

Global Bioenergies continues to bring its demo plant into operation successfully and lays out its strategy for using renewable resources

Evry (France), 15 December 2016

Global Bioenergies is now entering the final phase of demonstrating its technology for converting renewable carbon into hydrocarbons. The first trials on the demo plant in Leuna were successfully completed, within schedule, in the fall of 2016 and Global Bioenergies today announces that a first production of green isobutene was observed.

The demo plant will be ramped up in the first half of 2017, with the goal of reaching performances close to commercial levels by the end of the year. The delivery of the first tons to Global Bioenergies' numerous industrial partners will enable the validation of downstream processes for the conversion of this green isobutene in a range of industries, including cosmetics, rubber and fuels, the goal being to continue discussions on commercial exploitation in tens of thousands of tons of product.

While Global Bioenergies continues with the demonstration phase of the technology, it will now amplify its strategy aimed at diversifying the resources compatible with its isobutene fermentation process. The process currently uses first-generation sugar as feedstock, an approach facilitated by the existence of the well-established sugar beet, sugar cane and corn processing industries. We will now expand our focus to other second- and third-generation carbon feedstocks, which are associated with even higher reductions in greenhouse gas emissions. Second generation feedstock consists of agricultural residues (wood, straw, miscanthus, etc.), while third generation feedstock is based on the use of gaseous carbon (CO₂, syngas, etc.) directly.

The successful production of isobutene from second-generation carbon resources has already demonstrated the adaptability of the company's gaseous fermentation technology. These tests were based on wheat straw extracts supplied by Clariant. Global Bioenergies has also been selected by a consortium led by large Swedish industrialists, Preem and Sveaskog, to study the potential for converting forestry waste into renewable fuel. Global Bioenergies will intensify its efforts to maximize the use of currently un-valorized or under-valorized waste streams in an environmental and economic objective.

Third-generation feedstock is also a priority for Global Bioenergies' research and development because it has the highest environmental potential and also because of the low cost of the carbon sources considered. The principle of gaseous fermentation promoted by the company will also apply here, allowing a continuous, more efficient and more cost-effective production.

Global Bioenergies expects that the exploitation of the process based on first-generation feedstock will be facilitated by the gradual recovery in oil prices and a softening in sugar prices (as the quota system comes to an end in Europe and sugar consumption is reduced in the United States). By broadening the technology's potential even further, Global Bioenergies is setting ambitious economic and environmental targets, based on the use of carbon from a variety of sources and lower costs. In the future, the billions of tons of excess carbon produced every year must either be sequestered or exploited commercially. Global Bioenergies is pledging to make a difference by leveraging its technology to help meet this global challenge.

About GLOBAL BIOENERGIES

Global Bioenergies is one of the few companies worldwide, and the only one in Europe, that is developing a process to convert renewable resources into hydrocarbons through fermentation. The Company initially focused its efforts on the production of isobutene, one of the most important petrochemical building blocks that can be converted into fuels, plastics, organic glass and elastomers. Global Bioenergies continues to improve the performances of its process, operates its industrial pilot, is completing the construction of its demo plant in Germany, and prepares the first full-scale plant through a Joint-Venture with Cristal Union, named IBN-One. The company also replicated its achievement to propylene and butadiene, two members of the gaseous olefins family, key molecules at the heart of petrochemical industry. Global Bioenergies is listed on Alternext, Euronext Paris (FR0011052257 – ALGBE).

Should you like to be kept informed, subscribe to our news feed on www.global-bioenergies.com

Follow us on Twitter: [@GlobalBioenergi](https://twitter.com/GlobalBioenergi)

Contact

GLOBAL BIOENERGIES

Frédéric PÂQUES

Chief Operations Officer

Phone: +33 (0)1 64 98 20 50

Email: invest@global-bioenergies.com

