who said he had fared pretty well on the passthrough on his carton prices.

"We negotiated. We were talking to all our suppliers," he said.

A few contacts said most of the offers on prices were for added volumes or for switching suppliers, which they were not very interested in. One said his pass-through of the 2018 price hikes had gone well, and that his customers understood from the size of the increases last year the need to pass it on.

"We get it back one way or another," he said.

"Everything is stable and firm," insisted another carton contact who challenged the appetite to "play with prices."

He said the short lead times in CRB are an indication of "how bad things were" with the market tightness in 2018 that followed two mill shuts in 2017. He wondered if the GP SBS shut would play out similar to the CRB mill shuts, driving up backlogs "when the true effect kicks in."

"There is no negotiating," over CUK prices, he added. Others agreed, and said the prices were likely to remain above SBS folding prices for an extended time. "So be it," said a buyer of both, "The bleached guys can't stand it."

URB markets continued to see discounting, with one producer noting the impact of paper machine outages such as GP's in Arkansas and Louisiana this year on tube and core demand.

"Yes, it is definitely slower than last year," he said of market conditions. "But things are pretty darn steady."

October statistics. SBS folding carton production in October was 6.9% higher from a year ago at 157,200 tons and year-to-date was 3.3% lower at 1.723 million tons, the American Forest & Paper Association (AF&PA) reported. Production for export dropped 23.9% month-to-month and at 19,100 tons was 2.1% higher than a year ago. Export output year-to-date was off 1.2% to 245,600 tons.

The sector operated at 79.2% in the month due to outages, from 82.2% in September and 91.2% a year ago. Utilization year-to-date was 96.2% from 87.3%.

SBS food service production at 174,100 tons in October was 21.6% higher from a year ago and year-to-date was up 7.1% to 1.729 million tons. Cup stock production at 78,100 tons was 16.9% higher from a year ago and year-to-date at 788,900 tons was up 0.9%.

SBS liquid packaging output in the month was down 4.1% from a year ago at 94,600 tons and through 10 months was 3.6% lower at 962,500 tons.

The SBS food service/liquid packaging sector operated at 96.6% in October from 90.1%

a year ago, and year-to-date was 96.6% from 93.9%.

Total SBS production at 433,100 tons was up 7% from a year ago and year-to-date was down 0.4% to 4.495 million tons. Shipments at 413,000 tons were down 10.8% from a year ago and through 10 months were down 3.2% to 4.405 million tons.

Total SBS unmade orders in October at 447,600 tons were down 8% from September and were 13.2% lower than a year ago. Inventories were 23.9% higher to 535,700 tons.

CUK/gypsum production in October was up 3.5% from a year ago to 336,300 tons, and year-to-date was flat at 3.261 million tons. The sector operated at 93.2% in the month from 92.1% a year ago, and year-to-date was 92.2% from 92.5%. Major CUK maintenance and capital spending outages have been carried out this year.

Shipments were up 3.3% in the month to 337,200 tons and were off 1.8% year-to-date to 3.254 million tons. Inventories were 24.1% higher at 183,400 tons.

October CRB production was down 3.2% from a year ago to 169,600 tons and year-to-date was off 0.1% to 1.624 million tons, the AF&PA figures showed. Utilization was 100.3% from 98.9%, and year-to-date was 97.9% from 97.4%.

Shipments in the month were up 0.7% to 175,000 tons, and year-to-date were 2.4% lower to 1.613 million tons. Inventories at 69,700 tons were 68.4% above a year ago. Unmade orders at 105,600 tons declined



13.6% from September and were 38% below a year ago.

URB production in October was down 4.8% at 194,500 tons, with Greif shutting its 65,000 tons/yr PM No. 1 machine in Mobile, AL, at the end of the month. Year-to-date production was down 1.7% at 1.939 million tons. Tube/core/drum output at 119,600 tons in the month was down 3.3% from a year ago and through 10 months was down 2.7% to 1.164 million tons. Utilization was 91.4% from 96.3% a year ago, and year-to-date was 93.0% from 94.6%.

URB shipments were down 3.1% in the month to 198,600 tons, and year-to-date were 2.0% lower to 1.921 million tons. Inventories were 23.2% higher to 81,300 tons. Unmade orders at 159,000 tons were up 17.5% from a year ago.

• Dunkin' Brands said it will eliminate all polystyrene foam cups in its global supply chain with a targeted completion date of 2020. As of Dec. 1, all Dunkin' restaurants in New England will be fully transitioned to a double-walled paper cup, the company announced on Nov. 16. The company originally unveiled the plan in early 2018, and announced its "number one sustainability goal was to find an environmentally friendlier coffee cup," in 2011. The company sells an estimated 2 billion hot and cold cups annually. Major cupstock producer and converter Graphic Packaging told P&PW the company is already supplying paper cups to Dunkin'. Graphic makes about 30% of all US paper cups, an analyst estimated. Dunkin' said it would promote the move as "the double cup is breaking up," referring to a longheld customer request of double

cupping their drinks for insulation. The new cups will be Sustainable Forestry Initiative certified, but with a plastic coating inside, are not fully recyclable, the company acknowledged.

• Coca-Cola and strategic bottling partners in Europe will begin rolling out Graphic Packaging's KeeiClip product, an innovative solid unbleached sulfate (SUS) paperboard packaging solution that will replace plastic shrink-wrap on multipack ready-to-drink cans. Graphic's SUS product is also known as CUK. Coca-Cola HBC will remove shrink-wrap from all can multipacks in all European Union markets by the end of 2021. It will invest Euro 15 million in KeelClip, and begin the roll-out in Ireland and Poland early next year, followed by four other countries in 2020. It will save 2,000 tonnes of plastic and 3,000 tonnes of CO2 annually. Coca-Cola European Partners committed in October to removing all unnecessary or hard-to-recycle plastic from its portfolio, avoiding the use of more than 11,000 tonnes of virgin plastic a year across the countries where it operates. It will roll-out KeelClip in the Netherlands early next year with more markets to follow, investing Euro 14 million in its factory in the Netherlands

to install a new can line and a KeelClip packaging machine. Graphic Packaging has said AB InBev, the world's largest brewer, as well as its Budweiser Brewing Group in the UK and Ireland, will be the first to commercialize KeelClip, beginning in March 2020.

