Season’s Greetings!

On behalf of the CPBIS management team and the entire body of CPBIS faculty, staff, and students, I extend best wishes for this holiday season to all of our newsletter readers. We value your continued interest in the Center’s work as we strive to help meet the industry’s research, education, and outreach needs. During this joyous season, we hope that your travels are safe and your holidays relaxing.

With warm regards,
Pat McCarthy, Director

Web Site Revamped

Just in time to be added to the list of the current year’s accomplishments, the Center's Web site has been completely redesigned, thanks in large part to the skill and diligent efforts of CPBIS graduate research assistant Aselia Urmanbetova. The site is now located at Georgia Tech’s School of Economics, a unit of Ivan Allen College.

To better serve both our industry and academic audiences, we have reorganized the content of the site under headings corresponding to the four distinct categories of Center activities: Research, Data, Connect, and Invest.

In Research visitors to the site will find links to the full text of all Projects and Final Reports that the Center has developed over its nine years of operation to date. Also found here are links to the full text of Working Papers and Graduate Theses, as well as lists of Academic Presentations and Publications. All of the content in this section represents direct products of investments in Center-led research talent. Academic Presentations and Publications constitute new additions.

The Data section of the site presents various collections of statistical information that the Center's researchers have worked with, and in some cases collected and developed. The Data Center is an up-to-date collection of hundreds of data series related to the pulp and paper industry that are accessible by CPBIS researchers and sponsors through a special arrangement with economagic.com. Also included are the well-known MillsOnline, PaperPat, and CPBIS Bibliography databases. These have been compiled and organized by CPBIS researchers. The MillsOnline database is continually updated and verified by crosschecking with daily and weekly Forestweb press releases. Taken together, these databases provide a wealth of information on the current health of the industry and its performance relative to the rest of the economy.

To better convey the results of Center activities aimed at connecting academia with industry, we have expanded the former "Connectivity" sections (now relabeled "Connect") to include CPBIS in the News, Industry Presentations, and Trade Publications. CPBIS in the News and Trade Publications present news media articles that mention CPBIS or were authored by CPBIS researchers and staff. Industry Presentations includes presentations made by the Center's researchers and staff at industry-oriented conferences. In addition, Events are now organized in a small table of links, the CPBIS Event Menu, followed by detailed information on each of a complete collection of events that have been organized and sponsored or co-sponsored by the Center. In the Event Menu, you can find and learn more about Technobusiness Fora, Distinguished Lecture Series, Workshops and Seminars, Sloan 2004 Annual Conference, Rethink and Discovery series and other events.

The final section, Invest lists the Center's current and past Sponsors and identifies Investor Benefits.
including research opportunities and products available to the Center's sponsors.

In this early post-launch period, we are still finding and correcting some inaccuracies and omissions – please be patient and let us know if you see any problems. We hope you will explore the site and we welcome your feedback and suggestions.

**2008-2009 MillsOnline Updates Reveal M&A, Closures, Idlings**

Aselia has just completed a review of MillsOnline 2008-2009 capacity records. It portrays a big wave of restructuring and closures in the U.S. paper market during the last two years. The data mark 2008 as a year of mergers and acquisitions of especially large proportions. The major deals: merger of Abitibi (affecting 5 mills) and Bowater (4 mills); integration of Graphic Packaging Corporation and Altivity Packaging into a new company, Graphic Packaging Holding Corporation; sale of 8 Boise mills to Aldabra; acquisition of 10 Stora Enso mills by NewPage; purchase of 9 Weyerhaeuser containerboard mills by International Paper; and Potlatch's spinoff of its 3 mills to Clearwater.

According to the MillsOnline records, the aggregate 2008-2009 mill idlings and closures affected about 50 U.S. mills with over 7,434 thousand short tons of annual capacity. 31 mills with nearly 4,992 thousand short tons and 19 mills with 2,442 short tons were closed or idled in 2008 and 2009, respectively.

The following major U.S. paper players curtailed mill operations during the last two years:

- Caraustar in Chicago, IL, Baltimore, MD, Lockport, NY, Charlotte and Roanoke Rapids, NC, and Rittman, OH,
- Domtar in Port Edwards, WI,
- Georgia Pacific in North Little Rock, AR,
- International Paper in Terre Haute, IN, Pineville, LA, Redwood, MS, and Albany, OR,
- Neenah Paper in Ripon, CA and Urbana, OH,
- NewPage in Kimberly and Niagara, WI,
- Smurfit-Stone in Vernon, CA, Carthage, IN, and Ontonagon, MI,
- Sonoco Products Co. in Richmond, CA, Atlanta, GA, and Lancaster and Munroe Falls, OH,
- Tembec in St. Francisville, LA,
- Wausau-Mosinee in Groveton, NH, and
- Weyerhaeuser in Longview, WA.

