

Companies

Low oil prices will not thwart biobased chemicals

The severe and sustained drop in oil prices is expected to hamper but not eradicate investment in biobased chemicals, particularly when the product in question has specialty applications or the process remains cost-competitive, market players say. Consumer demand for renewable chemicals also continues to drive brand owners to explore ways to increase biobased content in their supply chains.

» Brand owners continue to see renewable chemicals as an opportunity for differentiation. «

Genomatica CEO Christophe Schilling expects that even with efficient biobased processes, continued low oil prices will lead the biobased chemicals industry to be selective on projects in the near term, prioritizing particular potential benefits. “Examples include ... more sustainable offerings, gaining assured local supplies, or back-integrating,” he says. “In addition, we’d expect biotechnology to be championed as an advantageous way to produce chemicals, especially for higher-value products, like specialty chemicals, whose mar-

ket pricing is less sensitive to changes in hydrocarbon prices.” The first commercial-scale plant using Genomatica’s biobased 1,4-butanediol (BDO) technology is slated to come online in 2016. Novamont, meanwhile, is building a €85-million (\$90.5 million); 30,000-m.t./year unit at Adria, Italy. The plant’s offtake will replace petroleum-based BDO used to produce polyesters, Novamont says.

“The combination of low oil prices ... and well-publicized setbacks for companies in the [industrial biotechnology] sector can lead to some doubting its future,” says Sean Sutcliffe, CEO of Green Biologics (Abingdon, UK). The company broke ground on a biobased *n*-butanol and acetone plant at Little Falls, MN, last fall, and commercial production is scheduled to begin later this year. The process technology is cost-competitive even at the currently low oil prices, Sutcliffe says. He adds that while he expects 2016 to be tough for renewable chemical companies, he still sees opportunities to prosper. Brand owners also continue to see renewable chemicals as an opportunity to build growth.

“The technology is proven. Today’s challenge is to bring biobased products to market when the consumer is basically unaware of their existence,” says Kathryn Sheridan, CEO of Sustainability Consult. “What we are

seeing now is a disruption of the traditional chemical value chain as start-ups work directly with brand owners on application development and to promote the benefits of renewable chemicals.”

Low oil prices have not stemmed government support for biobased developments. “In Europe, the political administration has put serious financial resources behind research and demo plants, particularly biorefineries,” Sheridan adds.

—REBECCA COONS

● Comet Biorefining receives grant

Comet Biorefining (London, ON) has been awarded a grant of C\$10.9 million (\$8.2 million) for the construction of an advanced biobased chemicals plant. The funding is being provided by Sustainable Development Technology Canada. The plant, to be located at Sarnia, will convert corn stover into high-purity dextrose using Comet’s proprietary technology.

● Amyris links with China’s Cofco

Amyris (Emeryville, CA) says that it will collaborate with China’s Cofco Nutrition and Health Research Institute (Cofco NHRI), a wholly owned subsidiary of agriproducts and foodstuffs company China National Cereals, Oils and Foodstuff Corp. (Cofco; Beijing). The agreement calls for Amyris to provide improved strains via its hyperintegration for rapid yeast strain engineering technology, Hi-Ryse, for Cofco NHRI.

● Firmenich perfume ingredient

Firmenich says it has developed a biobased route for Ambrox, a terpene furan used in perfume compositions, and will launch production on a large scale in the coming months. Ambrox was first developed by Firmenich in the 1950s as a substitute for ambergris, which was exceedingly scarce. The latest Firmenich process employs an enzymatic fermentation route.

● Dow expands crop protection deal

Dow Chemical and Radiant Genomics have expanded their existing ag biologicals collaboration to include additional targets with applications in both crop protection and trait development. The collaboration combines Radiant Genomics’ metagenomic and engineering-biology technologies with Dow’s natural products discovery and product development capabilities.

Digest

GFBiochemicals acquires Segetis and enters US market

GFBiochemicals (Milan) announced in February that it has acquired Segetis (Golden Valley, MN), the main levulinic acid derivatives producer in the United States. GFBiochemicals, which operates a 10,000-m.t./year levulinic acid plant at Caserta, Italy, will operate Segetis’s production plant at Golden Valley and establish a direct presence in the United States under the name GFBiochemicals Americas. Segetis’s levulinic acid derivatives have several applications, including fragrances, plasticizers for polyvinyl chloride and biopolymers, personal care, household and industrial cleaners, pesticide formulations, and coating and adhesive strippers.

REG to acquire biorefinery in Wisconsin

Renewable Energy Group (REG; Ames, IA) has agreed to acquire Sanimax Energy’s (DeForest, WI) 20-million gal/year nameplate capacity biodiesel refinery at DeForest for \$11 million in cash and 500,000 shares of REG common stock. The consideration will pay for the refinery and related assets. The biorefinery is located just north of Madison, WI, and began production in 2007. Sanimax operates a grease-processing facility at the same location, although that facility does not form part of the acquisition. REG will also pay Sanimax up to an additional \$5 million in cash for up to seven years after closing based on the volume of biodiesel produced at the plant.