--by imclaren@fastmarkets.com

### Pulp

## Family business plans to restart Quévillon, QC, mill

A year after acquiring a longidled 300,000 tonnes/yr northern bleached softwood kraft (NBSK) pulp mill in Lebel-sur-Quévillon (LSQ), QC, lumber and engineered wood distributor Chantiers Chibougamau announced it intends to restart production by next summer. The family-run firm, which said the Quebec government would finance 40% of the C\$342 million in restart costs, renamed the LSQ mill as Nordic Kraft -- in line with its two other business divisions, Nordic Structures and Foresterie Nordic.

"Although the mill closed over a decade ago, its strategic production equipment is still in excellent condition," Chantiers Chibougamau said in

## COVERAGE NOTE: Correction to European fluff pulp assessment in P&PW on Nov 15

Due to a production error, European fluff pulp assessments published in Fastmarkets RISI's *PPI Pulp & Paper Week* on Nov 15 appeared incorrectly as \$1,110/tonne. The correct price is \$1,100-1,110/tonne, in line with US fluff pulp assessments.

The correct European fluff pulp assessment appeared online in the RISI portal and mobile app. The Price Watch table in *PPI Pulp & Paper Week* has now also been corrected.

For comments or queries please contact <u>pricing.risi@fastmarkets.com</u>.



a release on Nov. 8. "The global market for kraft pulp has been transformed in recent years, offering significant prospects for decades-long growth."

Quebec-based Chantiers
Chibougamau, headquartered
in the town of Chibougamau
since its inception in 1961,
cited increased consumption
of tissue paper in Asia, global
interest in consumer products,
food and beverages in "ecofriendly" packaging and
cups, and the emergence of
e-commerce as potential outlets
to consume the mill's NBSK.

Domtar idled the mill in November 2005. At the time, it cited high costs for fiber, energy, and transportation. Domtar later shuttered LSQ's sawmilling operations in 2006. Domtar is one of the world's largest market pulp companies today.

Industry contacts questioned whether a restart would occur. Those sources said gathering the remaining 60% in financing for a market pulp mill that would face high fiber and transportation costs could prove difficult.

Another hurdle would be the length of the mill's shutdown. A pulp mill that's remained idle for 14 years would require significant repair. However, market pulp buyer contacts said they'd welcome the mill as a potential new source.

Chantiers Chibougamau is the latest firm to embark on an effort to revive the LSQ facility.

In 2012, Fortress Paper, which is now Fortress Global, acquired the mill, sawmilling operations, and its land from Domtar for C\$1. It also ratified a collective agreement with the unionized employees. Fortress planned to invest C\$222 million in a conversion project that would make it a dissolving pulp (DP) facility with 200,000 tonnes/yr of capacity. Fortress also acquired a 30 MW nonoperating cogeneration facility at LSQ, which it planned to restart for generating income. But the global DP market collapsed in pricing, and Fortress never finished the project. In July 2016, Fortress sold the mill and sawmill assets to LSQ Energy.

The province of Quebec released a statement saying the LSQ reopening would create about 300 jobs that will likely pay an average of C\$90,000 a year, the Montreal Gazette reported. More than 180 production workers have already been hired, according to Chantiers Chibougamau.

The LSQ mill is one of two market pulp mills Dorntar closed and then sold to other firms. In both cases, the sales contracts included noncompete clauses that forbade suitors from making NBSK. In addition to LSQ, the other idle NBSK pulp mill was a 328,000 tonnes/yr facility at Prince Albert, SK, which it sold to Paper Excellence for a DP conversion similar to the Fortress plan (*P&PW*, Mar. 11, 2011). By the time Chantiers Chibougamau intends to restart production at LSQ, the non-compete clause is expected to have expired.

--by bsmith@fastmarkets.com

### **Newsprint**

Prices hold in November after two declines; producers operate at 80%, see 62% inventory rise

North American newsprint prices remained flat in November, but

the supply-demand environment remained negative for producers, who still face declining demand, high inventories, and high costs from continuous mill downtime.

Prices for 27.7-lb newsprint in November remained unchanged over October, at \$706/tonne on the East Coast and at \$696/ tonne on the West Coast, according to Fastmarkets RISI's PPI Pulp & Paper Week survey.

The hold in November followed newsprint price declines of \$15/ tonne in September and a further \$15/tonne in October, according to *P&PW*. Today's prices are about 8% lower than a year ago.

Contacts reported that in some cases the price declines occurred in different months than the ones reported by P&PW, depending on negotiations.

"There's been two decreases of \$15 each, in some cases the second one was \$20/tonne. Some decreases happened in September and October, others in October and November," a supplier explained.

"We saw a \$15 decline in September and a further \$15 decline in October, but nothing in November," another supplier commented.

Further declines ahead? Both producers and buyers stated that there is still pressure on prices and the market may see lower levels in the first quarter 2020, as demand is seasonally weaker and supply is expected to exceed demand.

For December, contacts expect prices to hold, benefited from Resolute Forest Products' Augusta,



GA, mill deactivation last month, and seasonally good demand.

"Printers and publishers are pretty busy right now with holidayrelated jobs as well as printing election materials for next spring's primaries, but orders should drop off in December, which is typical for the end of Q4 each year," a buyer commented. "Although we expect to see marginal seasonal improvement in paper shipments in Q4, we will face sustained pricing pressures for all paper grades as operating rates remain low," Resolute pres/CEO Yves Laflamme said on a conference call earlier this month.