A regional breakdown of these closures reveals that the majority of these mills, 27, are located in the Northern region, 13 in the Southern, and 7 in the Western states. Closed and idled annual paper capacities associated with the North, South and West are, respectively, 4,725, 1,451, and 1,248 thousand short tons (Note: Regional grouping is borrowed from Ince, P. J., Li, X., Zhou, M., Buongiorno, J., Reuter, M. (2002), United States Paper, Paperboard, and Market Pulp Capacity Trends by Process and Location, 1970–2000, Research Paper FPL-PR-602, US Department of Agriculture. [http://www.fpl.fs.fed.us/documnts/fplrp/fplrp602.pdf](http://www.fpl.fs.fed.us/documnts/fplrp/fplrp602.pdf)).

The latest MillsOnline updates for this year were input to the database on October 31, 2009. They are reflected in this quick review, and there have been no new announcements of mill closures since then.

**Recent Forestweb Headlines**

Every week, Forestweb publishes “Newsbeat,” a news report tracking recent developments in and around the paper and forest products industries. Newsbeat is available by subscription from Forestweb. See [http://www.forestweb.com/Corporate/index.cfm](http://www.forestweb.com/Corporate/index.cfm)

Below is a small sampling of headlines from recent issues, together with brief synopses.

**December 14**

*World paper industry urges U.S. Senate, House of Representatives to end U.S. renewable energy subsidies for pulp and paper companies*

World paper industry organizations have written a joint letter to several U.S. Senators and members of the House of Representatives, urging they halt U.S. renewable energy subsidies for pulp and paper companies.

*Canadian paper products industry expected to lose C$1.2B, see production fall 14% in 2009 before returning to profitability in 2011, says Conference Board of Canada*

Canada’s paper products industry is expected to lose more than $1 billion this year, the industry’s seventh consecutive year of losses and largest on record.

*Pöyry report predicts double-digit growth in wood pellet markets in next five years, driven by bioenergy growth*
Wood pellets signal the emergence of a new commodities business in biomass.

**December 7**

*U.S. paper and paperboard output best of year in October, rising 2.6% from September with gains for both segments*

October’s output volume was the best this year, down only 6.4% from a year earlier.

**Russian pulp and papermaker Arkhangelsk ready to invest in new semi-chemical pulp mill**

Russian pulp and paper manufacturer is ready to begin construction work next year on a new pulp mill, in response to growing demand in Russia for semi-chemical fluting.

**Hardwood fiber costs for global pulp industry surpass costs for softwood fiber in 2009 on rise of demand for hardwood pulp, reports Wood Resource Quarterly**

Hardwood fiber costs for the global pulp industry have risen faster than softwood fiber costs in 2009. The Global Softwood Price index has typically ranged between US$5-10/odmt higher than the Global Hardwood Fiber Price Index. This relationship changed this year.

**November 30**

*Sweden’s Södra opens world’s first osmotic power plant at pulp mill in Tofte, Norway*

Plant generates power through mixing freshwater and seawater.

**University of Minnesota awarded US$2.7M federal grant to study viability, sustainability of wood biomass**

Grant from the federal agriculture and energy departments will fund a University of Minnesota-led multistate study of whether forest-based biofuels are viable and sustainable.

**November 23**

*Bill launched in U.S. House to lock in alternative fuel tax credit for paper mills’ black liquor fuel*

Alternative fuel tax credits for burning black liquor may become permanently available, but only if a newly introduced bill passes. It will face opposition from House members who think paper companies have taken advantage of a tax credit not intended for them, calling it a violation of the spirit of the alternative fuels credit

**KL Energy confirms USDA has approved Upton, Wyoming, ethanol facility for second-generation biomass production under BCAP, believed to be first approval for cellulosic ethanol**

Upton, Wyoming cellulosic ethanol facility owned and operated by KL Energy has been approved by the USDA as a biomass production facility under the Biomass Crop Assistance Program. The facility uses KL Energy’s proprietary thermomechanical pretreatment and enzymatic hydrolysis process.

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**Statistics Corner: E-Book Sales**

According to the International Digital Publishing forum (IDPF, [http://www.idpf.org/](http://www.idpf.org/)), wholesale electronic book sales are increasing at an unprecedented rate. This has obvious implications for producers of book papers and signals a trend that has broader implications. Figure 1 below shows data on wholesale e-book sales collected by IDPF and the Association of American Publishers (AAP, [http://www.publishers.org/index.html](http://www.publishers.org/index.html)).

![Figure 1. Wholesale Electronic Book Sales in the United States, 2002 – present.](image-url)