Georgia Tech The Center for Paper Business and Industry Studies

CPBIS

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Mills Online Database Updated

By Aselia Urmanbetova

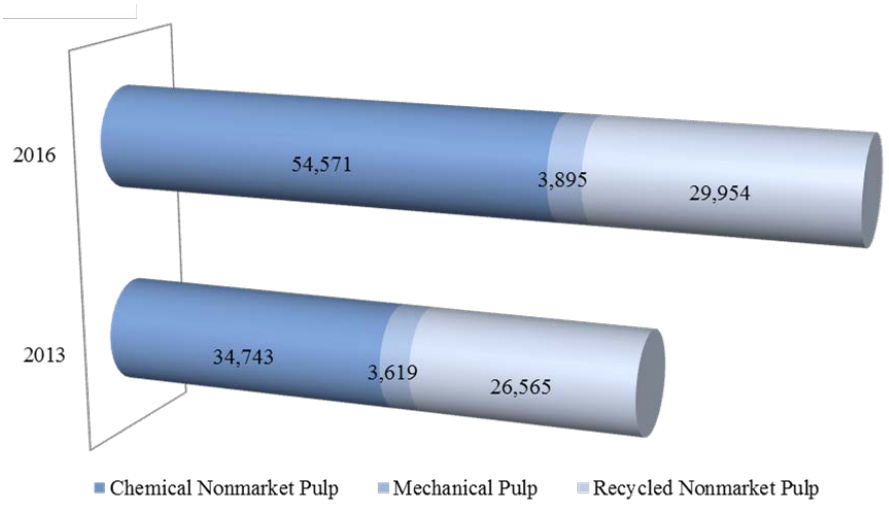
Using the latest Lockwood Post Directory of Pulp and Paper Mills, we updated the Mills Online (MoL) database earlier this month. In contrast to the 2013 and 2016 databases, the earlier versions did not include pulping capacity, employment, or energy consumption information. This year, given the two years of data, we can provide comparative statistics of what changed in the last three years.

Currently, the data cover 336 operating and 11 closed or idle mills (Figure 1). In contrast, in 2013 there were 345 operating and 19 closed or idle mills. In total, between 2013 and 2016 nine mills closed down and 26 were delisted from the directory altogether. Additionally, reported mill employment decreased from 94,502 to 93,095, or -0.5% in terms of annual average growth.

Figure 1. Map of Pulp and Paper Mill Capacity, 2016

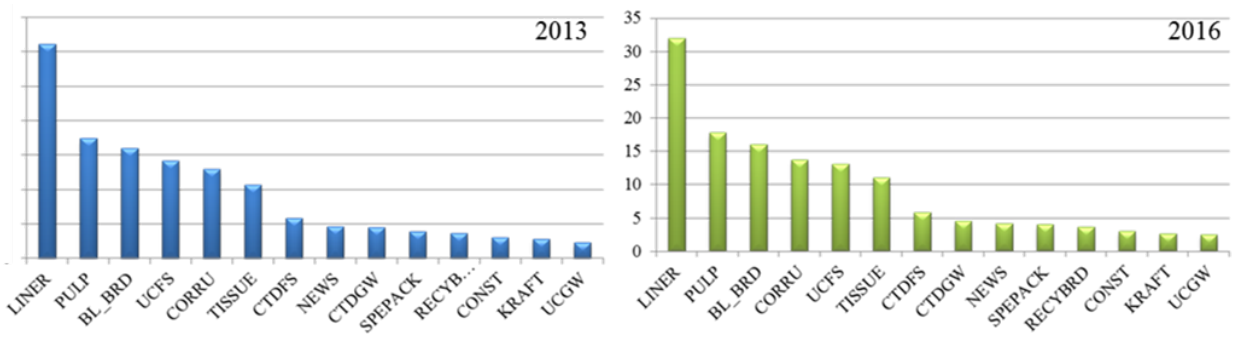
In terms of the changes in pulping capacity, chemical nonmarket pulp increased 16.24% annually from 2013 to 2016, while mechanical and recycled pulping annually increased only 2.48% and 4.08%, respectively (Figure 2). Overall, the total mill pulping capacity grew 0.13% annually from 133,105 short tons in 2013 to 133,605 short tons in 2016.

