



- Press Release -

2021 HALF-YEAR RESULTS

- **September 2021: Operational start-up of the demonstration plant in Clermont-Ferrand**
- **Fundraising of €114 million, the largest capital increase in history on Euronext Growth Paris¹**
- **Confirmation of the ambition to market enzymatically recycled PET by 2025, notably with the construction of a reference unit of c. 40kt capacity**
- **Full takeover of Carbiolice through the acquisition of the SPI's fund stake**
- **First samples of food-grade PET bottles produced from enzymatically recycled plastic by Carbios and its Consortium partners, L'Oréal, Nestlé Waters, PepsiCo & Suntory Beverage and Food Europe**
- **Carbios and Michelin take a major step towards developing 100% sustainable tires**
- **Cash position of €112 million as of June 30th, 2021**

Clermont-Ferrand, France, September 30, 2021 (6:00 pm CEST) - Carbios (Euronext Growth Paris: ALCRB) (the "**Company**"), today reported its operating and financial results for the first half of 2021. The financial statements as of June 30th, 2021, were approved by the Company's Board of Directors.

"We have successfully reached a decisive milestone in the scaling-up of our PET enzymatic recycling technology with the operational start-up of our industrial demonstration facility in Clermont-Ferrand. During the first half of 2021, our teams did their utmost to achieve this objective, which should enable us to start, by the end of 2022², the construction of its first of kind reference unit with an estimated production capacity of 40,000 tons per year and to grant, by 2023, the first operating licenses for this breakthrough innovation. We also strengthened the Group's financial structure by raising a landmark €114 million, which was more than twice oversubscribed. This transaction enabled us to take full control of Carbiolice. Following this acquisition, we have initiated a review of Carbiolice's strategic ambitions to support the acceleration of its growth and to extend the application of Evanesto® to other polymers and other applications worldwide. In partnership with the Consortium members, we also produced the world's first food-grade PET bottles entirely made from enzymatically recycled plastic. These achievements confirm our ambition and medium-term strategic vision to position Carbios as a key player in the environmental transition," **said Jean-Claude Lumaret, CEO of Carbios.**

¹ Source: Euronext

² Estimated date, depending on the choice of the construction site and the grant of the authorizations to build and operate

- **Income statement – First-half 2021:**

(In thousand euros)	June 30, 2021 (6 month)	June 30, 2020 (6 month)
Revenue and other income	568	849
Operating expenses	6,143	3,567
Operating income (loss)	(5,575)	(2,718)
Net financial income (loss)	(39)	(50)
Pre-tax profit	(5,614)	(2,768)
Extraordinary profit (loss)	15	39
Income tax (Research Tax Credit)	(1,182)	(469)
Net income/loss	(4,417)	(2,260)

As of June 30, 2021, revenue and other income amounted to €568K versus €849K in the first half of 2020 and mainly comprises subsidies from the ADEME for the ongoing CE-PET³ project and invoicing of services.

During the first half of 2021, operational expenses stood at €6.143 million (€m) compared to €3.567m for the same period in 2020. This sharp increase is mainly due to the growth in staff costs, particularly with the arrival of the first employees assigned to the demonstration facility. In addition, rental and maintenance expenses also increased with the lease of the Michelin site hosting the recently inaugurated demonstration unit in Clermont-Ferrand. To a lesser extent, acceleration of R&D effort on the CE-PET project also contributed to the increase of operational expenses over the period.

As a result, the net loss for the period reached €4.417m versus €2.260m for the first half of 2020, after taking into account the positive effect of the research tax credit of €1.182m.

Financial structure strengthened following the success of a historic €114m capital increase.

Carbios shows a solid financial structure, with a cash position of €112m as of June 30, 2021 versus €29m as of December 31, 2020.

The reinforcement of the Company's financial position following the capital increase⁴ dated May 2021, enabled the Company to take over the entire stake of the SPI funds in the capital of Carbiolice⁵ for €17.9m.

Given the financial situation as of June 30, 2021, and the Company's projected operational expenses, Carbios should be able to cover its financial needs for the next 24 months.

³ Project carried out as part of the Investment for the Future program operated by ADEME (French Environmental and Energy Management Agency)/ agreement n° 1882C0098.

⁴ Cf. [press release dated July 23, 2021](#)

⁵ Cf. [press release dated June 4, 2021](#)

Highlights of the first half of 2021 and post-closing:

- **Strategic update as of April 2021**

In April 2021, Carbios announced its plan to build a first of a kind 100% PET recycling production unit exploiting its technology (the “Unit”).

This Unit is expected to enable an annual production of 40,000 tons of recycled PET. It will also strengthen the Company’s business model which remains the licensing of its technologies and know-how and the sale of enzymes to its licensees, who will build their own PET recycling production units.

As a reminder, the provisional calendar⁶ and key steps for the building of the Unit are the following:

2021 – 2022: Site selection and engineering studies for the Unit;

End 2022⁶: beginning of the construction of the Unit;

End 2024⁶: Start-up of the Unit; and

2025⁶: First revenues generated from the Unit.

