



– Press Release –

## **CARBIOS produces first PET-bottles from 100% recycled plastic waste using Company's breakthrough technology**

- **Process can repeatedly recycle all kinds of PET plastic waste**
- **An industrial solution to achieve brand-owners' sustainability goals**
- **Innovative tech strives to help create a cleaner planet through a circular economy, resulting in less oil and gas consumption**

**Clermont-Ferrand, France, February 27, 2019 (06:45 AM CET)** – CARBIOS (Euronext Growth Paris: ALCRB), a company pioneering new, bioindustrial solutions to reinvent the lifecycle of plastic and textile polymers, today announced it has successfully produced the first PET-bottles made with 100% Purified Terephthalic Acid (rPTA), through the enzymatic biorecycling of plastic waste. This major milestone is a world-first and confirms the potential of the company's technology to engage the whole industry in a responsible transition towards a circular economy.

**Alain Marty, Chief Scientific Officer at CARBIOS**, comments, *"We have successfully developed the first biological process with which all kinds of PET plastic waste can be broken down into its original components and reused to produce virgin plastic products for applications such as PET-bottles. This new step shows the strong potential of CARBIOS' enzymatic technology and provides a breakthrough solution to help solve society's growing waste problem."*

Previously, CARBIOS demonstrated that its proprietary biorecycling technology, based on the use of bioengineered enzymes, had the ability to turn PET plastic waste back into its original components at a rate of 97% in only 16 hours. It had also demonstrated that virgin PET can be made with 100% rPTA via its proprietary biorecycling process, which uses all kinds of post-consumer PET plastic bottles (clear, colored, opaque, complex). By demonstrating today that 100% rPTA can be used to produce PET-bottles that match brand and customer requirements, this technology proves to be a potential game-changer in the transition towards a circular economy that will benefit the environment and future generations.

PET is the most common polyester on the market. It is used to produce plastic packaging, textile fibers, and nearly 500 billion units of plastic bottles each year<sup>1</sup>. It is a market expected to grow 4.8% annually, from 2017 to 2025<sup>2</sup>. By decoupling the production of new plastic bottles from petrochemical feedstock<sup>3</sup> and making waste collection economically more viable, CARBIOS' technology offers a sustainable and efficient solution to change the way we produce some of the most commonly used plastic products and meet the needs of brand-owners and consumers.

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<sup>1</sup> Source: Citi GPS - Global Perspectives & Solutions – Rethinking Single-Use Plastics (August 2018)

<sup>2</sup> Source: <https://www.recycling-magazine.com/2019/01/24/market-study-sees-lots-of-potential-for-recycled-plastic/>

<sup>3</sup> See interesting reference: How much oil is used to make plastic? <https://www.eia.gov/tools/faqs/faq.php?id=34&t=6>

**Jean-Claude Lumaret, CEO of CARBIOS**, adds, *“The plastics industry faces fundamental challenges related to sustainability. Our technology, based on a circular model, reuses resources rather than consuming them. This new milestone takes us one step closer to bringing our technology to the market. With the construction of our demonstration plant to start later this year, we’re aiming to engage the whole plastics industry in a transition towards a circular economy and take a leadership role as a global license provider for the biorecycling of PET plastics and fibers.”*

**Follow the link to discover more in video:** [Here](#)

**About CARBIOS:**

CARBIOS is a green chemistry company whose innovations provide solutions to the environmental and sustainable development issues manufacturers currently face. Since its founding in 2011, the company has developed two industrial-scale biological processes for the biological breakdown and recycling of polymers. These unique innovations help optimise the performance and life cycle of plastics and textiles by capitalizing on the properties of specially selected enzymes. CARBIOS’s economic growth model is based on the industrial roll-out and sale of its products, enzymes, technologies and biological processes through direct licence agreements or joint ventures, to major players in the fields to whom they would most benefit. To that end, CARBIOS founded the joint venture CARBIOLICE in 2016, in partnership with Limagrain Céréales Ingrédients and the SPI fund, run by Bpifrance. This company, in which CARBIOS holds a controlling share, will market the first technology licensed by CARBIOS by producing enzyme pellets used in the production of biodegradable and bio-sourced plastics. Since its founding, CARBIOS has been backed by Truffle Capital, a European investment capital player. CARBIOS qualifies as an “Innovative Company” according to Bpifrance, which makes the company’s shares eligible for inclusion in innovation-focused mutual funds (FCPIs). For more information, please visit: [www.carbios.fr](http://www.carbios.fr)  
CARBIOS is also eligible for inclusion in SME share savings accounts (PEA-PMEs).

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