

Mascoma and Valero Establish Joint Venture for Commercial-Scale Hardwood Cellulosic Ethanol Facility in Kinross, Michigan

– Valero to provide majority of financing for fully-funded commercial-scale facility –

Lebanon, New Hampshire – December 9, 2011 – Mascoma Corporation, a renewable fuels company, announced today that it has entered into definitive agreements with Valero Energy Corporation, the nation’s largest independent oil refiner and a leading ethanol producer, to develop and operate a first-of-its-kind 20 million gallon per year commercial-scale cellulosic ethanol facility in Kinross, Michigan. The cost to construct, commission and start-up this facility is expected to be approximately \$232 million, based on current external engineering estimates, and includes certain up-front infrastructure costs that will enable the expansion of the facility to 40 million gallons per year. These costs are fully funded, with Valero providing the majority of the financing, and the remainder from awards by the U.S. Department of Energy (DOE) and the State of Michigan. Construction of the Kinross facility is anticipated to start in the next three to six months and is expected to be completed by year-end 2013.

The Kinross facility will use Mascoma’s proprietary consolidated bioprocessing (CBP) technology platform, which has been developed by Mascoma over the past five years, to convert hardwood pulpwood into ethanol. Hardwood pulpwood is a selectively harvested, naturally regenerated feedstock and is an underutilized, abundant resource in the surrounding area.

“Valero’s substantial financial commitment to the Kinross facility demonstrates Mascoma’s technology leadership, as well as our ability to attract the significant investment that has posed a key challenge to advanced biofuels production in this country,” stated Bill Brady, President and CEO of Mascoma. “Our partnership with Valero to develop and operate the Kinross cellulosic ethanol facility, and facilities beyond Kinross, is a major step forward in our goal to provide a low-cost, more sustainable alternative to petroleum-based products.”

Highlights

- Frontier Renewable Resources, LLC, a subsidiary of Mascoma, and Diamond Alternative Energy, LLC, a subsidiary of Valero, have formed a joint venture, Kinross Cellulosic Ethanol LLC, to develop and operate a hardwood cellulosic ethanol facility in Kinross, Michigan.
- Mascoma and Valero will finalize certain ancillary agreements relating to the Kinross facility, including construction, feedstock supply and ethanol off-take marketing.
- Mascoma will contribute the proceeds from its DOE cooperative agreement award and its State of Michigan grant to the joint venture, while Valero will provide additional financing required to develop the Kinross facility.
- Valero will provide project management to build and will operate the Kinross facility, and will hold a majority interest in the joint venture. Mascoma, through its subsidiary Frontier, will hold a minority interest. Valero will market the ethanol produced at the Kinross facility.

- Mascoma will receive royalties for a certain time period based on ethanol yield milestones.
- Valero will have the option to expand the Kinross facility's capacity to up to 80 million gallons per year.
- Mascoma and Valero have developed a framework agreement for partnering on additional cellulosic ethanol facilities beyond Kinross.

"This partnership provides an exciting opportunity to combine Mascoma's innovative CBP technology platform and expertise with Valero's project management, operating, distribution and marketing capabilities," stated George Stutzmann, Vice President of Alternative Energy of Valero. "We view this first commercial-scale cellulosic ethanol facility in Kinross and our partnership with Mascoma as an important foundation for potential expansion beyond Kinross."

About Valero

Valero Energy Corporation, through its subsidiaries, is an international manufacturer and marketer of transportation fuels, other petrochemical products and power. Valero subsidiaries employ approximately 22,000 people, and assets include 16 petroleum refineries with a combined throughput capacity of approximately 3 million barrels per day, 10 ethanol plants with a combined production capacity of 1.2 billion gallons per year, and a 50-megawatt wind farm. Approximately 6,800 retail and branded wholesale outlets carry the Valero, Diamond Shamrock, Shamrock and Beacon brands in the United States and the Caribbean; Ultramar in Canada; and Texaco in the United Kingdom and Ireland. Valero is a Fortune 500 company based in San Antonio. Please visit www.valero.com for more information.

About Mascoma

Mascoma Corporation is a renewable fuels company that has developed innovative technology for the low-cost conversion of abundant biomass. Using its proprietary consolidated bioprocessing, or CBP, technology platform, Mascoma has developed genetically-modified yeasts and other microorganisms to reduce costs and improve yields in the production of renewable fuels and chemicals. Mascoma's first commercial application of its CBP technology is its Mascoma Grain Technology, or MGT™, yeast product, which is a "drop-in" substitute for existing yeasts designed to improve the economics of corn-based ethanol production. Mascoma is pursuing other commercial applications of its CBP technology and is working with collaborators to develop and construct commercial scale facilities to convert hardwood pulpwood to cellulosic ethanol.

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