- **R&D partnership with Michelin**

In April 2021⁷, Carbios and Michelin, a leader in sustainable mobility, announced a major step towards developing 100% sustainable tires. By obtaining highly technical fibers from used PET plastics that meet the performance requirements for use in tires, Carbios and Michelin achieved a world first and demonstrated the full extent of the enzymatic recycling process designed and developed by Carbios.

- **Agreement with a major PET producer**

In April 2021⁸, Carbios announced the signature, on April 15, 2021, of a non-binding and non-exclusive Letter of Intent with one of the world leading PET producers. This agreement will enable Carbios to carry out its ongoing studies to select the site, among those operated by this PET producer, which will be the most suitable, technically and economically, to build a 100 % PET recycling reference unit.

- **First samples of bottles produced with the Company’s PET Consortium**

In June 2021⁹, Carbios and its partners within its PET Consortium - L’Oréal, Nestlé Waters, PepsiCo et Suntory Beverage & Food Europe – announced the successful production of the first samples of food grade PET plastic bottles produced entirely from enzymatically recycled plastic, a world first. Based on the use of Carbios’ enzymatic PET recycling technology, each Consortium company has successfully manufactured sample bottles for some of their leading products including: Biotherm®, Perrier®, Pepsi Max® and Orangina®.

- **Operational start-up of the demonstration plant: Carbios enters the industrial phase of its technology**

In line with its projected timeline, Carbios started operating its industrial facility in September 2021. Based in Clermont-Ferrand, this demonstration plant brings the Company one step closer to the industrial and commercial stage and prefigures the design of future industrial units. By the end of 2022, Carbios intends to finalize the complete Process Design Package (engineering documents) for its

⁶ Estimated dates, depending on the choice of the construction site and the grant of the authorizations to build and operate

⁷ [Cf. press release dated Avril 23, 2021](#)

⁸ [Cf. press release dated April 26, 2021](#)

⁹ [Cf. press release dated June 24, 2021](#)

enzymatic recycling process, which should enable the construction of a first reference unit, with an estimated capacity of 40,000 tons per year, as well as future plants operated under license.

The implementation of this demonstration plant in Clermont-Ferrand also enables Carbios and Michelin to pool the utilities and services required to operate this facility.

- **A strengthened financial structure to support development**

In May 2021¹⁰, Carbios announced the **successful completion of a capital increase** without shareholders' preferential subscription rights by way of a public offering and with a priority subscription period. The Company issued 3,000,000 new ordinary shares with a nominal value of €0.70 each, at a price of €38 per share, including issue premium, for a total amount of €114m, representing 36.7 % of the Company's share capital. Strategic shareholders: L'Oréal, through its venture arm BOLD (Business Opportunities for L'Oréal Development) and Michelin Ventures, subscribed to the Offering in accordance with the commitments they had made, for a total amount of €11,4m. L'Occitane Group also subscribed for an amount of €10m. These supports, along with the strong demand expressed by international institutional investors and individuals eligible to the public offering, underlines the strength the Company and its management team has gained.

This capital increase, which has attracted strong support from investors, also contributes to the international diversification of Carbios' shareholder base and is a significant step forward towards supporting the Company's development.

- **Strengthening governance**

Evolution of the Board of Directors:

At its General Meeting dated June 23, 2021, Mrs. **Mieke JACOBS** and Mr. **Vincent KAMEL**, as well as the Companies **Business Opportunities for L'Oréal Development** (BOLD) and **Michelin Ventures**, were appointed members of the Board of the Company, for a duration of four years, expiring at the term of the Annual General Meeting to be held in 2025 and which will be called to approve the financial statements for the year ended December 31, 2024.

Evolution of the Executive Committee:

In June 2021¹¹, **Mrs. Lise LUCCHESI**, Intellectual Property Director and **Mrs. Vanina VARLAMOFF**, Legal Affairs & Human Resources Director were appointed as members of the Executive Committee of the Company.

- **Strengthening of Intellectual Property**

During the first half of 2021, Carbios pursued the procedures on its active policy of securing its technologies and know-how with the filing of a new patent application protecting its enzymatic PET recycling process.

Carbios has also consolidated its Intellectual Property portfolio with new grants of major patents in the United States, Canada, China, India and Japan contributing to protect the various technologies developed by the Company.

As of June 30, 2021, Carbios' intellectual property portfolio included 39 families of patents (including one under an exclusive worldwide license with the CNRS and University of Poitiers), representing 204 patent titles filed across the world's key regions and 39 patents already delivered. Of these patent families, 19 are related to Carbios' proprietary PET recycling technology with applications filed in Europe, U.S., Canada, Mexico, China, India, Thailand, Indonesia, South Korea and Japan.

¹⁰ Cf. [press release dated May 10, 2021](#)

¹¹ Cf. [press release dated July 5, 2021](#)

These patent families cover the different areas of the Company (biodiversity, enzymatic recycling, enzymatic biodegradation and bioproduction).