In October, North American newsprint demand was 18.1% lower than a year ago while in January-October demand declined by 14.4% over the same period of 2018, according to the Pulp and Paper Products Council (PPPC).

High inventory, 80% OR. The mill operating rate was down to 80% in October, compared with 97% a year ago, and inventories totaled 323,000 tonnes -- 62.3% higher than October 2018.

### Month in statistics

US paper and paperboard production was down 4.5% year-to-date through September, vs production in 2018 through September, according to the American Forest & Paper Association.

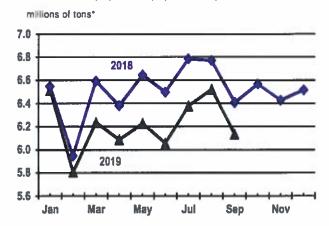
Total production through the first three quarters of this year was down 2.654 million tans, campared with production in 2018 through the first three years. This year, paperboard production was down by 1.49 million tans through September and paper production was down by 1.166 million tans. The large decline in paperboard was due to slowness in US corrugated box demand and an extensive amount of mill downtime taken.

Top production performers were **tissue paper**, which was the same in 2019 year-to-date as in 2018, and **liquid packaging and food service boxboard** production up by 2.1%.

Year-to-date, **linerboard** production was down 6.1% at 19.0 million tons of production, **uncoated freesheet paper** was down 10.3% at 5.04 million tons of production, **solid bleached sulfate boxboard** production was down 4.3% at 1.5 million tons, and **uncoated mechanical paper** was down 15.7% at 581,000 tons.

US mills overall and year-to-date averaged a 90.3% operating rate, down from 94.2% in 2018 through September.

### US paper and paperboard production



\* Not seasonally adjusted.

PAPER & PAPERBOARD PRODUCTION		Current Month	same month year ago	% chg. 2019/18	YTD 2019	YTD 2018	% chg. 2019/18
Newsprint	Sept.	80	90	-11.1%	733	776	-5.5%
Uncoated mechanical	Sept.	57	68	-16.2	581	689	-15.7
Coated paper	Sept.	377	416	-9.4	3,338	3,645	-8.4
Uncoated freesheet	Sept.	547	569	-3.9	5,038	5,615	-10.3
Tissue	Sept.	645	641	0.6	5,744	5,744	0.0
Unbleached packaging papers	Sept.	133	158	-15.8	1,257	1,373	-8.4
Total paper	Sept.	2,050	2,143	-4.3	18,633	19,799	-5.9
Linerboard	Sept.	2,139	2,256	-5.2	18,994	20,235	-6.1
Corrugating medium	Sept.	886	911	-2.7	8,140	8,298	-1.9
SBS boxboard	Sept.	148	169	-12.4	1,508	1,576	-4.3
Liquid packaging/food service board	Sept.	250	251	-0.4	2,423	2,372	2.2
Recycled boxboard	Sept.	168	177	-5.1	1,539	1,551	-0.8
Total paperboard	Sept.	4,084	4,263	-4.2	37,319	38,809	-3.8
Total paper and paperboard	Sept.	6,135	6,406	-4.2	55,953	58,607	-4.5

n.a. = not available. SBS; solid bleached sulfate. Linerboard and medium totals are for both virgin and recycled contents.

Note: Figures in 000 short tons. Unbleached kraft paper has been changed to unbleached packaging paper by the American Forest & Paper Association.

n.a.=not available. Source: American Forest & Paper Association.



### Newsprint statistics - October 2019

	(000 ton:	nes)			
	Curren	t month	Year-to-date		
NORTH AMERICA		% chg.		% chg.	
	2019	2019/18	2019	2019/18	
Operating rate, % (adj. for idled)	80%	97%	83%	95% 1	
Shipments to North America	195	-17.4	1,917	-14.6	
Shipments to USA	157	-16.7	1,542	-15.0	
Shipments to Canada	38	-20.2	375	+12.6	
Overseas exports	98	-10.7	993	-3.4	
Imports	1	-66.4	21	7.9	
Total demand	196	-18.1	1,938	-14.4	
Mill inventories	323	62.3%			

Operating rate, not year-over-year percentage change.
 Note: Consumption and user inventory data is no longer available.
 Source: Pulp and Paper Products Council.

"in September, non-seasonally adjusted operating rates tumbled below 80%, suggesting that there is further room for pricing to fall and that there will be a very significant capacity reckoning in the coming months," the latest issue of Fastmarkets RISI's Paper Trader reported on Oct. 31.

Two weeks later, Resolute announced it would indefinitely idle the 214,000 tonnes/yr Augusta mill. The mill's capacity accounts for about 4.5% of the 4.6-million-tonnes/yr North American newsprint market.

Augusta closure impact. Market contacts believe the Augusta newsprint closure is just the start of a new series of capacity closures in North America.

"The closure is helpful because there's too much capacity in the market. It feels there's a series of adjustments still to be made, this was just the first step. Mills can't just keep taking downtime as they're doing now, because it is really expensive," a contact said.

"It (the Augusta mill) was expected to close. They were

taking downtime there. But we're seeing more closures happening, not only in North America but in Europe, Australia too," a source said.

"Any US mill not living on the weak Canadian dollar is particularly vulnerable," another contact noted.

In Germany, Papierfabrik Palm stopped newsprint production on its machine No. 2 at the Aalen mill; UPM announced its intention to start a sales process or close its Chapelle Darblay newsprint mill in France; and SCA announced plans to possibly shut a publication paper machine at its Ortviken mill in Sweden.

In Australia, Norske Skog decided to sell its newsprint mill in Albury to Visy, to convert to mainly containerboard/corrugated as well as boxboard packaging.

North American newsprint industry margins began to approach breakeven levels in the third quarter, and the continued price deterioration in September and October will cause a further decline, according to Paper Trader.

