



Carbios announces half-year 2023 financial results and corporate update

- Confirmation of industrial and commercial objectives with the construction, in France, of the world's first PET biorecycling plant: Progress in line with 2025 commissioning target
- Exclusive global partnership with Novozymes to ensure supply of enzymes at industrial scale for the first plant and all future licensee plants
- Consolidation of partnership with Indorama Ventures, which plans to mobilize €110 million for the first plant
- Grants totaling €54 million from French State via France 2030 and Grand-Est Region to finance construction of the plant and accelerate R&D activities
- Strengthening of the Group's financial structure: successful capital increase of €141 million with French and International investors
- Group's cash position as of June 30, 2023: €78 million, excluding net proceeds of the €141 million capital increase raised in the second half of 2023

Clermont-Ferrand, France, September 28, 2023 (6:45 a.m. CET) - Carbios (Euronext Growth Paris: ALCRB), a biotech company developing and industrializing biological solutions to reinvent the life cycle of plastic and textiles, today reported its operating and financial results for the first half of 2023. The financial statements as of June 30, 2023 were approved by Carbios' Board of Directors.

Carbios CEO, Emmanuel Ladent: "During this first period of 2023, Carbios achieved major scientific and operational milestones. Most prominently, the strategic alliance with Novozymes ensuring the production of our proprietary enzymes at industrial scale as well as our partnership with Indorama Ventures for the construction of the world's first PET biorecycling plant. I would like to thank our employees as well as our stakeholders for these results, which reinforce our ambition to become a global leader in the r-PET market."

Pascal Bricout, Chief of Strategy and Financial Officer of Carbios, added: "Building on these key developments, we successfully completed a capital increase with preferential subscription rights for a gross amount of €141 million, the largest fundraising on Euronext Growth since 2015. Together with the funding by the French State and the Grand-Est region of overall €54 million, we now have the resources to build our first plant and ensure the commercial and international deployment of our activities."

A webcast and a conference call will take place today at 4:00pm CET (Paris time)

Emmanuel Ladent – Chief Executive Officer / Pascal Bricout – Chief of Strategy and Financial Officer

Access to the webcast: <https://edge.media-server.com/mmc/p/wupra5gw>

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Income statement H1 2023 (in thousand euros)

	6/30/2023	6/30/2022
	6 months	6 months
Revenue	20	9
R&D expenses, net	(5,719)	(5,540)
<i>R&D expenses</i>	<i>(9,438)</i>	<i>(8,970)</i>
<i>Subsidies and other business income</i>	<i>2,517</i>	<i>2,825</i>
<i>Capitalized development expenses</i>	<i>1,202</i>	<i>604</i>
Sales and marketing expenses	(2,280)	(1,354)
General & administrative expenses	(5,290)	(4,637)
Other operating income and expenses	-	26
Operating income (loss)	(13,269)	(11,496)
Financial income	910	26
Financial expenses	(1,301)	(342)
Net financial income	(391)	(316)
Contribution of companies reported using the equity method	-	-
Income before taxes	(13,660)	(11,811)
Income tax	-	-
Net income or loss for the period	(13,660)	(11,811)

- **Current operating expenses**

Operational expenses in the first half of 2023 stood at €13,289 thousand (H1 2022: €11,531 thousand).

R&D expenses, net, totaled €5,719 thousand in the first half of 2023 (H1 2022: €5,540 thousand). The Group has continued its research and development efforts in all its innovative themes, particularly in the biorecycling of PET plastic and fibers.

In the first six months of 2023, the Group committed €9,438 thousand in *R&D expenses* as it pursued its industrialization ambitions. The increase in R&D costs is mainly due to the work undertaken at the demonstration plant, the various studies (including engineering) for the construction of the PET biorecycling facility, and R&D expenditure at Carbiolice. The main changes were due to increased staff costs, with a sharp rise in the number of employees, particularly at the industrial demonstration plant.

The Group booked €2,517 thousand of *Subsidies and other business income*, which partly covered these R&D expenses. This item mainly consists of:

- €2,139 thousand in tax credits for first-half 2023, of which €1,721 thousand relates to Carbios and €418 thousand to Carbiolice.

