

Global Bioenergies: Successful first trial in its industrial pilot

Evry (France) – November 17th, 2014 – Global Bioenergies (Alternext Paris: ALGBE) announces having successfully carried out the first isobutene production trial in its industrial pilot of Pomacle-Bazancourt. Delivered on the Pomacle-Bazancourt site in July, the industrial pilot installation has since been taken through a series of mechanical and functional validations. A production run was initiated on November 3rd, 2014, and resulted in the very first production of fermentative isobutene in an industrial environment. This achievement is documented in a short movie available on [Global Bioenergies' website](#).

Global Bioenergies since 2008 has been developing a fermentation process that targets gaseous isobutene. After having completed a first stage that led to the initial proof of concept in 2009, the Company built a prototype in 2010. An extensive campaign of trials in laboratory-scale pilots of various sizes had then been conducted. The next frontier consisted in scaling up the process and adapting it to an industrial environment. To address this novel technical challenge Global Bioenergies had obtained a 4 million euro financing from the French State in 2013 (“Investissements d’Avenir” program).

The first objective was to build a fermenter of a new kind, adapted to the fermentation of gaseous hydrocarbons. Following phases dedicated to engineering and construction, the fermenter was installed in July 2014 at the heart of the Pomacle-Bazancourt industrial complex which brings together leaders in the field of agro-products conversion such as Cristal Union.

After a long phase of mechanical and functional validations, Global Bioenergies’ chemical engineering team decided that the required safety conditions were met to carry out a first trial. It was performed at the very beginning of November over three days. It is the very first time isobutene is produced by fermentation outside of Global Bioenergies’ R&D laboratories located in Evry near Paris.

This trial could rely on the unique expertise of the company ARD (Agro-industrie Recherches et Développements) which is now in charge of the operation of Global Bioenergies’ pilot, as part of an agreement signed recently.

Philippe Aubry, Deputy General Manager of ARD, comments: “Since its founding in 1989, ARD has established itself as a leader in the optimization of innovative fermentation processes. We are proud to participate in the industrialization of this breakthrough innovation. I thank ARD’s teams for all their hard work which has enabled this first isobutene production trial in industrial conditions, and on schedule”.

In the coming months, a new campaign of runs will be carried out. The objectives are now the optimization of the process and the production of samples. These samples will then be shipped to various industrialists and in the first instance to Arkema and Audi with whom Global Bioenergies has signed collaboration agreements.

Rick Bockrath, Vice President for Chemical Engineering at Global Bioenergies adds: “The fermentation of gaseous hydrocarbons is a new frontier. We have today taken a giant leap forward which will be followed within the next 18 months by the start-up of a second industrial pilot with a nameplate capacity of 100 tons per year in Germany. We already contemplate the commercialization of full scale plants in the framework of industrial partnerships within 3 to 4 years”.

Marc Delcourt, Chief Executive Officer of Global Bioenergies concludes: "The recent decrease in oil prices, a consequence of the temporary abundance of shale oil in the United States must not mask the underlying reality: the upcoming depletion of fossil resources will endanger the future of our civilization. The time is nearing when our bio-isobutene production process will appear as an important piece of the puzzle of the upcoming energetic and chemical transition".

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 yield of its process and is now carrying out tests in its first industrial pilot. The company recently replicated this success to propylene and butadiene and is also looking to continue with other members of the gaseous olefins family, key molecules at the heart of petrochemical industry.

Global Bioenergies is listed on Alternext, Euronext Paris (FR0011052257 - ALGBE) and is part of the Alternext Oseo Innovation Index.

Global Bioenergies is among the TOP 10 in the category production of the GreenTec Awards 2015, Europe's largest environmental and business prize. Help shape a green future and vote for our project on www.greentec-awards.com from November 6th, 2014, till January 11th, 2015!

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

Follow us on Twitter: @GlobalBioenergi

Contact

GLOBAL BIOENERGIES

Jean-Baptiste BARBAROUX

Head of Corporate Development

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

Email : jean-baptiste.barbaroux@global-bioenergies.com



**Global Bioenergies
on video**