"The peak profitability of 2018 likely left most mills with healthy war chests, but we expect negative overall margins (net of operating rates and export pricing) to become a serious issue in 2020 and lead to a major round of capacity adjustments," RISI economists reported in *Paper Trader*.

One contact mentioned that Canadian newsprint mills are also facing a lack of wood chip supply and rising prices.

"Chip prices are putting a strain on input costs on the Canadian newsprint producers. Also, the export markets are very difficult at the moment with prices well below any North American cash cost," the source noted.

According to the PPPC data, North American newsprint exports dropped 10.7% in October yearover-year and are also 3.4% lower year-to-date, compared with January-October 2018 exports.

- Market contacts said prices for uncoated mechanical (UM) high-bright papers are "surprisingly not following newsprint moves." P&PW's survey found stable prices this month compared with October levels for both 35-lb MF offset 65 bright and 45-lb offset substitute 83/84 bright. "It's a busy time of the year, prices are pretty stable. The low-brights follow newsprint, but there aren't many programs anymore," a supplier said. Other contacts stated that demand for high-brights is "very little these days" and clients are migrating to either newsprint or supercalendered (SC) papers.
- On **SC**, sources reported price pressure on ongoing negotiations

### Fastmarkets RISI

## PPI Pulp & Paper Week

in the fourth quarter and early first quarter of 2020. "Prices will probably go down," a contact said. "We're now in a busy season, but pricing in 2020 will be lower than now," another source said.

• The New York Times Company's operating profit decreased 40% to \$25.1 million in the third quarter, vs thirdquarter 2018 operating profit, and adjusted operating profit decreased 18% to \$44.1 million, as higher costs and lower advertising revenues offset higher digital-only subscription sales and other revenues.

• The McClatchy Co. could file for bankruptcy within the next year. The company faces a mandatory \$124 million contribution to its pension plan in 2020. The Sacramento, CAbased company operates 29 newspapers including the Miami Herald, The Charlotte Observer and The Kansas City Star.

 The combination of New Media and Gannett will operate under the name Gannett Co., Inc.

--by rmercante@fastmarkets.com

### North American printing/writing paper statistics October 2019

(000 tonnes)

,	October	% chg.	Year-to-date	% chg.
	2019	year ago	2019	year ago
Uncoated mechanical	2000			
Shipments	163	-23.2%	1,698	-16.5%
Operating rate (%)	80	99 1	82	92 1
Imports	23	-35.3	219	-12.3
Demand	186	-24.9	1,917	-16.0
Uncoated freesheet				
Shipments	535	-12.7%	5,270	-10.3
Operating rate (%)	96	100 1	92	961
Imports	59	-2.9	671	34.3
Demand	594	-11.8	5,941	-6.8
Coated freesheet				
Shipments	209	-14.1%	1,862	-16.8
Operating rate (%)	106	103 1	92	991
Imports	68	-24.5	705	-4.6
Demand	277	-16.9	2,567	-13.7
Coated mechanical				
Shipments	148	-3.9%	1,248	-20.0
Operating rate (%)	103	95 1	85	98 1
Imports	37	-23.0	370	-1.9
Demand	184	-8.4	1,618	-16.5
Total printing & writing			Dest Priva	
Shipments	1,055	-13.7%	10,078	-13.9
Operating rate (%)	95	100 *	89	96 1
Imports	187	-20.3	1,965	5.4
Demand	1,241	-14.7	12.043	-11.3

Mill Inventories (000 tonnes)

				Tonne change			
	October 2019	September 2019	October 2018	from month ago	from year ago		
Uncoated mechanical	137	144	136	-7	1		
Uncoated freesheet	611	624	546	-13	65		
Coated freesheet	372	406	318	-34	54		
Coated mechanical	96	115	63	-19	33		
Total printing & writing	1,216	1,289	1,063	-73	153		

Source: Pulp and Paper Products Council (PPPC).

### UFS prices hold in place

>>> continued from page 1

Prices for 20-lb office/copy 92 brightness paper held at \$1,070-1,120/ton in November in the US market and 50-lb offset rolls with 92 brightness remained at \$980-1,000/ton, both 1% lower than a year ago, according to PPI Pulp & Paper Week's survey.

"Pricing is fairly stable, but we see some spot deals for the end of the year," a domestic player noted.

"I don't think the mills will go much lower unless pulp prices go lower. Demand in November is surprisingly better than I would have thought," a distributor commented.

"Some are offering special yearend deals for extra volume to close the year, mainly on cutsize" office/copy paper, an importer stated.

"The price pressure continues, as there are more competitors in the market, more options for supply, (and) spot offers," a domestic player added.

**Imports up by 34.3%.** Most of the competition still comes from



imports, which through October increased by 34.3% to about 740,000 tons and accounted for 11% of North American total demand, according to data from the Pulp and Paper Products Council (PPPC).

At the same time, UFS exports through October were 20.4% lower than a year ago, leaving more paper in the North American market.

Some contacts also mentioned the new UFS offset paper capacity introduced by Willamette Falls Paper in October at its West Linn, OR, mill, is affecting the market. The company was planning to start up more UFS production at the mill in November, but it was unclear if that had happened. Fastmarkets RISI estimates that Willamette will make 50,000 tons/yr of UFS at West Linn. If all of that is offset paper, that addition would represent about 3% of the about 1.5 million tons/yr US offset market.

Sources also said that Shanying International's Phoenix Paper was offering 50-lb rolls to distributors. **Co**ntacts claimed that Phoenix Paper is now making 240,000 tons/yr of UFS at its converted-to-market pulp printing and writing paper mill in Wickliffe, KY. The company also was supposed to be converting a line to brown recycled pulp next year at the mill complex.

Slowdown in imports? While year-to-date UFS imports were up, the import total in October actually declined by 2.9% vs the total in October 2018, the PPPC reported. October imports also were 6% lower than in September, even though there was one more calendar day in October.

"The flood of the imports is slowing down. We can clearly see it is more moderate now," a local player said.

