



The reality of renewables

The need for safe, renewable energy sources that reduce dependence on fossil fuels and mitigate environmental impacts is both a future and current reality, as the Gulf of Mexico oil spill disaster has highlighted. While renewable energy sources only account for about 13 percent of the world's primary energy demand, technology advances could help support 80 percent by 2050, according to optimistic estimates. Although controversial in terms of competition with existing products and needs, fuels derived from cellulose, such as ethanol and biodiesel, have gained a great deal of attention and will continue to do so as the demand for bioenergy expands.

The forest products industry is uniquely positioned to respond to the interest in renewables, but technical, business, and policy hurdles exist. Given the potential of bioenergy, TAPPI is committed to bringing its members the latest information from this field through dedicated content and innovative conference programs.

For example, this issue of *TAPPI Journal* features three papers that underscore the pulp and paper industry's access to bioenergy for internal and external applications, such as the UASB reactor technology on this month's cover. In addition to peer-reviewed articles within *TJ*, TAPPI's *Bioenergy Technologies Monthly* provides focused information on biorefinery research, operations, and markets. Also, the fall

PEERS conference includes strong biorefinery content, while the new BioPro Expo, scheduled for spring 2011, will take a multi-industry look at the potential of cellulosic biomass.

PEERS features robust Biorefinery Track

Scheduled for October 17-20, 2010, in Norfolk, VA, TAPPI's PEERS Conference (formerly known as EPE) will cover pulping, engineering, environmental, recycling, and sustainability topics. A robust Biorefinery Track will inform attendees about the latest technical advances in hemicellulose extraction, including those that result in more efficient production of biofuels, as well as extraction methods that do not interfere with pulp yield and characteristics. Sessions on thermomechanical gasification will cover a thermomechanical biorefinery pilot plant designed for integration with pulp and paper mills, among other topics.

Another key biorefinery session addresses technical and business considerations in repurposing closed pulp mills for ethanol production. Using two mill-specific studies as examples, along with extensive laboratory data, one such presentation describes the near-term viability of adapting a kraft pulp mill to meet specific production rates and economic conditions that provide an internal rate of return greater than 15%. For more information on the PEERS Conference, visit www.tappipeers.org.

BioPro Expo looks at near-term options

TAPPI has also created BioPro Expo, a unique new cross-industry bioenergy event scheduled for March 11-14, 2011, in Atlanta, GA. This event explores existing and emerging ways for transitioning a variety of biomass feedstocks into energy and biofuel, as well as critical policy developments. Through technical sessions and a hands-on tradeshow, BioPro Expo attendees will explore bioenergy solutions they can implement in the short term. These solutions include biomass transportation, storage, and conversion technologies, as well as processing chemicals and equipment, and other supporting consulting services.

BioPro Expo conference content is organized by a multi-industry Advisory Board that includes TAPPI, Georgia Power, Southern Alliance for Clean Energy, Forest Landowners Association, Southeast Agriculture & Forestry Resources Alliance, Bioenergy Deployment Consortium, and others. TAPPI's 5th Annual International Bioenergy and Biotechnologies Conference (IBBC) is co-located with BioPro Expo, which will also provide bioenergy facility tours as part of the event. For more information on BioPro Expo, visit www.bioproexpo.org.

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