Figure 2. Pulping Capacity



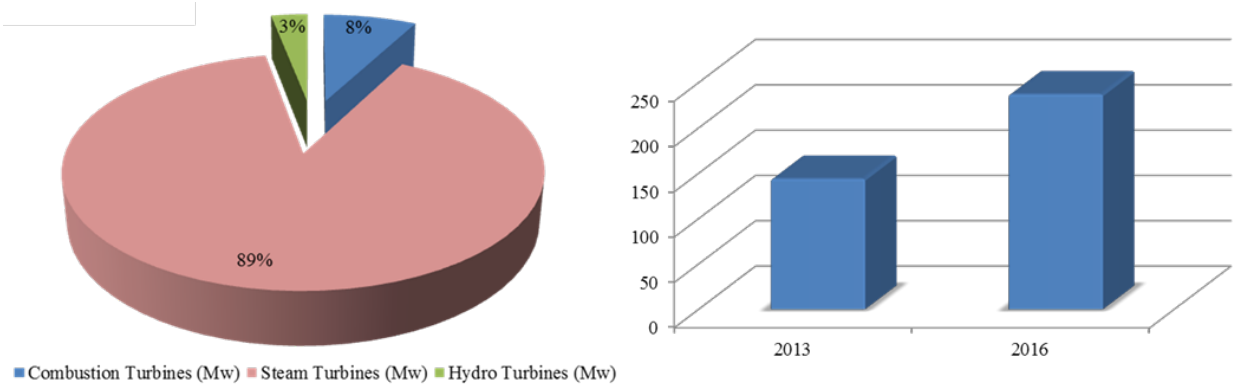
The top three product capacities at the mills remained unchanged in 2016. The top paper grade is linerboard, followed by pulp and solid bleached board. Yet, in 2016 uncoated freesheet slid down from the fourth to fifth highest capacity, giving its place to corrugating medium. Similarly, coated groundwood superseded newsprint climbing from the ninth to eighth place in 2016. The capacity distribution among the rest of the grades remained the same (Figure 3).

Figure 3. Mill Capacity by Paper Grade in Million Short Tons



Some of the more interesting indicators are related to energy requirements of the mills. The data list the number of power boilers, combustion, steam, and hydro turbines, as well as energy generation broken down by source. From 2013 to 2016, there was an annual average growth of 0.13% in the number of power boilers; energy generation from steam increased on average by 0.58%, while hydro decreased by 0.14%, on average. Among the three energy generation methods reported in Lockwood, steam accounts for almost 90%, with combustion and hydro accounting for 8% and 3%, respectively. In contrast to modest growth in energy generation, average annual growth in electrical demand increased by 18% from 144 thousand Mwh/D in 2013 to 237.2 thousand Mwh/D in 2016 (Figure 4).

Figure 4. Mill Energy Generation and Total Electrical Demand (Mwh/D) in Thousands, 2016



In terms of industry structure, the number of vertically integrated operating mills increased from 93 in 2013 to 109 in 2016, while the number of non-integrated mills decreased from 252 in 2013 to 227 in 2016. Similarly, more mills are starting to use secondary (recycled) pulp, the number growing from 165 operating mills in 2013 to 188 in 2016 (Figure 5). Finally, the relative distribution of product specialization has not changed in the last three years. The vast majority of mills (up to 91%) produce one to two paper grades, while the rest 9% of mills produce up to five paper grades (Figure 6).