"Of course there is still a lot of imports, but I think the market in 2020 will be more balanced in terms of imports and exports," another competitor said.

Data from the PPPC showed that UFS exports in October were 20.1% higher year-over-year.

Fastmarkets RISI's Paper Trader noted that "import competition will continue to be a key factor holding prices in the USA down as Asian capacity expansion remains high despite a decline in Asian demand" and the "US dollar continues to be strong and US prices are already perched high above most other regions of the world."

End of inventory bubble?

Domtar pres/CEO John

Williams said on the company's third-quarter conference call that the "inventory bubble experienced throughout 2019 is beginning to normalize."

"It seems the inventory build earlier in the year has worked its way through the system and the demand, inventory, and shipments are now pretty balanced," a market contact stated.

The PPPC report showed that North American UFS mill inventory declined 2% in October over September, but remained 12% higher than a year ago.

"The worst is over, and the inventory level is getting better, especially at customers," one contact noted.

Supply, demand. The closures of Domtar's and IP's capacity will remove over 450,000 tons from the North American market and could prevent further price erosion until mid-2020, according to Fastmarkets RISI's economists.

On the demand side, Fastmarkets RISI forecasts that the UFS market will decline nearly 400,000 tons or 5% in 2019, fueled by customer inventory burn.

"The failed attempt to raise prices after the shut of (Georgia-Pacific's) Port Hudson (machine in Louisiana) also contributed to the weak demand, as buyers chose to run down inventories as they searched for alternative suppliers with lower prices," according to Fastmarkets RISI's economists.

In October, North American UFS demand declined by 11.8% over a year ago. Year-to-date through October demand was 6.8% lower than in 2018 through October, according to PPPC.

**Specialty papers.** *P&PW* found unchanged prices for 40-lb SCK (supercalendered kraft) release liner label paper this month.

On 48-g thermal POS paper, prices dropped 2%, completing a 4% decline since September, according to market sources.

One contact mentioned that the global market for thermal paper is to add at least about 10% more capacity from the first quarter of 2020. Hansol is said to be bringing its coater No. 2 to full operation, Koehler Paper started its 100,000 tonnes/yr coater No. 2 at the end of October, Lecta also has a new coater with 60,000 tonnes/yr of capacity, and Asia Pulp & Paper

## Fastmarkets RISI

## PPI Pulp & Paper Week

plans to add 300,000 tonnes/yr of capacity in Asia in 2021 or 2022.

In South America, Oji announced a \$120 million investment to add 70,000 tonnes/yr of thermal paper capacity by 2022 at its Brazilian unit, Oji Papéis Especiais. The company believes demand in Mexico, Colombia, Peru, and Argentina may increase by 5%/yr in the next five years due to increasing use of labels applied in e-commerce packaging.

- APP Canada is to expand its Paperline portfolio early next year with Paperline Gold, a "premium" paper with 98% brightness.
- Supremex reported revenues at C\$45.2 million in 3Q, in line with last year. "Our diversification strategy, specifically into the US envelope market helped compensate for lower Canadian envelope revenues and flat packaging and specialty sales," the company stated. Canada Post Transactional Mail volumes were down 5.7% during the second quarter. Revenue from the US envelope market increased 6.1%.
- From January 2020, a new regulation in Germany requires that point of sale systems must be verifiably protected against tampering. As a result, electronic cash registers must issue a receipt for every transaction, either electronic or on paper. According to the German bakers' confederation, the regulation will result in more than five billion additional paper receipts every year.
- Avery Dennison announced a definitive agreement to acquire Smartrac's Transponder (RFID Inlay) div for Euro 225 million (US\$250 million). "This represents

an excellent strategic fit for us, accelerating our strategy to expand our Intelligent Labels platform across a variety of end markets and customers within the industrial and retail segments, and extending our reach to new channels," said chmn/pres/CEO Mitch Butier.

--by rmercante@fastmarkets.com

### Coated print paper

Coated paper prices hold but still pressured, with discounts offered on domestic market

Prices for coated printing and writing paper were unchanged in November, after declining \$20/ton in October due to poor demand and more competition among North American suppliers.

On coated freesheet (CFS) paper rolls, the No. 3 50-lb held at \$1,065-1,110/ton and No. 3 60-lb at \$1,005-1,035/ton, according to Fastmarkets RISI's PPI Pulp & Paper Week survey. Both of the grades are down about 1.5-2% today vs a year ago, according to P&PW's survey.

For coated mechanical (CM) paper, the No. 4 50-lb stood at \$940-980/tan in November and No. 5 34-lb at \$980-1,030/tan, both about 2.5% lower than in November 2018.

CFS market. Sources claimed that CFS prices continued to be pressured by Willamette Falls Paper's reentry into the market. They said the Oregon mill was competing against imports from Asia on the West Coast.

"The official market price is stable, but domestic mills

are trying to increase sales volume by spot discounts," a paper importer said.

Another contact said that in the last 10 years, market pulp prices increased more than CFS prices, squeezing paper producers' margins.

"That's why Verso and Sappi are very reluctant in lowering their prices. I don't think (CFS) prices will decline much more in the next months, otherwise producers will have to close," the contact told P&PW.

As for CFS demand, sources reported seasonally good volumes in November and expected a slower December.

North American CFS demand in October was 16.9% lower than a year ago, according to data from the Pulp and Paper Products Council (PPPC). In January-October, demand declined 13.7%. Exports were also 33.2% lower year-over-year, while imports fell 4.6%.

CM market. Market sources reported low but stable demand for CM in November.

"There is softness and price pressure expected for the first quarter," a supplier noted.

"We're hearing very aggressive price points from competitors; it looks like ... they want to protect their business," another competitor said.

"There are concerns about Catawba and also Kruger, which may no longer be interested in CM," a contact noted.



