

## **Global Bioenergies: estimation of a 69 % reduction in greenhouse gases emissions for fully renewable ETBE compared to fossil gasoline**

**Evry (France) – 15 January 2018 – Global Bioenergies (Euronext Growth: ALGBE) has entrusted EVEA, a company specialized in calculation of Life Cycle Assessment (LCA), with a study focused on the products to be manufactured in the future IBN-One plant. Fully renewable ETBE is estimated to enable 69% reduction in greenhouse gas emissions compared to fossil gasoline. This figure was calculated for the current design planned for the IBN-One plant using a greenhouse gases emissions calculator based on 2BSVS, compliant with the Renewable Energy Directive.**

As part of the ISOPROD project financed by the Investissements d'Avenir program and operated by the ADEME, an assessment of the environmental impact of the future renewable isobutene plant IBN-One was performed by Evea, a company specialized in Life Cycle Assessment (LCA) and eco-design. The LCA focused on the production of renewable isobutene derived from sugar beet under the IBN-One plant design in collaboration with Cristal Union, partner of Global Bioenergies in this joint-venture.

Samuel Causse, Agro-Resources & Green Chemistry department manager at EVEA, declares: "In terms of usage and end-of-life, we analyzed several dimensions of environmental footprint, greenhouse gases emissions being one of them. Our analysis led to eco-design recommendations which will be implemented in the process. We are proud to have been selected for assessing and improving the environmental performance of such an innovative and possibly game-changing technology."

The preliminary results of the analysis according to the greenhouse gases emissions calculator compliant with the Renewable Energy Directive was that fully renewable ETBE (Ethyl Tert-Butyl Ether), produced from renewable isobutene and bioethanol, is associated with a reduction of 69% of CO<sub>2</sub> equivalent emissions if compared to fossil gasoline. These results will have to be confirmed after an audit on site and a peer review of the LCA. ETBE is today incorporated in gasoline, up to 23%. Fully renewable ETBE holds the potential to incorporate 2.7 times more renewable energy in gasoline than using traditional biofuels.

Bernard Chaud, Chief Industry Officer at Global Bioenergies and CEO of IBN-One, adds: "These results are encouraging and promising with sugar beet as a substrate. With second generation feedstocks, such as wheat straw or wood-derived hydrolysates, renewable isobutene derivatives are expected to achieve an even higher emission reduction".

Marc Delcourt, CEO of Global Bioenergies, declares: "This is just the beginning of a new revolution in the adoption of environmentally friendly liquid fuels. While the world is overwhelmed by news about electric mobility, it is important to remind the public that similar greenhouse gases emissions savings can be achieved using advanced biofuels. Biofuels represent a renewable solution that carries no compromise on car autonomy and requires no nation-scale infrastructure expenditure."

### 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 performance of its process, to operate its demo plant in Germany, and to prepare the first full-scale plant through a joint venture with Cristal Union, named IBN-One. Global Bioenergies is listed on Euronext Growth Paris (FR0011052257 – ALGBE).

**Stay informed! Subscribe to our newsfeed on**  
**[www.global-bioenergies.com](http://www.global-bioenergies.com)**

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

**ALGBE**

**EURONEXT**  
**GROWTH**



### Contact

#### **GLOBAL BIOENERGIES**

Jean-Baptiste Barbaroux  
Head of Business Development  
Phone: +33 1 64 98 20 50  
[invest@global-bioenergies.com](mailto:invest@global-bioenergies.com)