Figure 5. Number of Vertically Integrated Mills and Mills Using Recycled Pulp

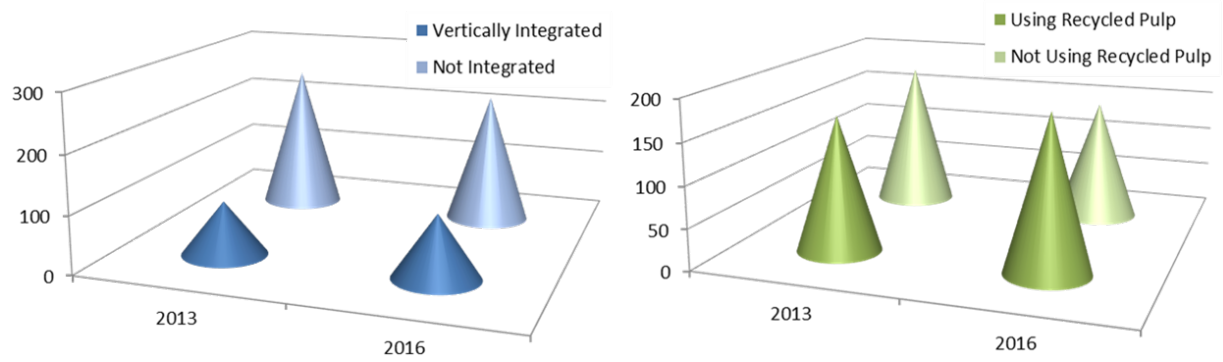
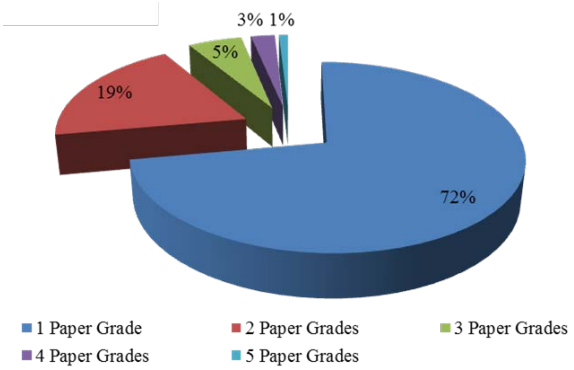


Figure 6. Multi-product Mills in 2016



The data can be purchased and downloaded via http://www.cpbis.gatech.edu/data/mills-online-new

Trend Indicators from Industry Intelligence Inc.

Industry Intelligence Inc. has provided market intelligence to more than 600 companies worldwide since it began as Forestweb in 1999. Industry Intelligence delivers a daily report featuring news of the paper and forest products industries. For your subscription visit: http://www.industryintel.com

Below is a sampling of recent Industry Intelligence headlines, chosen to mirror significant trends and other interesting developments in and around the paper and forest products industries.

Metsä Group strongly affects Finnish economy, with its bio-product mill in Äänekoski to boost revenue of companies in Finland by about €2.4B at construction stage, will generate economic growth of nearly €1B over 2015-2018: report

Metsä Group will build the world's first next-generation bioproduct mill. Scheduled for completion in the third quarter of 2017, it will produce 1.3 million tonnes of pulp per year as well as other bioproducts and bioenergy.

Pulp trade boosting Port of Philadelphia's Tioga Marine Terminal, which receives 360,000 tons/year of eucalyptus pulp from Fibria; Chile's CMPC also now ships pulp to Tioga, which aspires to add Brazil's Eldorado and Suzano as customers

Fibria produces 5.3 million tons of pulp annually and sends about two ships a month to Tioga.

Former FutureMark groundwood paper mill in Manistique, Michigan, to reopen in June under name UP Paper; mill, shuttered for more than a year, will make mostly brown paper and kraft paper using recovered paper, employ 90 people

Before it was closed in March 2015, the mill employed about 150 people producing uncoated groundwood papers.

Domtar's Johnsonburg Mill in Pennsylvania raises and releases 10,000 trout/year into Clarion River in co-operative effort between Domtar, its employees and retirees, and Pennsylvania Fish and Boat Commission, as part of company's sustainability efforts

About 25-30 volunteers (employees and retirees) feed the fish twice a day and keep an eye on their health.

Finnish companies produced 830,000 tonnes of paperboard in in January-March, up 8.4% year-over-year; pulp production up 4.1% to 1.9 million tonnes, paper production down 4.9% to 1.8 million tonnes: Finnish Forest Industries Federation

This despite the fact that Finnish producers continue to suffer from weaker cost competitiveness than companies located in our most significant rival countries.