New-Indy Containerboard has plans to convert its 340,000 tons/yr CM paper machine in Catawba, SC, to ultra lightweight unbleached kraft linerboard, potentially in 2021. Kruger makes 260,000 tons/yr of CM No. 5 on one machine at the Trois-Rivières Wayagamack mill in Quebec.

Verso move. Last week, Verso announced an agreement to the sell two specialty paper mills to Pixelle Specialty Solutions for \$400 million. The mills to be sold are the Androscoggin operation in Jay, ME, and the Stevens Point, WI, mill that make flexible packaging paper, release liner base paper, specialty label paper, thermal paper, kraft paper, and kraft linerboard.

Coated printing and writing paper players claim that Verso's move does not impact the CFS and CM markets, as those mills produce specialty or packaging paper and board. However, it brings new thoughts about what the company may be planning for its other mills. Verso also plans to make about 50,000 tons/yr of recycled containerboard and unbleached kraft paper starting in January at its Duluth, MN, printing paper mill (see story, p. 15).

"Verso sold their most promising businesses. They may be planning to sell the company in parts," a producer said.

"What we can read is that Verso is looking for buyers. Another transaction may come soon," another player stated.

Last month, it was reported that Atlas Holdings was interested in trying to gain four seats on the Versa board of directors.

According to RISI's Paper Trader report, a significant capacity closure or conversion is expected to be announced soon.

"Low prices for pulp have enabled most mills to remain cash-positive and encouraged the restart of both the West Linn (OR) and Combined Locks (WI) mills, giving buyers more options and availability. Prices will continue to decline in 2020 until significant supply cuts or conversions occur," Paper Trader noted.



### Fastmarkets RISI

## PPI Pulp & Paper Week

Major players' view. On its third-quarter financial report call, Sappi executives stated that graphic paper demand is weak in North America and the company took 57,000 tons of downtime.

Verso interim CEO Les Lederer stated on the company's call that they continue to "balance production to demand and expect to reach inventory levels equal to yearend 2019." Verso is taking downtime at its Escanaba, MI, mill this quarter.

Lederer noted that Verso's average paper price in third quarter was down \$12/ton, or 1% vs the same period last year.

"While there are headwinds in our industry going into the 4Q and the 1Q of 2020, we believe mill conversions in US and Europe will stabilize product demand with supply," the company said.

--by rmercante@fastmarkets.com

### Recovered paper

EPA report highlights need to grow domestic markets for recyclables; US rate up to 35.2%

Import restrictions implemented by China and Southeast Asian countries accelerated the need to improve domestic markets for recyclable materials in the US, according to a report this month from the US Environmental Protection Agency (EPA) autlining a multi-stakeholder effort that kicked off one year ago.

The National Framework for Advancing the US Recycling System summarizes a pledge by 45 organizations, including the American Forest & Paper Association (AF&PA) and the Paper Recycling Coalition, signed on Nov. 15, 2018. One year later, the EPA wrapped up its second Recycling Summit on America Recycles Day on Nov. 15, and said more than 100 additional organizations signed the pledge to work together to address challenges facing US recycling.

One challenge the report highlighted is confusion around which materials can be recycled in curbside programs. This "often leads to placing recyclables in the trash or throwing trash in the recycling bin or cart," the report stated.

AF&PA pres/CEO Heidi Brock, who attended the second summit, said clearing up confusion is one area the industry is working to improve. Pizza boxes, Brock said, are recyclable, yet Americans still question whether to put used pizza boxes in recycling bins.

Brock noted that the US paper recovery rate has met or exceeded 63% for the past decade. In 2018, the recovery rate for paper reached a record 68.1%.

Strengthening domestic markets. The groups met regularly in the last year, the EPA said, to "undertake actions to promote education and outreach, enhance materials management infrastructure, strengthen secondary materials markets, and improve measurement."

Of these four areas, developing new domestic demand for recyclables is especially important considering the demand softness since export countries have rolled out restrictions on imports, especially of recovered paper. Year-to-date US recovered paper exports were down 8.1% through September, based on government figures.

"The loss of available international markets for recyclable materials has impacted the economics of recycling both within the US and worldwide," according to the National Framework for Advancing the US Recycling System report. "A stronger domestic recycling market will support local communities by creating more jobs and providing the U.S. economy with greater resilience to market disruptions. Municipalities will achieve cost savings when the markets for recycled materials are improved and more robust."

China, the US's largest recovered paper export market, banned mixed paper at the end of 2017 and implemented a 0.5% contaminant limit on imports of recovered paper in early 2018, Add in the current trade war with the US and a 25% tariff on recovered fiber to China, with plans to bump up an additional 5% to 30% by Dec. 15, as well as a potential ban on all recovered fiber into China in 2021, and the drop in demand is made more clear. China imported 18 million tonnes of recovered fiber in 2018, down 36.8% from 28.5 million tonnes in 2017, it is on pace to import around 11 million tonnes in 2019. Through the first eight months of this year, China's imports of US recovered paper are off 20% year-over-year.

Other countries to make moves that have tightened their demand for US recovered fiber include Taiwan, limiting imports of low quality recovered fiber in late 2018; Indonesia's run-around of restrictions on recovered



fiber, ranging from a strict 0% contaminant rule to 2%, potentially settling on 0.5% like China as well as additional pre-inspections required; Vietnam's tightened inspection measures; and India's rumored ban on mixed paper imports.

Other-Asia buyers in No. **1 spot.** US exports to what Fastmarkets RISI Sr economist Hannah Zhao referred to as "other Asia" -- or India. Indonesia, Thailand, Taiwan, Vietnam, South Korea, and Malaysia -- surged by nearly 80% in 2018, yet the increase has slowed to 5% year-over-year in the first eight months of 2019 due to tightening restrictions on imports and slowing demand. Still, these countries together have become the largest buyers of US recovered fiber. Zhao said at the International Containerboard Conference in Miami Beach on Nov. 14.