Finally, the Group continued to capitalize the *Development expenses* of its PET biorecycling project, booking a total €806 thousand in the first half of 2023, in accordance with IAS 38 capitalization criteria.

Sales and marketing expenses totaled €2,280 thousand in the first half of 2023 (H1 2022: €1,354 thousand). This increase of €926 thousand mainly reflects the strengthening of the Group's sales teams to support the acceleration of its development and prepare for the future licensing of its PET biorecycling technology.

General and administrative expenses totaled €5,290 thousand in the first half of 2023 (H1 2022: €4,637 thousand). The €653 thousand increase is mainly attributable to increased Staff costs, reflecting the rise in headcount over the period.

- **Financial results**

The Company's financial income is generated by interest on money market investments and term deposits of its cash and cash equivalents. Cash is systematically invested in risk-free money market products.

Financial expenses include interest charges on loans, in particular from the European Investment Bank (EIB), and on repayable advances.

- **Net result and financial position**

The Group's operating income (loss) shows a loss of €13.7 million at June 30, 2023 (€11.5 million loss at June 30, 2022).

The Group enjoys a robust financial position, with net cash of €78 million at June 30, 2023 (€101 million at December 31, 2022), before taking into account the capital increase successfully carried out in July 2023 for a gross amount of €141 million (before deducting expenses from the issue premium).

Given the financial position to date, the Company's projected operational expenses, the capital increase carried out in July 2023, and the subsidies obtained, Carbios expects to be able to cover its needs beyond the next 12 months.

H1 2023 and post-closing highlights

World's first industrial PET biorecycling plant in France

Together with our industrial partners **Indorama Ventures**, the world's leading PET manufacturer, **Novozymes**, the world leader in biosolutions, and **Technip Energies**, a leading Engineering & Technology company, we laid the foundations to start the construction of the world's first PET biorecycling plant, in France. This industrial facility located in Longlaville (France) is designed to process 50,000 tons of PET waste annually, equivalent to 2 billion bottles or 2.5 billion food trays. This plant will also serve to bolster the Company's business model of licensing its technology to manufacturers who will build their own plants, as well as reinforce the Company's know-how in its industrial and commercial deployment strategy through international licensing.

In June 2023, we achieved a significant **landmark in our partnership with Indorama Ventures, by signing a non-binding Memorandum of Understanding ("MOU")** for the construction of this industrial biorecycling plant. For this project, Indorama Ventures plans to mobilize about **€110 million** in equity and non-convertible loan financing¹.

The construction timeline is on schedule with planning permission filed in December 2022, start of construction, recruitment and training of plant staff planned for end of 2023, and commissioning of the plant due in 2025. The plant is designed to maximize circularity with high product quality, energy and waste minimization and improvement add-ons such as increasing textile feedstock, the reuse and recycling of process water.

Financing:

In May 2023, Carbios announced that its project has been selected by the French government for **funding for an amount of €30 million from the French State via France 2030 and €12.5 million from the Grand-Est Region**².

Alongside this support, Carbios has been granted total funding of **€11.4 million from the French State as part of France 2030, of which €8.2 million directly for Carbios** (€5 million in repayable advances) **and €3.2 million for its academic partners INRAE, INSA and CNRS** via the TWB and TBI joint service and research units. This funding will enable the Group to continue its research into the optimization and continuous improvement of Carbios' enzymatic technologies.

¹ Based on and subject to the comprehensive terms set out in the non-binding MOU

² The implementation of this funding is conditional to the European Commission's approval of the corresponding state aid scheme, followed by the conclusion of national aid agreements.

In July 2023, Carbios announced the success of its **capital increase in cash with preferential subscription rights (“PSR”) maintained for a gross amount of approximately €141 million**³. Approximately 85% of the net proceeds of this capital increase are to be used to finance the construction of the industrial PET biorecycling plant, for which the investment is estimated at around €230 million. The proportion not funded by the net proceeds of the capital increase should be covered by financings to be received from Indorama Ventures (€110 million), subsidies from the French government (€30 million) and from the Grand-Est Region (€12.5 million) and by part of the Company’s available cash.