- **Carbiolice**

In June 2021¹², Carbios announced the acquisition of the SPI fund's entire stake of Carbiolice capital (37,29%). This acquisition, which took place on June 3, 2021, for €17.9m, closes five years of fruitful collaboration with the SPI fund. Following this transaction paid exclusively in cash, Carbios now holds 100% of Carbiolice's voting rights¹³. This acquisition, which follows the one, dated October 2020, of Limagrain Ingredients' entire stake in Carbiolice¹⁴ (18,02%), is part of the rationalization of the Company's portfolio, as announced at the time of its successful capital on May 10, 2021¹⁵.

These two successive transactions demonstrate Carbios' interest in Carbiolice's developments and in its ability to expand its activities in polymer biodegradation beyond PLA. It also reinforces Carbios' ambition to position itself as the world leader in biological technologies to reinvent the end-of-life of plastics and synthetic fibers.

In September 2021¹⁶, Carbiolice has announced that it has obtained the TÜV Austria label for rigid PLA-based packaging (up to 70%) containing Evanesto®. This new step allows everyday packaging (yogurt pots, trays, cups, and also horticultural pots...) to be labelled "Ok Compost Home" by TÜV Austria. Thus, rigid packaging containing Evanesto® will turn into compost in 255 days, even at room temperature and therefore in domestic conditions.

- **Distinctions**

In June 2021¹⁷, Carbiolice announced that it has received the **Efficient Solution label from the Solar Impulse Foundation** for its Evanesto® solution. To receive this label, the technology implemented by Carbiolice has been evaluated by a group of independent experts according to five criteria covering the three main themes of technical feasibility, social & environmental impact and economic profitability.

In May 2021¹⁸, Carbiolice announced that it has received the **Green Innovation label from the French Ecological Transition Ministry**. This recognition attests to the innovative nature of the enzymatic biodegradation technology of PLA-based plastics implemented by Carbiolice and its ability to make a significant contribution to the ecological transition. Carbiolice thus joins the network of 216 start-ups labeled *Greentech Innovation* since its creation in 2016.

In June 2021¹⁹, Carbios has announced it has been recognized as a **Technology Pioneer by the World Economic Forum**. The *Techpioneers* selected from hundreds of candidates by the World Economic Forum are fast-growing companies with a global presence. They develop innovations and use technologies that have a significant impact on business, society and the environment. The 2021 *Techpioneers* have been selected on criteria such as innovation, impact, leadership and relevance of the company to the World Economic Forum's platforms.

In June 2021²⁰, Carbios also won the **"Grand Prix" of the Scale Up Challenge at the World Materials Forum (WMF)** for the development of its enzymatic recycling process of PET waste allowing the

¹² [Cf. press release dated June 4, 2021](#)

¹³ The Company holds 29,500,000 of the 29,502,000 shares comprising the share capital of Carbiolice. The remaining 2,000 shares are held by the management of Carbiolice.

¹⁴ [Cf. press release dated October 8, 2020](#)

¹⁵ [Cf. press release dated May 10, 2021](#)

¹⁶ [Cf. Carbiolice press release dated September 2, 2021](#)

¹⁷ [Cf. Carbiolice press release dated January 20, 2021](#)

¹⁸ [Cf. Carbiolice press release dated May 3, 2021](#)

¹⁹ [Cf. press release dated June 15, 2021](#)

²⁰ [Cf. communication of the World Materials Forum dated June 17, 2021](#)

production of transparent food grade bottles. The award recognizes growth companies that have a high potential impact on the WMF's goal of decoupling economic growth from the use of our natural resources.

About Carbios:

[Carbios](#), a green chemistry company, develops biological and innovative processes representing a major innovation in the end of life of plastics and textiles. Through its unique approach of combining enzymes and plastics, Carbios aims to address new consumer expectations and the challenges of a broader ecological transition by taking up a major challenge of our time: plastic and textile pollution.

Established in 2011 by [Truffle Capital](#), the mission of Carbios is to provide an industrial solution to the recycling of PET plastics and textiles (the dominant polymer in bottles, trays, textiles made of polyester). The enzymatic recycling technology developed by Carbios deconstructs any type of PET plastic waste into its basic components which can then be reused to produce new PET plastics of a quality equivalent to virgin ones. This PET innovation, the first of its kind in the world, was recently recognized in a scientific paper published in the prestigious journal [Nature](#). Additionally, Carbios is working hand in hand with multinational brands — like L'Oréal, Nestlé Waters, PepsiCo and Suntory Beverage & Food Europe — to implement its technology, and to lead the transition toward a truly circular economy.

The Company has also developed an enzymatic biodegradation technology for PLA (a bio sourced polymer) based single use plastics. This technology can create a new generation of plastics that are 100% compostable in domestic conditions, integrating enzymes at the heart of the plastic product. This disruptive innovation has been licensed to [Carbiolice](#), a joint venture created in 2016, in which Carbios now holds 100% of the capital.

For more information, please visit www.carbios.com/en

Twitter: [Carbios](#) LinkedIn: [Carbios](#) Instagram : [carbioshq](#)



Carbios (ISIN FR0011648716/ALCRB) 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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