To increase demand for recyclable materials in the USA, the EPA outlined in its report some work participating organizations have accomplished through November 2019. This includes starting to develop a marketdevelopment toolkit for governments, material recovery facilities (MRFs), and secondary processing facilities on "how to conduct cost vs benefit analysis for investments, incremental and major enhancements, planning for future materials, and contracting best practices to ensure the capability to meet current and future needs."

Looking ahead, the report said EPA's actions will explore economic models to create domestic secondary markets, including possible incentives to drive demand and create more end users.

Supporting existing end markets and developing new ones were considered challenges among the report's participants. As an example, the report said contracts between municipalities and MRFs need to be restructured "to better insulate them from market fluctuations." In their third quarter earnings reports, top US MRF companies said restructuring their municipal recycling contracts helped them to manage the lower pricing of recyclable commodities, especially recovered paper. OCC and mixed paper pricing are at historic lows on the US domestic market.

In addition, "Improved dialogue is needed among MRFs, recyclers, product designers, governments, etc., to inform the design and production of new products, including packaging," according to the report.

By November 2020, the EPA said its goal is to: "Help strengthen and increase domestic demand for postconsumer recyclable materials and serve as a stimulus in US markets for materials collected through recycling programs, encourage sustainable management of collected materials, and mitigate reliance on export markets."

The point related to reducing reliance on export markets is a major one. Over the five years through 2017, 40% of the more than 50 million tons of annual US recovered paper demand was sold on the export market. US domestic market demand peaked in recent years at 32 million short tons.

The report added: "While the benefits of recycling are clear, growing and strengthening the US recycling system to support domestic industries and enhance environmental and community benefits will require multi-stakeholder collaboration to address the challenges currently facing the system."

Recycling and reuse activities in the USA accounted for 757,000 jobs, \$36.6 billion in wages and \$6.7 billion in tax revenues, according to the report. In addition, the report showed that recyclable materials with a commodity value of about \$8.9 billion are sent to landfills annually.

New numbers. In addition to this report on collaboration among the recycling industry, the EPA issued updated data on national waste generation and recycling through 2017. The updated figures show that the US recycling rate is up to 35.2%, an increase from 34.6% in 2015. The total municipal solid waste recycled was 67.2 million tons in 2017, with paper and paperboard accounting for about 66% of that amount, according to the EPA. At 28.8 million tons. corrugated boxes were the most recycled or composted materials in 2017, as measured by tonnage.

Of the 267.9 million tons of municipal solid waste (MSW) in 2017, paper and paperboard products made up the largest percentage of all materials, at a quarter of total generation. In 2017, about 139.6 million tons of MSW were landfilled, with paper and paperboard making up about 13%.

--by mworkman@fastmarkets.com





### News briefs

A Phase 1 trade agreement by the US and China was not expected to be done by yearend, Reuters reported on Nov. 20. China has pushed for tariff rollbacks in what has been a more than one-year trade war between the US and China. The latest US tariffs on China's imports are to start on Dec. 15. Following the Reuters story on Nov. 20, the Dow Jones dropped nearly 113 points... Network Services Company and Strategic Market Alliance announced this week that they are combining their janitorial, sanitation, foodservice, and packaging industries firms into one company with more than \$22 billion in revenue. more than 130 distributor members, and more than 900 locations in 50 countries. The deal is expected to be final by yearend. The new organization will operate as Network Services Company, with Alan Tomblin as CEO. "This is the best of the best in the distribution industry." said Tomblin... HP's board of directors said it unanimously rejected an unsolicited proposal from Xerox to acquire HP. HP. told Xerox that the Xerox bid "significantly undervalues HP." Even so, HP added that "we recognize the potential benefits of consolidation, and we are open to exploring whether there is value to be created for HP shareholders through a potential combination with Xerox. ... We note the decline of Xerox's revenue from \$10.2 billion to \$9.2 billion (on a trailing 12-month basis) since June 2018, which raises significant questions for us regarding the trajectory of your business and future prospects."... Sonoco signed a definitive agreement to acquire Thermoform Engineered Quality

and Plastique Holdings, (together TEQ), a global manufacturer of thermoformed packaging for the healthcare, medical device, and consumer markets. The purchase from ESCO Technologies for about \$187 million is to be completed by the end of year. TEQ, based in Huntley, IL, generated \$88 million in sales in the fiscal year ended Sept. 30, 2018, and operates three thermoforming and extrusion facilities in the USA along with a thermoforming operation in the UK; and thermoforming and moldedfiber manufacturing in Poland. TEQ also produces recyclable, molded-pulp-fiber packaging and thermoformed plastic packaging for multiple consumer products primarily in Europe. The company employs about 500... The Canadian government and the Forest Enhancement Society of B.C. (FESBC) issues C\$27 million in grants for projects that are intended to help create jobs throughout British Columbia and increase wood fiber consumption that otherwise would have been burned as slash. "Nothing frustrates people more than seeing piles of slash go to waste rather than be used to help create jobs," said Ravi Kahlon, Parliamentary Secretary for the Ministry of Forests, Lands, Natural Resource Operations and Rural Development. These projects are to employ forestry contractors and mill workers who produce electricity, wood pellets, and pulp at mills. As result, more wood waste will be turned into electricity, heat energy, and pulp products to help achieve BC's and Canada's climate change targets, the government and FESBC said... Monadnok introduced a new line of coated text and cover papers for commercial printing. Astrolite PC 100 Velvet C25 is a "premium" coated-two-sided,