'Unprinting' technology gives second life to office paper

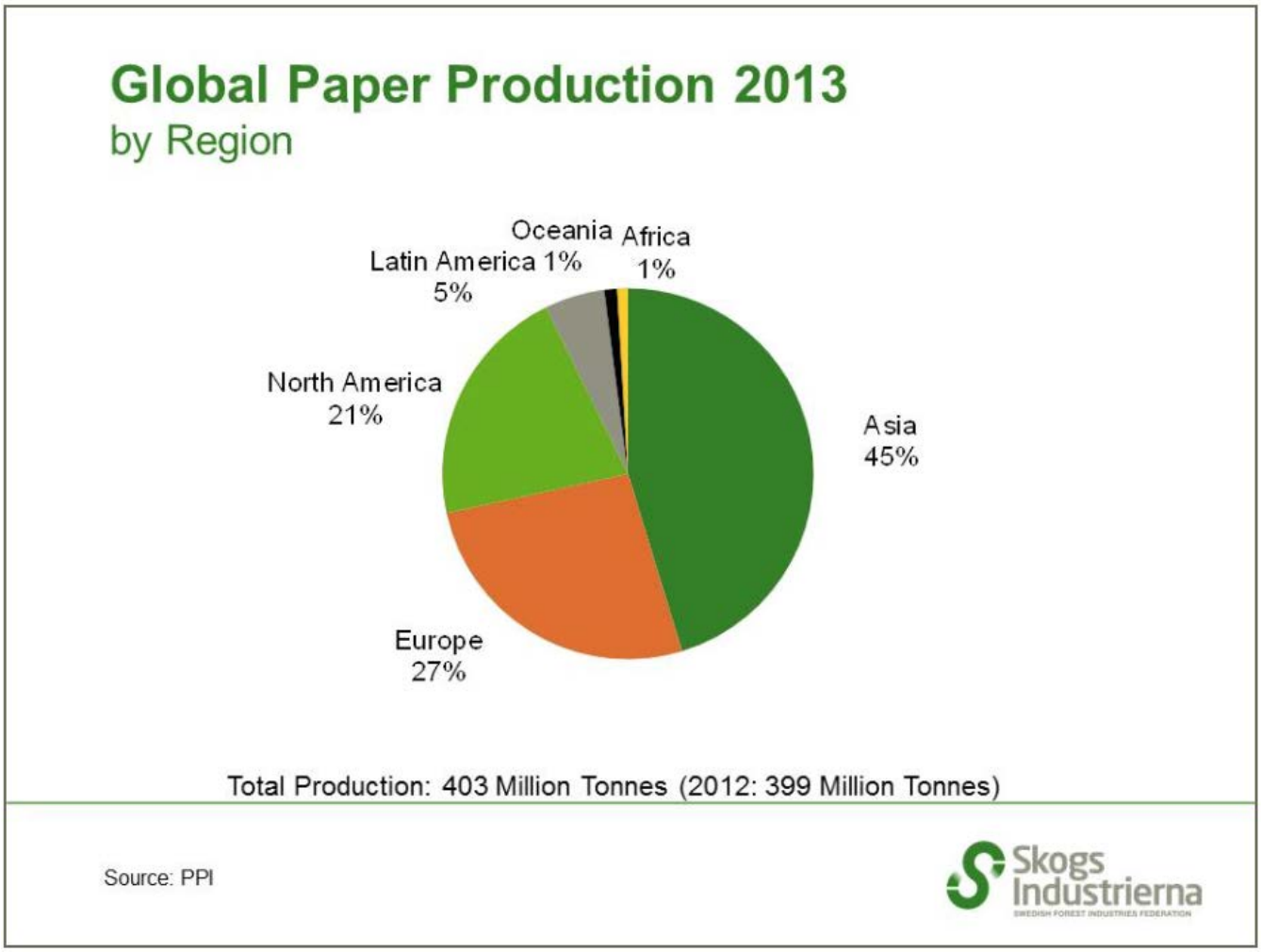
Recycling paper could be as easy as zapping ink off a page with laser beam pulses. Aiming to incorporate this technology in a standard printer, Reduse is currently trying to raise £4 million (US$2.8 million) and talking to several major printer manufacturers, Business Green reported April 14. Reduse is not the first to come up with this technology, as Toshiba has created a similar machine.

Paper Quotes

"While global market and economic conditions remain less than stellar, this environment has helped moderate input costs and we've further improved results through synergies and manufacturing efficiencies." – *John O'Donnell, Chief Executive Officer, Neenah Paper, commenting on 2016 first quarter results.*

Statistics Corner: Global Paper Production by Region

As shown in the figure, world production in 2013 was more than 400 million metric tons, Asia accounting for nearly half of this. Most of the remainder was split roughly equally between North America and Europe.■



Global Paper Production by Region, 2013

(Source: Swedish Forest Industries Federation: http://www.forestindustries.se/documentation/statistics_ppt_files/international/global-paper-production-by-region)