Operational highlights

- **Strategic alliance with Novozymes**

In January 2023, Carbios strengthened its **strategic partnership with Novozymes** by signing an exclusive and long-term agreement which ensures the production and supply of Carbios’ proprietary PET degrading enzymes at industrial scale for our first plant, as well as for our future licensees.

- **Licensing documentation ready**

In April 2023, we **finalized the engineering documentation**⁴ enabling us to provide our licensees with the necessary information for future industrial plants. This new industrial milestone on schedule in the deployment of our PET biorecycling technology is the result of our successful operations conducted in our demonstration plant and is the starting point to enter first licensing agreements in 2024. It will enable Carbios’ future licensees to reliably engineer, construct and operate their own PET biorecycling facilities.

- **Supply agreement secured with Citeo**

In April 2023, we **secured a first supply agreement with Citeo** for our PET biorecycling plant. This long-term agreement covers the supply of PET waste from multilayer and monolayer trays. This PET waste will be recycled in our industrial plant, which is due for commissioning in 2025.

Textile consortium & Ellen MacArthur Foundation

In February 2023, **PVH Corp., a leading fashion company joined our fiber-to-fiber consortium founded by Carbios with On, Patagonia, PUMA, and Salomon**. Committed to accelerating the transition of the textile industry toward a circular economy, consortium members collaborate to test and enhance Carbios’ breakthrough biological recycling technology on their own products. The common goal of the consortium members is to create real circularity in this industry by innovating to recycle fibers from one product into another and so reduce the problem of textile waste in a collaborative approach that helps create a more sustainable future.

In March 2023, we **became a member of the Ellen MacArthur Foundation’s Network**. Carbios shares the Foundation’s commitment to accelerate the transition to a circular economy, especially in the areas of plastic and fashion. By joining the Ellen MacArthur Foundation’s Network, Carbios will connect with other leaders within the Foundation’s leading circular economy network of businesses, policymakers, academia, innovators, and thought leaders worldwide.

Technology and IP update

In February 2023, we **concluded the final key stage of the CE-PET research project supported by the French State** as part of the Investments for the Future Programme, now integrated into France 2030, and operated by ADEME. In this project Carbios acted as the coordinator alongside our academic partner INRAE⁵-TWB (Toulouse White Biotechnology). The CE-PET project, which lasted four years, confirmed Carbios’ ability to enzymatically recycle complex waste to produce bottles and fibers and prove the robustness of its process.

³ Further information on the capital increase, successfully completed in July 2023, can be found in the prospectus approved by the Autorité des marchés financiers (AMF) on June 21, 2023, under number 23-236, which is available free of charge from the Carbios (<https://investir.carbios.com>) and the AMF (www.amf-france.org/fr) websites.

⁴ Technological Information Summary

⁵ France’s National Research Institute for Agriculture, Food and Environment

In April 2023, we announced **the development of an ultra-high throughput microfluidic screening of PET-depolymerizing enzymes** in partnership with the Paul Pascal Research Centre (a joint research unit of the CNRS and the University of Bordeaux, which specializes in microfluidics). This cutting-edge technology enables the screening of millions of enzymes in just one day, speeding up the process to optimize enzymes breaking down PET. This competitive advantage enables Carbios to reduce the time between the R&D phase and the production of its proprietary enzymes, and therefore to develop concrete solutions to plastic pollution even faster.

In March 2023, biotechnology researchers from Carbios and its academic partner Toulouse Biotechnology Institute (TBI), as well as two eminent professors in polymer science from the University of Bordeaux, **published an article entitled “Enzymes’ power for plastics degradation” in Chemical Reviews**. The article is a comprehensive and critical review of research published to date on the enzymatic degradation of all types of plastics (PET, PLA, polyolefins, polyurethanes, polyamides) and includes almost 700 references.

In March 2023, we announced the **significant expansion of our intellectual property portfolio** by doubling the number of granted patents in two years. Carbios currently has 375 titles worldwide divided into 58 patent families for its innovation in enzymatic recycling of PET plastics and fibers, and its PLA biodegradation technology.

