Paper Market Update

LSC COMMUNICATIONS

Global Strategic Services

December 2017

Industry News

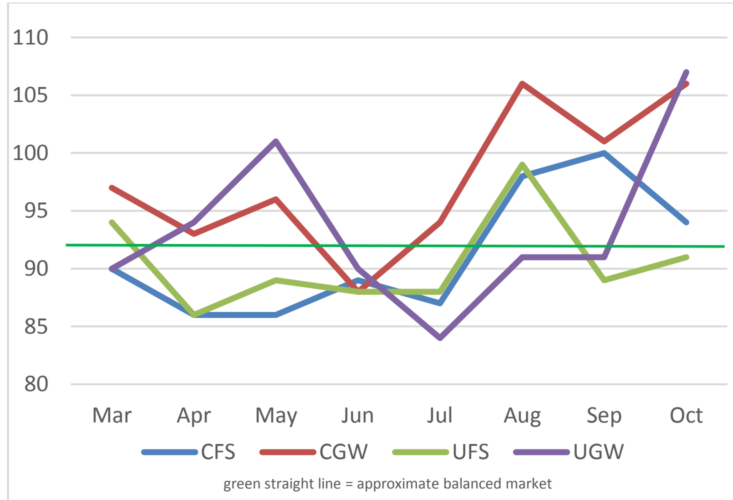
- World Trade Organization Upholds Existing Antidumping and Countervailing Duties Against Imports of Certain Coated Paper from Indonesia
    - *Duties (38% total) originally imposed on Oct. 2010 will remain in effect; applies to coated paper in sheet form*
    - *http://investor.versoco.com/2017-12-07-WTO-Panel-Upholds-the-Imposition-of-Antidumping-and-Countervailing-Duties-on-Imports-of-Certain-Coated-Paper-from-Indonesia*
- SAPPI Invests in Paper Machine at Cloquet, MN mill
    - *$5.94MM investment to rebuild headbox on PM 12*
    - *Dilution profiled headbox will improve product quality on graphic papers and packaging products*
    - *https://www.sappi.com/sappi-north-america-invests-594-million-cloquet-minn-mill*
- Appleton Coated Restarts on Limited Basis
    - *Recently idled mill starts up one of three paper machines*
    - *Production limited to brown medium and inkjet book only*
    - *http://www.wbay.com/content/news/Appleton-Coated-restarting-machine-calling-back-50-workers-462374913.html*
- Norske Scog Enters into Structured Auction Process
    - *Largest creditor forces action as best path forward*
    - *7 paper mills will continue to operate as new ownership is sought*
    - *https://www.reuters.com/article/norske-skogsind-ma-aker/update-2-end-of-road-looms-for-norske-skog-as-aker-seeks-to-buy-paper-mills-idUSL8N1NT1F3*
- Forest Stewardship Council Publishes Revised Trademark Standard
    - *Revised standard specifies requirements for use of FSC trademarks, for promotion of FSC certified products and for promotion of organization's status as an FSC certificate holder*
    - *New standard effective 3/1/2018*
    - *https://us.fsc.org/en-us/newsroom/newsletter/id/1010*

Uncoated Freesheet and Groundwood Focus

- *Capacity reductions on uncoated freesheet as a result of closure of West Linn and Appleton Coated plus announced paper machine closure by Georgia Pacific and conversion by PCA both in Q1 2018 will have removed approximately 8% of North American uncoated freesheet capacity.*
- *Trade case against Canadian producers of newsprint and high bright groundwood grades could result in price increases and possibly even capacity reductions as a result of duties placed on paper coming to US.*
- *Both circumstances combined could result in longer lead times and/or higher prices for both product segments (SC papers excluded). Grade substitution could be possible and add to lead times to one product segment or the other.*
- *A new round of price increases in early stages in both segments have been announced since December 1 (Verso, Twin Rivers, Resolute).*
- *Forecasting and early planning of print projects key to reduce impact.*

Mill Operating Rates

(shipments to capacity - not seasonally adjusted)



Source: RISI, LSC Communications

Product Segment Commentary

- Coated Freesheet
    - ***Lead times 6 – 10 weeks****; Q4 operating rates in high 90's due to seasonal demand and loss of West Linn, Appleton Coated*
    - *Near to mid-term forecast is for mills to operate at or close to full capacity which will make it hard to replenish inventory*
    - *SAPPI conversion project at Skowhegan mill will remove 30 days of production from 1 of 3 paper machines in Q1 2018*
    - *2nd $2.00/cwt price increase of 2017 announced for November 1 will be fully implemented by January 1.*
- Coated Groundwood
    - ***Lead times 4 – 8 weeks;*** *Q4 operating rates in high 90's to over 100 due to seasonal demand and July capacity loss*
    - ***$1.****00/cwt increase announced for October 1 will be fully implemented by January 1*
    - *UPM PM5 closure at end of Q1 2018 will keep remaining capacity busier in H1 2018 than historical averages*
- Uncoated Freesheet
    - ***Lead times 3 – 6 weeks;*** *operating rates near 90%*
    - *Outlook for Q1 2018 is that capacity reductions could result in longer lead times and possible price increases*
    - *Decreased supply to West Coast coming in 2018 could require longer lead times and/or freight considerations*
- Uncoated Groundwood
    - ***High bright ground grades lead times 6 – 10 weeks; newsprint lead times 6 – 8 weeks; SC lead times 4 – 6 weeks***
    - *High brights impacted by earlier capacity reductions; NorPac trade case rulings expected 1/8/18 and 1/16/18, could result in significant duties against Canadian producers*
    - *Newsprint capacity closures resulting in high operating rates and higher prices for near to mid-term*
    - *Demand for SC grades falls off after holiday advertising season.*