100% recycled sheet, the company

said... Bookstores sales fell 2.3% in September, to \$954 million, compared with sales in September 2018, according to the US Census Bureau. In January-September 2019, sales were down 5.6% yearover-year... Sofidel launched two new Papernet brand products at the ISSA Show North America. The small core toilet tissue and Ready Table interfolded napkins contribute to waste reduction and, as a result, greater environmental stewardship, the company said... Papel San Francisco ordered a stock preparation and deinking line from Kadant Black Clawson. The systems are for Paper San Francisco's new tissue machine at its Mexicali, Mexico facility that is to start running in September 2020. Paper Son Francisco had a venture agreement with Orchids Paper, which was recently acquired by Cascades, for selling tissue products on the US West Coast. The Kadant Black Clawson's fiber processing solution includes Heli-Drum pulping and detrasking system as well as "coarse, fine, and approach flow screening," the company said. "We will also be supplying our innovative MAK-C flotation cell and cleaning systems."... Woodland Pulp said it signed new labor contracts affecting nearly 300 employees at its Baileyville, ME, mill. Local media reported that the agreement "will strengthen rules specific to separate trades and also provide pay increases for trades and production workers at the plant, union leaders said." Trades and production workers in four unions ratified contracts last month. according to a news release from the unions. The mill produces St. Croix hardwood, a type of pulp made from locally sourced wood and that is sold to paper makers globally, as well as to its affiliate company on-site, St. Croix Tissue...



Tetra Pak and supplier Braskem said they have become the first company in the food and beverage industry to "responsibly source plant-based polymers using the Bonsucro standards for sustainable sugar cane." "We've seen a growing trend of consumers wanting to do more for the planet, and they look to brands to help," said Tetra Pak VP for sustainability Mario Abreu, in a release. "Our plantbased polymers are fully traceable to their sugarcane origin. We see plant-based materials as playing a key role in achieving a low-carbon circular economy. In the future, all polymers we use will either be made from plant-based materials or from post-consumption recycled food grades."... ePac said it opened its first flexible packaging converting plant in the UK. The so-called Silverstone plant houses HP Indigo 20000 Digital Presses in the 24,200-ft<sup>2</sup> facility at Arrow Park in Brackley, England. In the USA, ePac planned this year to open seven new plants... Legion Paper opened a new distribution center for its fine art paper business at a former Canson paper converting plant in South Hadley, MA.

been with IP for 28 years serving in a wide range of leadership positions. He replaces John Sims who returns to the US as Sr VP for corporate development.

effective Dec. 1. Mr. Royalty has

Domtar named Marie Cyr as general mgr for its Dryden mill in Ontario. Cyr was the Windsor Mill's first female engineer in 1995 two years after graduating from L'Ecole Polytechnique (now Polytechnique Montréal) with a degree in mechanical engineering.

### Obituary

Paper Machinery Corporation
CEO Luca Dellomodarme, 60,
died on Nov. 18 at UW Health
University Hospital in Madison,
WI, local media reports said. He
started his career as a mechanical
engineer at International Paper
in Wisconsin. He was born in
Livorno, Tuscany, Italy, and his
family immigrated to the USA
to Highwood, IL, when he was 13
years old. Dellomodarme received
a bachelors degree in Mechanical

Engineering from the University of Illinois in Champaign-Urbana and his masters degree in Business from Northern Illinois University. Dellomodarme is survived by his wife, Julie, a son, and daughter.

### Supplier news

Heidelberg sold its Hi-Tech Coatings division to Innovative Chemical Products Group's (ICP Group) Industrial Solutions Group (ISG) division for 38.5 million euros. ISG, based in Itasca, IL, sells coatings used by the packaging, labeling, and printing industries. Hi-Tech Coatings develops and produces more than 1,000 "environmentally compatible" products and formulations, primarily waterbased and UV-based coatings in Taylor, Ml. Aylesbury, UK, and Zwaag, Netherlands, the companies said. The transaction also established a strategic partnership between Heidelberg and ICP Group to ensure Heidelberg's future sales of its coating portfolio to its customers.

### People news

Kimberly-Clark CEO Michael Hsu was elected to the additional role of chairman of the company's board of directors effective Jan 1. Hsu, 55, succeeds Thomas Falk, who plans to retire from the company and the board at the end of the year after being chairman for the past 16 years. Hsu succeeded Falk as CEO in October 2018.

International Paper's board elected Jay Royalty as Sr VP and was appointed as president of International Paper EMEA,

### PPI Pulp & Paper Week

© Copyright 2019 by RISI, Inc. All rights reserved. Reproduction in any form whatsoever forbidden without express permission of copyright owner. PPI Pulp & Paper Week and Pulp & Paper Week are trademarks of RISI, Inc. and are registered in the US Patent and Trademark Office.

### **Editorial Staff**

Greg Rudder, Managing Editor, containerboard-kraft paper, tissue grudder@fastmarkets.com; 510.922.9504

James McLaren, Sr., News Editor, baxbaard imclaren@fastmarkets.com; 510.922.8016

Bryon Smith, Deputy Editor, global pulp bishth@fastmarkets.com; 510.922.9012

Renata Mercante, Sr., News Editor, printing and writing paper mercante@fastmarkets.com; 315.791.4467

Megan Workman, Editor/Price Reporter, recovered paper mworkman@fastmarkets.com; 212.224.3934

Teresa Wann, Director of Production twann@fastmarkets.com; 710.735.9805

Paul Blackwood, Digital Publishing Specialist pblackwood@fastmarkets.com; 781.734.8935

### **Editorial office**

1440 Broadway, Suite 400, Oakland, CA 94612. Phone 510.922.8816, fax 510.879.7642

### Subscriptions and customer service

Call 866.271.8525 (US & Canada) or 32.2.536.0748 (outside the US & Canada); visit risi.com/ppw (new subscriptions); email info.risi@fastmarkets.com; fax 781.734.8998, or mail to PPI Pulp & Paper Week, 1 Van de Graaff Drive, 4th Floor, Burlington, Massochusetts, 01803-5176 USA.

### Advertising

PPI Pulp & Paper Week accepts advertising. For information on pricing and availability, please consult risi.com/advertising

### Executives

Daniel Klein Chief Executive Officer
Matt Graves Senior Vice President