CSR policy

In June 2023, **we integrated our Purpose into the bylaws of the Company**, as permitted by the PACTE Act of 2019, following the vote at the Annual General Meeting held on 22 June 2023, namely **“to generate a positive and significant social, societal and environmental impact in the conduct of its activities”**. This Purpose underpins Carbios' business, which provides solutions to the environmental emergency of tackling plastic pollution.

Strategic Update

In June 2023, Carbios **held a Strategic Update** in which we provided details on the fast-growing r-PET market, our business model and licensing strategy, our ambitions in terms of market share by 2030 and 2035, as well as our plans to expand our innovation pipeline, beyond PET and PLA, to other types of plastic such as polyamides and polyolefins.

Providing a broad overview of our recent developments, this webcast (summarized in a press release available on the Company's website) was also an opportunity to provide further insight on the competitive benefits of Carbios' biorecycling technology, the launch of the construction of our PET biorecycling plant, the performances of our proprietary enzymes and the commercial deployment of our PLA biodegradation solution, which is expected in 2024.

Click on the link to view the replay: <https://edge.media-server.com/mmc/p/u2qw4cir>

Strengthening governance

Change in the Board of Directors

In February 2023, Carbios announced the cooptation, within its Board of Directors, of **Karine Auclair**, professor of Chemistry at McGill University, **Mateus Schreiner Garcez Lopes**, Global Director for Energy Transition and Investments at Raizen, **Amandine De Souza**, General Manager of leboncoin and **Sandrine Conseiller**, former CEO of Aigle, as independent members of Carbios' Board of Directors.

To date, the Company has seven independent Directors, i.e. 63.64% of the total number of Directors.

Awards

In May 2023, Carbios was selected to represent French innovation at the 6th **“Choose France” Summit** at the Château de Versailles. “Choose France” is an international business summit dedicated to the attractiveness of France launched at the initiative of the French President, Emmanuel Macron. On this occasion, Carbios announced that it had joined the **Coq Vert community** launched by Bpifrance in partnership with ADEME and the Ministry of Ecological Transition, to connect with other environmentally committed business leaders and advance its international deployment.

Outlook – confirmation of industrial and commercial objectives

Given the significant progress made by the Group during the first half of the year and the success of the financing operation closed in July 2023, Carbios confirms its operating targets and the provisional calendar of the industrial and commercial deployment of its PET biorecycling technology⁶.

- 2023 • Construction of the Longlaville plant to start when permits obtained in the fourth quarter
- 2024 • Recruitment of the plant operations team and training at the demonstration facility
- 2025 • Mechanical completion and commissioning
- 2026 • Ramp-up

Publication of the interim financial report

The interim financial report as of June 30, 2023 has been published on the Company's website and filed with the French regulator, the *Autorité des Marchés Financiers*.

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About Carbios:

Carbios is a biotech company developing and industrializing biological solutions to reinvent the life cycle of plastic and textiles. Inspired by nature, Carbios develops enzyme-based processes to break down plastic with a mission to avoid plastic and textile pollution, and accelerate the transition to a circular economy. Its two disruptive technologies for the biorecycling of PET and the biodegradation of PLA are reaching industrial and commercial scale. Its biorecycling demonstration plant has been operational since 2021 and a first industrial plant, in partnership with Indorama Ventures, is due to be commissioned in 2025. Carbios has received scientific recognition, notably with the cover of Nature, and is supported by prestigious brands in the cosmetics, Food & Beverage and apparel industries to enhance their products' recyclability and circularity. Nestlé Waters, PepsiCo and Suntory Beverage & Food Europe are members of a packaging consortium founded by Carbios and L'Oréal. On, Patagonia, PUMA, PVH Corp. and Salomon collaborate with Carbios in a textile consortium.

Visit www.carbios.com/en to find out more about biotechnology powering plastic and textile circularity.

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Information on Carbios shares:



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LEI:	969500M2RCIWO4NO5F08

Carbios, founded in 2011 by Truffle Capital, 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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This press release and the information contained herein do not constitute an offer to sell or a solicitation of an offer to buy or subscribe to shares in Carbios in any country.

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

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