Climate Policies to Impact Industry

Industry accounts for 32 percent of the U.S. energy budget and is responsible for about 27 percent of the nation’s greenhouse gas (GHG) emissions, mainly CO₂. The pulp and paper industry, the country’s third largest industrial consumer of energy, is entering a period that will be characterized by increasingly stringent demands for reductions in GHG emissions that are in line with yet-to-be-promulgated climate change-related policies. Notwithstanding the very considerable uncertainty surrounding the form these policies will take, the industry is faced with an immediate need to formulate future capital investment and operating strategies that are consistent with the developing regulatory environment. This situation underlines the importance of examining the implications of the most likely policy scenarios.

In response to this need, Georgia Tech professor Marilyn A. Brown and researcher Youngsun Baek have been conducting a CPBIS-supported research program to estimate the magnitude of the impacts of evolving energy policies on the pulp and paper industry. They used the National Energy Modeling System to examine the likely effects of the following three policy packages:

- a national renewable electricity standard, a legislative mandate requiring electricity suppliers in a given geographical area to employ renewable resources to generate a certain amount or percentage of renewable power by a target year,
- a U.S. greenhouse gas (GHG) cap and trade system, by which the government provides economic incentives for achieving reductions in GHG emissions, and
- expansion of industrial energy efficiency policies, by which the government would step up programs to support research aimed at more efficient energy use and extend tax credits for combined heat and power systems.

Preliminary results of the study show that, in combination, the three policies would cut CO₂ emissions by an estimated 42%. At the same time, however, they would increase the price of timber and other forest-based biomass inputs, while also increasing the price of industrial electricity. The authors provide quantitative estimates of the magnitudes of these changes under various assumptions concerning which policy or combination of policies is adopted. The results of the study will be of considerable interest to pulp and paper industry managers as they weigh their future strategy options.

For more detailed information on the results of this work, attend a presentation by the authors at one of the CPBIS-sponsored sessions during the upcoming TAPPI Engineering, Pulping and Environmental Conference in Memphis, Tennessee, October 11-14. (See the August issue of this newsletter for information on other papers to be presented in those sessions.)

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

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

September 21

U.S. corrugated box shipments down 9.6% in August; markets remain steady and poised for upturn

August corrugated shipments were off 9.6% year-over-year. Box shipments are so far resisting any obvious benefit from an improving manufacturing climate but an upturn is expected.

Global softwood and hardwood pulp markets stable and strong in September, with similar conditions expected over next couple of months

Vol. IX, No. 5

September 24, 2009
Ongoing short supply and good demand have resulted in quick acceptance of announced September prices. There is very little spot market activity because of the overall limited supply, and spot tonnage is hard to find.

Minas Basin Pulp approved for tidal energy project; by using recycled fiber, company cuts costs and gains carbon credits at mill in Hantsport, Nova Scotia, CEO says

Minas Basin Pulp and Power Co. Ltd. in Nova Scotia has received approval for an experimental tidal energy project on the Bay of Fundy, which generates most of Canada’s tidal energy. The state-of-the-art demonstration facility will serve researchers, technology providers and industry.

Proposals for Wisconsin biomass plants trigger questions, concerns from state’s papermakers about possible rising wood prices for existing forest industries

Proposals to generate power by burning waste wood look set to add to concerns voiced by the paper industry and environmentalists.

September 7
U.S. paper and paperboard production improves for third straight month in July, but output for year down 15%

July statistics show that, for the third month in a row, U.S. production of paper and paperboard increased. Year-to-date production, however, was 15% lower than last year’s figure of 52.4 million tons.

IP hopes ArborGen’s genetically modified eucalyptus will provide reliable supply of cold-tolerant, low-cost wood as timberlands come under pressure from development and biofuels industry

ArborGen LLC, is seeking permission from the U.S. Dept. of Agriculture to sell Australian eucalyptus trees genetically engineered to survive freezes in the U.S. South.

Stora Enso invites media to viewing of Opcon Powerbox at its Skutskär, Sweden, pulp mill; technology will allow company to produce energy from surplus heat

Innovative system for carbon-free production of electricity will produce power from 70°C waste heat that the mill was previously unable to exploit.

August 31
PPPC: Printing and writing paper data in July show decline moderating, exports improving overall; uncoated woodfree demand down relatively modest

North American printing and writing production in July fell 18.3% year-over-year. The total through the first seven months was down 20.8% year-over-year. July output fell a relatively moderate 10.2% year-over-year for uncoated wood-free.

Report: 57% of paper consumed in U.S. was recovered for recycling in 2008, more than any other material; paper industry aims for 60% recycling by 2012

Among the facts documented by a new position paper being developed by The Print Council are the following:

- In 2008, more than 57 percent of paper consumed in the U.S. was recovered for recycling, more than any material.
- Less than 10 percent of U.S. power comes from renewable sources, but in the pulp and paper industry, that figure is greater than 60 percent.
- The average person’s paper use for a year -- 440 pounds -- is produced by 500 kilowatt-hours of electricity, the amount used to power one computer continuously for 5 months.

Upcoming Events

CPBIS-Sponsored Sessions at the TAPPI EPE Conference: October 12-14 at the Memphis Cook Convention Center and Memphis Marriott Downtown. See the August issue of this newsletter for information. See also www.tappiepe.com

Statistics Corner: Emerging from the Gloom?

Figure 1 below shows that, after months of declines followed by a period of relative stagnation, U.S. pulp production is exhibiting a robust recovery. Figure 2 documents a corresponding increase in prices.

![U.S. Pulp Production Index](source: Economagic.com (Federal Reserve Board))

Figure 1. U.S. Pulp Production Index (Federal Reserve Board)
Figure 2. U.S. NBSK Pulp Price Index (Foex)