



-Press release-

## CARBIOS: New patents granted in Europe and Japan

- On heels of US patent, the European and Japanese grants significantly enhance the global protection of CARBIOS' infinite PET plastic waste recycling technology
- CARBIOS holds 32 patent families worldwide, 13 of which are related to its biorecycling technology

**Clermont-Ferrand, France, October 08, 2019 (06:45 AM CEST)** – CARBIOS (Euronext Growth Paris: ALCRB), a company pioneering new bio-industrial solutions to reinvent the lifecycle of plastic and textile polymers, announced the grant of new patents by the European Patent Office (EPO) and the Japanese Patent Office (JPO) for the company's proprietary process of biorecycling polyethylene terephthalate (PET) plastic waste.

**Jean-Claude Lumaret, CEO of CARBIOS comments:** « *After a first validation in the United States in early 2019, the grant of these patents strengthens our competitiveness in key markets and ensures the protection of our recycling technology until 2033. Amid this favorable trend, we continue to consolidate our IP portfolio in regions and countries where demand for our disruptive technology is strong.* »

These European (EP 2,922,906 B1) and Japanese (JP 6449165) patents are a true acknowledgment of CARBIOS' PET recycling innovation – a biotechnological process that enables, from a mixture of plastic waste, the depolymerization of PET into its original components (monomers). These monomers can then be reused to manufacture new, 100% recycled products such as bottles and packaging.

These patents, filed in November 2013, are the first delivered in Europe and Japan for this innovative method of recycling PET plastics. In addition, CARBIOS currently holds 127 titles worldwide representing 32 patent families, six of which protect the recycling process and seven related to PET-degrading enzymes.

The US, Europe and Japan represent a significant share of the overall PET market, accounting for 42% of global consumption (29.4 Mt) and 11% of production (7.9 Mt)<sup>1</sup>. These deliveries complement the open market opportunities CARBIOS sees globally and confirms the innovative nature of its research.

CARBIOS' recycling technology opens the path to a truly circular economy in the treatment of post-consumer plastics and fibers. The Company recently achieved a world first by producing PET bottles from 100% recycled plastics. CARBIOS' enzymatic approach, which runs at limited heat and at atmospheric pressure in water could significantly increase global plastic recycling rates.

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<sup>1</sup> Source: IHS Markit in 2018, Transparency Market Research in 2015, Pira International in 2012 and CARBIOS' estimation

**About CARBIOS:**

[CARBIOS](#) is a green chemistry company whose innovations are designed to meet environmental and sustainable development issues faced by global industrial players. Since its creation in 2011, CARBIOS has developed two industrial bioprocesses dedicated to the biodegradation and the biorecycling of polymers. These innovations, which are a world first, optimize the performance and lifecycle of plastics and textiles by exploiting the properties of highly specific enzymes.

CARBIOS' economic development model is based on the industrialization and commercialization of its products, enzymes, technologies, and bioprocesses via the concession of licenses, directly or via joint ventures to major industrial players in the sectors that can make use of the Company's innovative technologies. For instance, CARBIOS created in September 2016 the joint-venture CARBIOLICE, in partnership with Limagrain Ingrédients and the SPI investment fund run by Bpifrance. This company, in which CARBIOS holds a controlling share, will market the first technology licensed by CARBIOS by producing an enzymatic additive making PLA-based plastics (films, bags, packaging) fully compostable in domestic conditions.

Since its creation, CARBIOS benefits from the financial support of the leading European venture capital firm [Truffle Capital](#). CARBIOS was granted the label "Young Innovative Company" by Bpifrance (former OSEO) and is eligible for investments by private equity mutual funds (FCPIs).

For more information, please visit: [www.carbios.fr](http://www.carbios.fr)

CARBIOS is eligible for the PEA-PME, a government program allowing French residents investing in SMEs to benefit from income tax rebates.



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